

## 8 CONDUCTED RF OUTPUT POWER

|        |                                   |
|--------|-----------------------------------|
| 8.1    | GSM Output Power                  |
| 8.2    | WCDMA Output Power                |
| 8.3    | LTE Output Power                  |
| 8.3.1  | LTE Band2 Output Power            |
| 8.3.2  | LTE Band4 Output Power            |
| 8.3.3  | LTE Band5 Output Power            |
| 8.3.4  | LTE Band7 Output Power            |
| 8.3.5  | LTE Band12 Output Power           |
| 8.3.6  | LTE Band17 Output Power           |
| 8.3.7  | LTE Band26 Output Power           |
| 8.3.8  | LTE Band66 Output Power           |
| 8.3.9  | LTE Band38 Output Power           |
| 8.3.10 | LTE Band41 Output Power           |
| 8.4    | Intra-Band Uplink CA Power        |
| 8.4.1  | LTE Band7 Uplink CA Output Power  |
| 8.4.2  | LTE Band38 Uplink CA Output Power |
| 8.4.3  | LTE Band41 Uplink CA Output Power |
| 8.5    | 5G NR Output Power                |
| 8.5.1  | NR Band5 Output Power             |
| 8.5.2  | NR Band7 Output Power             |
| 8.5.3  | NR Band38 Output Power            |
| 8.5.4  | NR Band41 Output Power            |

## 8.1 GSM Output Power

| GSM-State1-Ant.1      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 30.37                    | 30.61 | 30.38 | 31.30      | 21.18                | 21.42        | 21.19 | 22.11        |
| GPRS (GMSK, 1-Slot)   | 30.31                    | 30.53 | 30.33 | 31.30      | 21.12                | 21.34        | 21.14 | 22.11        |
| GPRS (GMSK, 2-Slots)  | 27.60                    | 27.65 | 27.51 | 29.00      | 21.47                | <b>21.52</b> | 21.38 | <b>22.87</b> |
| GPRS (GMSK, 3-Slots)  | 25.23                    | 25.45 | 25.39 | 27.20      | 20.81                | 21.03        | 20.97 | 22.78        |
| GPRS (GMSK, 4-Slots)  | 24.57                    | 24.49 | 24.52 | 26.00      | 21.39                | 21.31        | 21.34 | 22.82        |
| EGPRS (8PSK, 1-Slot)  | 24.56                    | 24.62 | 24.68 | 26.50      | 15.37                | 15.43        | 15.49 | 17.31        |
| EGPRS (8PSK, 2-Slots) | 21.94                    | 21.92 | 21.93 | 23.50      | 15.81                | 15.79        | 15.80 | 17.37        |
| EGPRS (8PSK, 3-Slots) | 19.99                    | 19.85 | 20.02 | 21.70      | 15.57                | 15.43        | 15.60 | 17.28        |
| EGPRS (8PSK, 4-Slots) | 19.24                    | 19.16 | 19.25 | 21.00      | 16.06                | 15.98        | 16.07 | 17.82        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 26.14                    | 26.23 | 26.22 | 26.30      | 16.95                | 17.04        | 17.03 | 17.11        |
| GPRS (GMSK, 1-Slot)   | 26.13                    | 26.29 | 26.20 | 26.30      | 16.94                | 17.10        | 17.01 | 17.11        |
| GPRS (GMSK, 2-Slots)  | 23.41                    | 23.60 | 23.59 | 24.50      | 17.28                | <b>17.47</b> | 17.46 | <b>18.37</b> |
| GPRS (GMSK, 3-Slots)  | 21.23                    | 21.28 | 21.20 | 22.70      | 16.81                | 16.86        | 16.78 | 18.28        |
| GPRS (GMSK, 4-Slots)  | 20.29                    | 20.35 | 20.28 | 21.50      | 17.11                | 17.17        | 17.10 | 18.32        |
| EGPRS (8PSK, 1-Slot)  | 22.22                    | 22.17 | 22.49 | 24.00      | 13.03                | 12.98        | 13.30 | 14.81        |
| EGPRS (8PSK, 2-Slots) | 20.10                    | 20.20 | 20.25 | 21.00      | 13.97                | 14.07        | 14.12 | 14.87        |
| EGPRS (8PSK, 3-Slots) | 18.29                    | 18.35 | 18.51 | 19.20      | 13.87                | 13.93        | 14.09 | 14.78        |
| EGPRS (8PSK, 4-Slots) | 17.16                    | 17.48 | 17.39 | 18.50      | 13.98                | 14.30        | 14.21 | 15.32        |

| GSM-State2-Ant.1      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 29.43                    | 29.64 | 29.43 | 30.30      | 20.24                | 20.45        | 20.24 | 21.11        |
| GPRS (GMSK, 1-Slot)   | 29.60                    | 29.82 | 29.62 | 30.30      | 20.41                | 20.63        | 20.43 | 21.11        |
| GPRS (GMSK, 2-Slots)  | 26.79                    | 26.80 | 26.76 | 28.00      | 20.66                | <b>20.67</b> | 20.63 | <b>21.87</b> |
| GPRS (GMSK, 3-Slots)  | 24.54                    | 24.76 | 24.51 | 26.20      | 20.12                | 20.34        | 20.09 | 21.78        |
| GPRS (GMSK, 4-Slots)  | 23.68                    | 23.52 | 23.65 | 25.00      | 20.50                | 20.34        | 20.47 | 21.82        |
| EGPRS (8PSK, 1-Slot)  | 23.96                    | 23.78 | 23.93 | 25.50      | 14.77                | 14.59        | 14.74 | 16.31        |
| EGPRS (8PSK, 2-Slots) | 20.97                    | 20.70 | 20.81 | 22.50      | 14.84                | 14.57        | 14.68 | 16.37        |
| EGPRS (8PSK, 3-Slots) | 19.09                    | 19.12 | 19.07 | 20.70      | 14.67                | 14.70        | 14.65 | 16.28        |
| EGPRS (8PSK, 4-Slots) | 18.41                    | 18.82 | 18.49 | 20.00      | 15.23                | 15.64        | 15.31 | 16.82        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 25.28                    | 25.24 | 25.10 | 25.30      | 16.09                | 16.05        | 15.91 | 16.11        |
| GPRS (GMSK, 1-Slot)   | 25.22                    | 25.24 | 25.11 | 25.30      | 16.03                | 16.05        | 15.92 | 16.11        |
| GPRS (GMSK, 2-Slots)  | 22.48                    | 22.86 | 22.55 | 23.50      | 16.35                | <b>16.73</b> | 16.42 | <b>17.37</b> |
| GPRS (GMSK, 3-Slots)  | 20.54                    | 20.50 | 20.41 | 21.70      | 16.12                | 16.08        | 15.99 | 17.28        |
| GPRS (GMSK, 4-Slots)  | 19.63                    | 19.73 | 19.76 | 20.50      | 16.45                | 16.55        | 16.58 | 17.32        |
| EGPRS (8PSK, 1-Slot)  | 21.43                    | 21.47 | 21.60 | 23.00      | 12.24                | 12.28        | 12.41 | 13.81        |
| EGPRS (8PSK, 2-Slots) | 19.27                    | 19.33 | 19.33 | 20.00      | 13.14                | 13.20        | 13.20 | 13.87        |
| EGPRS (8PSK, 3-Slots) | 17.87                    | 18.03 | 18.00 | 18.20      | 13.45                | 13.61        | 13.58 | 13.78        |
| EGPRS (8PSK, 4-Slots) | 16.49                    | 16.41 | 16.65 | 17.50      | 13.31                | 13.23        | 13.47 | 14.32        |

| GSM-State3-Ant.1      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 29.43                    | 29.64 | 29.43 | 30.30      | 20.24                | 20.45        | 20.24 | 21.11        |
| GPRS (GMSK, 1-Slot)   | 29.60                    | 29.82 | 29.62 | 30.30      | 20.41                | 20.63        | 20.43 | 21.11        |
| GPRS (GMSK, 2-Slots)  | 26.79                    | 26.80 | 26.76 | 28.00      | 20.66                | <b>20.67</b> | 20.63 | <b>21.87</b> |
| GPRS (GMSK, 3-Slots)  | 24.54                    | 24.76 | 24.51 | 26.20      | 20.12                | 20.34        | 20.09 | 21.78        |
| GPRS (GMSK, 4-Slots)  | 23.68                    | 23.52 | 23.65 | 25.00      | 20.50                | 20.34        | 20.47 | 21.82        |
| EGPRS (8PSK, 1-Slot)  | 23.96                    | 23.78 | 23.93 | 25.50      | 14.77                | 14.59        | 14.74 | 16.31        |
| EGPRS (8PSK, 2-Slots) | 20.97                    | 20.70 | 20.81 | 22.50      | 14.84                | 14.57        | 14.68 | 16.37        |
| EGPRS (8PSK, 3-Slots) | 19.09                    | 19.12 | 19.07 | 20.70      | 14.67                | 14.70        | 14.65 | 16.28        |
| EGPRS (8PSK, 4-Slots) | 18.41                    | 18.82 | 18.49 | 20.00      | 15.23                | 15.64        | 15.31 | 16.82        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 25.28                    | 25.24 | 25.10 | 25.30      | 16.09                | 16.05        | 15.91 | 16.11        |
| GPRS (GMSK, 1-Slot)   | 25.22                    | 25.24 | 25.11 | 25.30      | 16.03                | 16.05        | 15.92 | 16.11        |
| GPRS (GMSK, 2-Slots)  | 22.48                    | 22.86 | 22.55 | 23.50      | 16.35                | <b>16.73</b> | 16.42 | <b>17.37</b> |
| GPRS (GMSK, 3-Slots)  | 20.54                    | 20.50 | 20.41 | 21.70      | 16.12                | 16.08        | 15.99 | 17.28        |
| GPRS (GMSK, 4-Slots)  | 19.63                    | 19.73 | 19.76 | 20.50      | 16.45                | 16.55        | 16.58 | 17.32        |
| EGPRS (8PSK, 1-Slot)  | 21.43                    | 21.47 | 21.60 | 23.00      | 12.24                | 12.28        | 12.41 | 13.81        |
| EGPRS (8PSK, 2-Slots) | 19.27                    | 19.33 | 19.33 | 20.00      | 13.14                | 13.20        | 13.20 | 13.87        |
| EGPRS (8PSK, 3-Slots) | 17.87                    | 18.03 | 18.00 | 18.20      | 13.45                | 13.61        | 13.58 | 13.78        |
| EGPRS (8PSK, 4-Slots) | 16.49                    | 16.41 | 16.65 | 17.50      | 13.31                | 13.23        | 13.47 | 14.32        |

| GSM-State4-Ant.1      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 32.93                    | 33.14 | 32.95 | 33.80      | 23.74                | 23.95        | 23.76 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 32.89                    | 33.11 | 32.91 | 33.80      | 23.70                | 23.92        | 23.72 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 29.87                    | 30.13 | 29.88 | 31.50      | 23.74                | <b>24.00</b> | 23.75 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 27.89                    | 28.12 | 27.87 | 29.70      | 23.47                | 23.70        | 23.45 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 26.93                    | 27.16 | 26.90 | 28.50      | 23.75                | 23.98        | 23.72 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.32                    | 27.25 | 27.33 | 29.00      | 18.13                | 18.06        | 18.14 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.48                    | 24.59 | 24.60 | 26.00      | 18.35                | 18.46        | 18.47 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.28                    | 22.24 | 22.31 | 24.20      | 17.86                | 17.82        | 17.89 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.96                    | 21.88 | 21.99 | 23.50      | 18.78                | 18.70        | 18.81 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 28.70                    | 28.52 | 28.53 | 29.30      | 19.51                | 19.33        | 19.34 | 20.11        |
| GPRS (GMSK, 1-Slot)   | 28.62                    | 28.57 | 28.46 | 29.30      | 19.43                | 19.38        | 19.27 | 20.11        |
| GPRS (GMSK, 2-Slots)  | 26.74                    | 26.78 | 26.70 | 27.50      | 20.61                | <b>20.65</b> | 20.57 | <b>21.37</b> |
| GPRS (GMSK, 3-Slots)  | 24.58                    | 24.62 | 24.54 | 25.70      | 20.16                | 20.20        | 20.12 | 21.28        |
| GPRS (GMSK, 4-Slots)  | 23.76                    | 23.81 | 23.74 | 24.50      | 20.58                | 20.63        | 20.56 | 21.32        |
| EGPRS (8PSK, 1-Slot)  | 25.04                    | 25.10 | 25.29 | 27.00      | 15.85                | 15.91        | 16.10 | 17.81        |
| EGPRS (8PSK, 2-Slots) | 22.63                    | 22.75 | 22.98 | 24.00      | 16.50                | 16.62        | 16.85 | 17.87        |
| EGPRS (8PSK, 3-Slots) | 20.95                    | 21.05 | 21.30 | 22.20      | 16.53                | 16.63        | 16.88 | 17.78        |
| EGPRS (8PSK, 4-Slots) | 19.71                    | 19.90 | 20.15 | 21.50      | 16.53                | 16.72        | 16.97 | 18.32        |

| GSM-State5-Ant.1      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 32.93                    | 33.14 | 32.95 | 33.80      | 23.74                | 23.95        | 23.76 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 32.89                    | 33.11 | 32.91 | 33.80      | 23.70                | 23.92        | 23.72 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 29.87                    | 30.13 | 29.88 | 31.50      | 23.74                | <b>24.00</b> | 23.75 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 27.89                    | 28.12 | 27.87 | 29.70      | 23.47                | 23.70        | 23.45 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 26.93                    | 27.16 | 26.90 | 28.50      | 23.75                | 23.98        | 23.72 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.32                    | 27.25 | 27.33 | 29.00      | 18.13                | 18.06        | 18.14 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.48                    | 24.59 | 24.60 | 26.00      | 18.35                | 18.46        | 18.47 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.28                    | 22.24 | 22.31 | 24.20      | 17.86                | 17.82        | 17.89 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.96                    | 21.88 | 21.99 | 23.50      | 18.78                | 18.70        | 18.81 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 26.34                    | 26.39 | 26.32 | 26.80      | 17.15                | 17.20        | 17.13 | 17.61        |
| GPRS (GMSK, 1-Slot)   | 26.32                    | 26.34 | 26.36 | 26.80      | 17.13                | 17.15        | 17.17 | 17.61        |
| GPRS (GMSK, 2-Slots)  | 24.18                    | 24.25 | 24.19 | 25.00      | 18.05                | <b>18.12</b> | 18.06 | <b>18.87</b> |
| GPRS (GMSK, 3-Slots)  | 22.00                    | 22.04 | 22.01 | 23.20      | 17.58                | 17.62        | 17.59 | 18.78        |
| GPRS (GMSK, 4-Slots)  | 21.23                    | 21.27 | 21.26 | 22.00      | 18.05                | 18.09        | 18.08 | 18.82        |
| EGPRS (8PSK, 1-Slot)  | 23.38                    | 23.11 | 23.08 | 24.50      | 14.19                | 13.92        | 13.89 | 15.31        |
| EGPRS (8PSK, 2-Slots) | 20.16                    | 20.35 | 20.55 | 21.50      | 14.03                | 14.22        | 14.42 | 15.37        |
| EGPRS (8PSK, 3-Slots) | 18.74                    | 19.10 | 18.97 | 19.70      | 14.32                | 14.68        | 14.55 | 15.28        |
| EGPRS (8PSK, 4-Slots) | 17.29                    | 17.41 | 17.60 | 19.00      | 14.11                | 14.23        | 14.42 | 15.82        |

| GSM-State6-Ant.1      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 32.93                    | 33.14 | 32.95 | 33.80      | 23.74                | 23.95        | 23.76 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 32.89                    | 33.11 | 32.91 | 33.80      | 23.70                | 23.92        | 23.72 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 29.87                    | 30.13 | 29.88 | 31.50      | 23.74                | <b>24.00</b> | 23.75 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 27.89                    | 28.12 | 27.87 | 29.70      | 23.47                | 23.70        | 23.45 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 26.93                    | 27.16 | 26.90 | 28.50      | 23.75                | 23.98        | 23.72 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.32                    | 27.25 | 27.33 | 29.00      | 18.13                | 18.06        | 18.14 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.48                    | 24.59 | 24.60 | 26.00      | 18.35                | 18.46        | 18.47 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.28                    | 22.24 | 22.31 | 24.20      | 17.86                | 17.82        | 17.89 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.96                    | 21.88 | 21.99 | 23.50      | 18.78                | 18.70        | 18.81 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 26.34                    | 26.39 | 26.32 | 26.80      | 17.15                | 17.20        | 17.13 | 17.61        |
| GPRS (GMSK, 1-Slot)   | 26.32                    | 26.34 | 26.36 | 26.80      | 17.13                | 17.15        | 17.17 | 17.61        |
| GPRS (GMSK, 2-Slots)  | 24.18                    | 24.25 | 24.19 | 25.00      | 18.05                | <b>18.12</b> | 18.06 | <b>18.87</b> |
| GPRS (GMSK, 3-Slots)  | 22.00                    | 22.04 | 22.01 | 23.20      | 17.58                | 17.62        | 17.59 | 18.78        |
| GPRS (GMSK, 4-Slots)  | 21.23                    | 21.27 | 21.26 | 22.00      | 18.05                | 18.09        | 18.08 | 18.82        |
| EGPRS (8PSK, 1-Slot)  | 23.38                    | 23.11 | 23.08 | 24.50      | 14.19                | 13.92        | 13.89 | 15.31        |
| EGPRS (8PSK, 2-Slots) | 20.16                    | 20.35 | 20.55 | 21.50      | 14.03                | 14.22        | 14.42 | 15.37        |
| EGPRS (8PSK, 3-Slots) | 18.74                    | 19.10 | 18.97 | 19.70      | 14.32                | 14.68        | 14.55 | 15.28        |
| EGPRS (8PSK, 4-Slots) | 17.29                    | 17.41 | 17.60 | 19.00      | 14.11                | 14.23        | 14.42 | 15.82        |

| GSM-State1-Ant.0      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 33.17                    | 33.40 | 33.21 | 33.80      | 23.98                | 24.21        | 24.02 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 33.15                    | 33.37 | 33.16 | 33.80      | 23.96                | 24.18        | 23.97 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 30.26                    | 30.49 | 30.26 | 31.50      | 24.13                | <b>24.36</b> | 24.13 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 28.08                    | 28.30 | 28.05 | 29.70      | 23.66                | 23.88        | 23.63 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 27.01                    | 27.25 | 26.99 | 28.50      | 23.83                | 24.07        | 23.81 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.49                    | 27.35 | 27.58 | 29.00      | 18.30                | 18.16        | 18.39 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.12                    | 24.15 | 24.14 | 26.00      | 17.99                | 18.02        | 18.01 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.31                    | 22.27 | 22.24 | 24.20      | 17.89                | 17.85        | 17.82 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.91                    | 21.93 | 22.11 | 23.50      | 18.73                | 18.75        | 18.93 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 30.15                    | 30.04 | 29.88 | 30.30      | 20.96                | 20.85        | 20.69 | 21.11        |
| GPRS (GMSK, 1-Slot)   | 30.11                    | 29.99 | 29.84 | 30.30      | 20.92                | 20.80        | 20.65 | 21.11        |
| GPRS (GMSK, 2-Slots)  | 27.76                    | 27.81 | 27.70 | 28.50      | 21.63                | <b>21.68</b> | 21.57 | <b>22.37</b> |
| GPRS (GMSK, 3-Slots)  | 25.50                    | 25.56 | 25.44 | 26.70      | 21.08                | 21.14        | 21.02 | 22.28        |
| GPRS (GMSK, 4-Slots)  | 24.67                    | 24.74 | 24.63 | 25.50      | 21.49                | 21.56        | 21.45 | 22.32        |
| EGPRS (8PSK, 1-Slot)  | 26.03                    | 26.17 | 26.24 | 28.00      | 16.84                | 16.98        | 17.05 | 18.81        |
| EGPRS (8PSK, 2-Slots) | 23.33                    | 23.25 | 23.49 | 25.00      | 17.20                | 17.12        | 17.36 | 18.87        |
| EGPRS (8PSK, 3-Slots) | 21.40                    | 21.30 | 21.46 | 23.20      | 16.98                | 16.88        | 17.04 | 18.78        |
| EGPRS (8PSK, 4-Slots) | 20.63                    | 20.57 | 20.55 | 22.50      | 17.45                | 17.39        | 17.37 | 19.32        |

| GSM-State2-Ant.0      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 33.17                    | 33.40 | 33.21 | 33.80      | 23.98                | 24.21        | 24.02 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 33.15                    | 33.37 | 33.16 | 33.80      | 23.96                | 24.18        | 23.97 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 30.26                    | 30.49 | 30.26 | 31.50      | 24.13                | <b>24.36</b> | 24.13 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 28.08                    | 28.30 | 28.05 | 29.70      | 23.66                | 23.88        | 23.63 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 27.01                    | 27.25 | 26.99 | 28.50      | 23.83                | 24.07        | 23.81 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.49                    | 27.35 | 27.58 | 29.00      | 18.30                | 18.16        | 18.39 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.12                    | 24.15 | 24.14 | 26.00      | 17.99                | 18.02        | 18.01 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.31                    | 22.27 | 22.24 | 24.20      | 17.89                | 17.85        | 17.82 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.91                    | 21.93 | 22.11 | 23.50      | 18.73                | 18.75        | 18.93 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 30.15                    | 30.04 | 29.88 | 30.30      | 20.96                | 20.85        | 20.69 | 21.11        |
| GPRS (GMSK, 1-Slot)   | 30.11                    | 29.99 | 29.84 | 30.30      | 20.92                | 20.80        | 20.65 | 21.11        |
| GPRS (GMSK, 2-Slots)  | 27.76                    | 27.81 | 27.70 | 28.50      | 21.63                | <b>21.68</b> | 21.57 | <b>22.37</b> |
| GPRS (GMSK, 3-Slots)  | 25.50                    | 25.56 | 25.44 | 26.70      | 21.08                | 21.14        | 21.02 | 22.28        |
| GPRS (GMSK, 4-Slots)  | 24.67                    | 24.74 | 24.63 | 25.50      | 21.49                | 21.56        | 21.45 | 22.32        |
| EGPRS (8PSK, 1-Slot)  | 26.03                    | 26.17 | 26.24 | 28.00      | 16.84                | 16.98        | 17.05 | 18.81        |
| EGPRS (8PSK, 2-Slots) | 23.33                    | 23.25 | 23.49 | 25.00      | 17.20                | 17.12        | 17.36 | 18.87        |
| EGPRS (8PSK, 3-Slots) | 21.40                    | 21.30 | 21.46 | 23.20      | 16.98                | 16.88        | 17.04 | 18.78        |
| EGPRS (8PSK, 4-Slots) | 20.63                    | 20.57 | 20.55 | 22.50      | 17.45                | 17.39        | 17.37 | 19.32        |

| GSM-State3-Ant.0      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 33.17                    | 33.40 | 33.21 | 33.80      | 23.98                | 24.21        | 24.02 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 33.15                    | 33.37 | 33.16 | 33.80      | 23.96                | 24.18        | 23.97 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 30.26                    | 30.49 | 30.26 | 31.50      | 24.13                | <b>24.36</b> | 24.13 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 28.08                    | 28.30 | 28.05 | 29.70      | 23.66                | 23.88        | 23.63 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 27.01                    | 27.25 | 26.99 | 28.50      | 23.83                | 24.07        | 23.81 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.49                    | 27.35 | 27.58 | 29.00      | 18.30                | 18.16        | 18.39 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.12                    | 24.15 | 24.14 | 26.00      | 17.99                | 18.02        | 18.01 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.31                    | 22.27 | 22.24 | 24.20      | 17.89                | 17.85        | 17.82 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.91                    | 21.93 | 22.11 | 23.50      | 18.73                | 18.75        | 18.93 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 30.15                    | 30.04 | 29.88 | 30.30      | 20.96                | 20.85        | 20.69 | 21.11        |
| GPRS (GMSK, 1-Slot)   | 30.11                    | 29.99 | 29.84 | 30.30      | 20.92                | 20.80        | 20.65 | 21.11        |
| GPRS (GMSK, 2-Slots)  | 27.76                    | 27.81 | 27.70 | 28.50      | 21.63                | <b>21.68</b> | 21.57 | <b>22.37</b> |
| GPRS (GMSK, 3-Slots)  | 25.50                    | 25.56 | 25.44 | 26.70      | 21.08                | 21.14        | 21.02 | 22.28        |
| GPRS (GMSK, 4-Slots)  | 24.67                    | 24.74 | 24.63 | 25.50      | 21.49                | 21.56        | 21.45 | 22.32        |
| EGPRS (8PSK, 1-Slot)  | 26.03                    | 26.17 | 26.24 | 28.00      | 16.84                | 16.98        | 17.05 | 18.81        |
| EGPRS (8PSK, 2-Slots) | 23.33                    | 23.25 | 23.49 | 25.00      | 17.20                | 17.12        | 17.36 | 18.87        |
| EGPRS (8PSK, 3-Slots) | 21.40                    | 21.30 | 21.46 | 23.20      | 16.98                | 16.88        | 17.04 | 18.78        |
| EGPRS (8PSK, 4-Slots) | 20.63                    | 20.57 | 20.55 | 22.50      | 17.45                | 17.39        | 17.37 | 19.32        |

| GSM-State4-Ant.0      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 33.17                    | 33.40 | 33.21 | 33.80      | 23.98                | 24.21        | 24.02 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 33.15                    | 33.37 | 33.16 | 33.80      | 23.96                | 24.18        | 23.97 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 30.26                    | 30.49 | 30.26 | 31.50      | 24.13                | <b>24.36</b> | 24.13 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 28.08                    | 28.30 | 28.05 | 29.70      | 23.66                | 23.88        | 23.63 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 27.01                    | 27.25 | 26.99 | 28.50      | 23.83                | 24.07        | 23.81 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.49                    | 27.35 | 27.58 | 29.00      | 18.30                | 18.16        | 18.39 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.12                    | 24.15 | 24.14 | 26.00      | 17.99                | 18.02        | 18.01 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.31                    | 22.27 | 22.24 | 24.20      | 17.89                | 17.85        | 17.82 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.91                    | 21.93 | 22.11 | 23.50      | 18.73                | 18.75        | 18.93 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 30.15                    | 30.04 | 29.88 | 30.30      | 20.96                | 20.85        | 20.69 | 21.11        |
| GPRS (GMSK, 1-Slot)   | 30.11                    | 29.99 | 29.84 | 30.30      | 20.92                | 20.80        | 20.65 | 21.11        |
| GPRS (GMSK, 2-Slots)  | 27.76                    | 27.81 | 27.70 | 28.50      | 21.63                | <b>21.68</b> | 21.57 | <b>22.37</b> |
| GPRS (GMSK, 3-Slots)  | 25.50                    | 25.56 | 25.44 | 26.70      | 21.08                | 21.14        | 21.02 | 22.28        |
| GPRS (GMSK, 4-Slots)  | 24.67                    | 24.74 | 24.63 | 25.50      | 21.49                | 21.56        | 21.45 | 22.32        |
| EGPRS (8PSK, 1-Slot)  | 26.03                    | 26.17 | 26.24 | 28.00      | 16.84                | 16.98        | 17.05 | 18.81        |
| EGPRS (8PSK, 2-Slots) | 23.33                    | 23.25 | 23.49 | 25.00      | 17.20                | 17.12        | 17.36 | 18.87        |
| EGPRS (8PSK, 3-Slots) | 21.40                    | 21.30 | 21.46 | 23.20      | 16.98                | 16.88        | 17.04 | 18.78        |
| EGPRS (8PSK, 4-Slots) | 20.63                    | 20.57 | 20.55 | 22.50      | 17.45                | 17.39        | 17.37 | 19.32        |

| GSM-State5-Ant.0      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 33.17                    | 33.40 | 33.21 | 33.80      | 23.98                | 24.21        | 24.02 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 33.15                    | 33.37 | 33.16 | 33.80      | 23.96                | 24.18        | 23.97 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 30.26                    | 30.49 | 30.26 | 31.50      | 24.13                | <b>24.36</b> | 24.13 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 28.08                    | 28.30 | 28.05 | 29.70      | 23.66                | 23.88        | 23.63 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 27.01                    | 27.25 | 26.99 | 28.50      | 23.83                | 24.07        | 23.81 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.49                    | 27.35 | 27.58 | 29.00      | 18.30                | 18.16        | 18.39 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.12                    | 24.15 | 24.14 | 26.00      | 17.99                | 18.02        | 18.01 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.31                    | 22.27 | 22.24 | 24.20      | 17.89                | 17.85        | 17.82 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.91                    | 21.93 | 22.11 | 23.50      | 18.73                | 18.75        | 18.93 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 28.52                    | 28.51 | 28.48 | 28.80      | 19.33                | 19.32        | 19.29 | 19.61        |
| GPRS (GMSK, 1-Slot)   | 28.51                    | 28.56 | 28.47 | 28.80      | 19.32                | 19.37        | 19.28 | 19.61        |
| GPRS (GMSK, 2-Slots)  | 25.75                    | 25.82 | 25.72 | 27.00      | 19.62                | 19.69        | 19.59 | 20.87        |
| GPRS (GMSK, 3-Slots)  | 23.95                    | 24.05 | 23.98 | 25.20      | 19.53                | 19.63        | 19.56 | 20.78        |
| GPRS (GMSK, 4-Slots)  | 23.53                    | 23.65 | 23.59 | 24.50      | 20.35                | <b>20.47</b> | 20.41 | <b>21.32</b> |
| EGPRS (8PSK, 1-Slot)  | 24.57                    | 24.64 | 24.62 | 26.50      | 15.38                | 15.45        | 15.43 | 17.31        |
| EGPRS (8PSK, 2-Slots) | 21.63                    | 21.52 | 21.51 | 23.50      | 15.50                | 15.39        | 15.38 | 17.37        |
| EGPRS (8PSK, 3-Slots) | 20.06                    | 20.15 | 19.98 | 21.70      | 15.64                | 15.73        | 15.56 | 17.28        |
| EGPRS (8PSK, 4-Slots) | 19.83                    | 19.87 | 20.11 | 21.00      | 16.65                | 16.69        | 16.93 | 17.82        |

| GSM-State6-Ant.0      |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 124                      | 190   | 251   | Power(dBm) | 124                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 33.17                    | 33.40 | 33.21 | 33.80      | 23.98                | 24.21        | 24.02 | 24.61        |
| GPRS (GMSK, 1-Slot)   | 33.15                    | 33.37 | 33.16 | 33.80      | 23.96                | 24.18        | 23.97 | 24.61        |
| GPRS (GMSK, 2-Slots)  | 30.26                    | 30.49 | 30.26 | 31.50      | 24.13                | <b>24.36</b> | 24.13 | <b>25.37</b> |
| GPRS (GMSK, 3-Slots)  | 28.08                    | 28.30 | 28.05 | 29.70      | 23.66                | 23.88        | 23.63 | 25.28        |
| GPRS (GMSK, 4-Slots)  | 27.01                    | 27.25 | 26.99 | 28.50      | 23.83                | 24.07        | 23.81 | 25.32        |
| EGPRS (8PSK, 1-Slot)  | 27.49                    | 27.35 | 27.58 | 29.00      | 18.30                | 18.16        | 18.39 | 19.81        |
| EGPRS (8PSK, 2-Slots) | 24.12                    | 24.15 | 24.14 | 26.00      | 17.99                | 18.02        | 18.01 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.31                    | 22.27 | 22.24 | 24.20      | 17.89                | 17.85        | 17.82 | 19.78        |
| EGPRS (8PSK, 4-Slots) | 21.91                    | 21.93 | 22.11 | 23.50      | 18.73                | 18.75        | 18.93 | 20.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 975                  | 38           | 124   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 28.52                    | 28.51 | 28.48 | 28.80      | 19.33                | 19.32        | 19.29 | 19.61        |
| GPRS (GMSK, 1-Slot)   | 28.51                    | 28.56 | 28.47 | 28.80      | 19.32                | 19.37        | 19.28 | 19.61        |
| GPRS (GMSK, 2-Slots)  | 25.75                    | 25.82 | 25.72 | 27.00      | 19.62                | 19.69        | 19.59 | 20.87        |
| GPRS (GMSK, 3-Slots)  | 23.95                    | 24.05 | 23.98 | 25.20      | 19.53                | 19.63        | 19.56 | 20.78        |
| GPRS (GMSK, 4-Slots)  | 23.53                    | 23.65 | 23.59 | 24.50      | 20.35                | <b>20.47</b> | 20.41 | <b>21.32</b> |
| EGPRS (8PSK, 1-Slot)  | 24.57                    | 24.64 | 24.62 | 26.50      | 15.38                | 15.45        | 15.43 | 17.31        |
| EGPRS (8PSK, 2-Slots) | 21.63                    | 21.52 | 21.51 | 23.50      | 15.50                | 15.39        | 15.38 | 17.37        |
| EGPRS (8PSK, 3-Slots) | 20.06                    | 20.15 | 19.98 | 21.70      | 15.64                | 15.73        | 15.56 | 17.28        |
| EGPRS (8PSK, 4-Slots) | 19.83                    | 19.87 | 20.11 | 21.00      | 16.65                | 16.69        | 16.93 | 17.82        |

## 8.2 WCDMA Output Power

| WCDMA-State 1-Ant.1 |              |         |              |                             |
|---------------------|--------------|---------|--------------|-----------------------------|
| Band                | Band 2       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400    | 9538         |                             |
| Frequency           | 1852.40      | 1880.00 | 1907.60      |                             |
| AMR 12.2Kbps        | 17.61        | 17.67   | 17.75        | 17.80                       |
| RMC 12.2Kbps        | 17.70        | 17.72   | <b>17.76</b> | 17.80                       |
| HSDPA Subtest-1     | 16.67        | 16.68   | 16.70        | 16.80                       |
| HSDPA Subtest-2     | 16.53        | 16.68   | 16.49        | 16.80                       |
| HSDPA Subtest-3     | 16.27        | 16.22   | 16.25        | 16.30                       |
| HSDPA Subtest-4     | 16.16        | 16.18   | 16.02        | 16.30                       |
| HSUPA Subtest-1     | 14.77        | 14.72   | 14.68        | 14.80                       |
| HSUPA Subtest-2     | 13.70        | 13.69   | 13.62        | 13.80                       |
| HSUPA Subtest-3     | 14.59        | 14.69   | 14.68        | 14.80                       |
| HSUPA Subtest-4     | 13.96        | 14.14   | 14.03        | 14.30                       |
| HSUPA Subtest-5     | 16.51        | 16.68   | 16.72        | 16.80                       |
| Band                | Band 4       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412    | 1513         |                             |
| Frequency           | 1712.40      | 1732.40 | 1752.60      |                             |
| AMR 12.2Kbps        | 17.81        | 17.72   | 17.89        | 18.30                       |
| RMC 12.2Kbps        | 17.81        | 17.78   | <b>17.84</b> | 18.30                       |
| HSDPA Subtest-1     | 16.79        | 16.76   | 16.84        | 17.30                       |
| HSDPA Subtest-2     | 16.69        | 16.81   | 16.79        | 17.30                       |
| HSDPA Subtest-3     | 16.14        | 16.32   | 16.34        | 16.80                       |
| HSDPA Subtest-4     | 16.13        | 16.28   | 16.30        | 16.80                       |
| HSUPA Subtest-1     | 15.15        | 15.20   | 15.03        | 15.30                       |
| HSUPA Subtest-2     | 14.17        | 14.27   | 14.17        | 14.30                       |
| HSUPA Subtest-3     | 14.73        | 14.77   | 14.84        | 15.30                       |
| HSUPA Subtest-4     | 14.13        | 14.24   | 14.11        | 14.80                       |
| HSUPA Subtest-5     | 16.63        | 16.76   | 16.69        | 17.30                       |
| Band                | Band 5       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00 | 4233.00      |                             |
| Frequency           | 826.40       | 836.40  | 846.60       |                             |
| AMR 12.2Kbps        | 21.55        | 21.46   | 21.37        | 22.30                       |
| RMC 12.2Kbps        | <b>21.57</b> | 21.43   | 21.41        | 22.30                       |
| HSDPA Subtest-1     | 20.49        | 20.41   | 20.42        | 21.30                       |
| HSDPA Subtest-2     | 20.45        | 20.43   | 20.20        | 21.30                       |
| HSDPA Subtest-3     | 19.87        | 19.83   | 19.92        | 20.80                       |
| HSDPA Subtest-4     | 20.01        | 19.97   | 19.65        | 20.80                       |
| HSUPA Subtest-1     | 18.90        | 18.98   | 18.79        | 19.30                       |
| HSUPA Subtest-2     | 17.87        | 17.83   | 17.82        | 18.30                       |
| HSUPA Subtest-3     | 18.55        | 18.55   | 18.30        | 19.30                       |
| HSUPA Subtest-4     | 17.96        | 17.94   | 17.87        | 18.80                       |
| HSUPA Subtest-5     | 20.37        | 20.29   | 20.47        | 21.30                       |

| WCDMA-State 2-Ant.1 |              |         |              |                             |
|---------------------|--------------|---------|--------------|-----------------------------|
| Band                | Band 2       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400    | 9538         |                             |
| Frequency           | 1852.40      | 1880.00 | 1907.60      |                             |
| AMR 12.2Kbps        | 16.67        | 16.64   | 16.69        | 16.80                       |
| RMC 12.2Kbps        | 16.62        | 16.65   | <b>16.71</b> | 16.80                       |
| HSDPA Subtest-1     | 15.65        | 15.68   | 15.71        | 15.80                       |
| HSDPA Subtest-2     | 15.60        | 15.74   | 15.60        | 15.80                       |
| HSDPA Subtest-3     | 15.11        | 15.12   | 15.15        | 15.30                       |
| HSDPA Subtest-4     | 15.18        | 15.24   | 15.24        | 15.30                       |
| HSUPA Subtest-1     | 13.55        | 13.59   | 13.60        | 13.80                       |
| HSUPA Subtest-2     | 12.62        | 12.66   | 12.64        | 12.80                       |
| HSUPA Subtest-3     | 13.62        | 13.59   | 13.68        | 13.80                       |
| HSUPA Subtest-4     | 13.23        | 13.30   | 13.27        | 13.30                       |
| HSUPA Subtest-5     | 14.59        | 14.73   | 14.77        | 15.80                       |
| Band                | Band 4       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412    | 1513         |                             |
| Frequency           | 1712.40      | 1732.40 | 1752.60      |                             |
| AMR 12.2Kbps        | 16.68        | 16.64   | 16.76        | 17.30                       |
| RMC 12.2Kbps        | 16.66        | 16.66   | <b>16.74</b> | 17.30                       |
| HSDPA Subtest-1     | 15.68        | 15.67   | 15.78        | 16.30                       |
| HSDPA Subtest-2     | 15.63        | 15.75   | 15.77        | 16.30                       |
| HSDPA Subtest-3     | 15.05        | 15.29   | 15.20        | 15.80                       |
| HSDPA Subtest-4     | 14.98        | 15.14   | 15.24        | 15.80                       |
| HSUPA Subtest-1     | 14.01        | 14.21   | 13.95        | 14.30                       |
| HSUPA Subtest-2     | 13.05        | 13.27   | 13.13        | 13.30                       |
| HSUPA Subtest-3     | 13.61        | 13.62   | 13.83        | 14.30                       |
| HSUPA Subtest-4     | 13.13        | 13.21   | 13.12        | 13.80                       |
| HSUPA Subtest-5     | 15.66        | 15.78   | 15.67        | 16.30                       |
| Band                | Band 5       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00 | 4233.00      |                             |
| Frequency           | 826.40       | 836.40  | 846.60       |                             |
| AMR 12.2Kbps        | 20.41        | 20.44   | 20.32        | 21.30                       |
| RMC 12.2Kbps        | <b>20.47</b> | 20.46   | 20.34        | 21.30                       |
| HSDPA Subtest-1     | 19.47        | 19.45   | 19.37        | 20.30                       |
| HSDPA Subtest-2     | 19.37        | 19.39   | 19.43        | 20.30                       |
| HSDPA Subtest-3     | 18.85        | 18.87   | 18.66        | 19.80                       |
| HSDPA Subtest-4     | 18.80        | 19.03   | 18.76        | 19.80                       |
| HSUPA Subtest-1     | 17.97        | 17.74   | 17.86        | 18.30                       |
| HSUPA Subtest-2     | 16.90        | 16.70   | 16.71        | 17.30                       |
| HSUPA Subtest-3     | 17.44        | 17.46   | 17.41        | 18.30                       |
| HSUPA Subtest-4     | 16.96        | 16.94   | 16.94        | 17.80                       |
| HSUPA Subtest-5     | 19.16        | 19.25   | 19.24        | 20.30                       |

| WCDMA-State 3-Ant.1 |              |         |              |                             |
|---------------------|--------------|---------|--------------|-----------------------------|
| Band                | Band 2       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400    | 9538         |                             |
| Frequency           | 1852.40      | 1880.00 | 1907.60      |                             |
| AMR 12.2Kbps        | 16.67        | 16.64   | 16.69        | 16.80                       |
| RMC 12.2Kbps        | 16.62        | 16.65   | <b>16.71</b> | 16.80                       |
| HSDPA Subtest-1     | 15.65        | 15.68   | 15.71        | 15.80                       |
| HSDPA Subtest-2     | 15.60        | 15.74   | 15.60        | 15.80                       |
| HSDPA Subtest-3     | 15.11        | 15.12   | 15.15        | 15.30                       |
| HSDPA Subtest-4     | 15.18        | 15.24   | 15.24        | 15.30                       |
| HSUPA Subtest-1     | 13.55        | 13.59   | 13.60        | 13.80                       |
| HSUPA Subtest-2     | 12.62        | 12.66   | 12.64        | 12.80                       |
| HSUPA Subtest-3     | 13.62        | 13.59   | 13.68        | 13.80                       |
| HSUPA Subtest-4     | 13.23        | 13.30   | 13.27        | 13.30                       |
| HSUPA Subtest-5     | 14.59        | 14.73   | 14.77        | 15.80                       |
| Band                | Band 4       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412    | 1513         |                             |
| Frequency           | 1712.40      | 1732.40 | 1752.60      |                             |
| AMR 12.2Kbps        | 16.68        | 16.64   | 16.76        | 17.30                       |
| RMC 12.2Kbps        | 16.66        | 16.66   | <b>16.74</b> | 17.30                       |
| HSDPA Subtest-1     | 15.68        | 15.67   | 15.78        | 16.30                       |
| HSDPA Subtest-2     | 15.63        | 15.75   | 15.77        | 16.30                       |
| HSDPA Subtest-3     | 15.05        | 15.29   | 15.20        | 15.80                       |
| HSDPA Subtest-4     | 14.98        | 15.14   | 15.24        | 15.80                       |
| HSUPA Subtest-1     | 14.01        | 14.21   | 13.95        | 14.30                       |
| HSUPA Subtest-2     | 13.05        | 13.27   | 13.13        | 13.30                       |
| HSUPA Subtest-3     | 13.61        | 13.62   | 13.83        | 14.30                       |
| HSUPA Subtest-4     | 13.13        | 13.21   | 13.12        | 13.80                       |
| HSUPA Subtest-5     | 15.66        | 15.78   | 15.67        | 16.30                       |
| Band                | Band 5       |         |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00 | 4233.00      |                             |
| Frequency           | 826.40       | 836.40  | 846.60       |                             |
| AMR 12.2Kbps        | 20.41        | 20.44   | 20.32        | 21.30                       |
| RMC 12.2Kbps        | <b>20.47</b> | 20.46   | 20.34        | 21.30                       |
| HSDPA Subtest-1     | 19.47        | 19.45   | 19.37        | 20.30                       |
| HSDPA Subtest-2     | 19.37        | 19.39   | 19.43        | 20.30                       |
| HSDPA Subtest-3     | 18.85        | 18.87   | 18.66        | 19.80                       |
| HSDPA Subtest-4     | 18.80        | 19.03   | 18.76        | 19.80                       |
| HSUPA Subtest-1     | 17.97        | 17.74   | 17.86        | 18.30                       |
| HSUPA Subtest-2     | 16.90        | 16.70   | 16.71        | 17.30                       |
| HSUPA Subtest-3     | 17.44        | 17.46   | 17.41        | 18.30                       |
| HSUPA Subtest-4     | 16.96        | 16.94   | 16.94        | 17.80                       |
| HSUPA Subtest-5     | 19.16        | 19.25   | 19.24        | 20.30                       |

| WCDMA-State 4-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 20.06        | 20.31        | 20.05        | 20.80                       |
| RMC 12.2Kbps        | 20.04        | <b>20.33</b> | 20.09        | 20.80                       |
| HSDPA Subtest-1     | 19.44        | 19.52        | 19.59        | 19.80                       |
| HSDPA Subtest-2     | 19.48        | 19.54        | 19.69        | 19.80                       |
| HSDPA Subtest-3     | 18.92        | 19.08        | 19.08        | 19.30                       |
| HSDPA Subtest-4     | 19.01        | 19.00        | 19.20        | 19.30                       |
| HSUPA Subtest-1     | 17.45        | 17.48        | 17.37        | 17.80                       |
| HSUPA Subtest-2     | 16.39        | 16.42        | 16.48        | 16.80                       |
| HSUPA Subtest-3     | 17.44        | 17.51        | 17.52        | 17.80                       |
| HSUPA Subtest-4     | 17.06        | 17.00        | 17.06        | 17.30                       |
| HSUPA Subtest-5     | 18.32        | 19.51        | 18.69        | 19.80                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 20.33        | 20.17        | 20.37        | 20.80                       |
| RMC 12.2Kbps        | 20.35        | 20.19        | <b>20.39</b> | 20.80                       |
| HSDPA Subtest-1     | 19.40        | 19.13        | 19.32        | 19.80                       |
| HSDPA Subtest-2     | 19.38        | 19.22        | 19.34        | 19.80                       |
| HSDPA Subtest-3     | 18.88        | 18.86        | 18.86        | 19.30                       |
| HSDPA Subtest-4     | 18.75        | 18.73        | 18.81        | 19.30                       |
| HSUPA Subtest-1     | 17.73        | 17.73        | 17.80        | 17.80                       |
| HSUPA Subtest-2     | 16.68        | 16.73        | 16.75        | 16.80                       |
| HSUPA Subtest-3     | 17.20        | 17.37        | 17.32        | 17.80                       |
| HSUPA Subtest-4     | 16.89        | 16.88        | 16.81        | 17.30                       |
| HSUPA Subtest-5     | 19.22        | 19.26        | 19.32        | 19.80                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 23.93        | 23.83        | 23.89        | 24.80                       |
| RMC 12.2Kbps        | <b>24.05</b> | 24.00        | 23.91        | 24.80                       |
| HSDPA Subtest-1     | 22.96        | 23.01        | 22.87        | 23.80                       |
| HSDPA Subtest-2     | 22.80        | 23.03        | 22.89        | 23.80                       |
| HSDPA Subtest-3     | 22.50        | 22.55        | 22.44        | 23.30                       |
| HSDPA Subtest-4     | 22.31        | 22.49        | 22.45        | 23.30                       |
| HSUPA Subtest-1     | 21.31        | 21.44        | 21.38        | 21.80                       |
| HSUPA Subtest-2     | 20.46        | 20.50        | 20.46        | 20.80                       |
| HSUPA Subtest-3     | 20.97        | 21.01        | 21.09        | 21.80                       |
| HSUPA Subtest-4     | 20.44        | 20.48        | 20.58        | 21.30                       |
| HSUPA Subtest-5     | 23.03        | 23.01        | 22.94        | 23.80                       |

| WCDMA-State 5-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 17.71        | 17.88        | 17.77        | 18.30                       |
| RMC 12.2Kbps        | 17.67        | <b>17.90</b> | 17.75        | 18.30                       |
| HSDPA Subtest-1     | 17.30        | 16.94        | 17.25        | 17.30                       |
| HSDPA Subtest-2     | 17.09        | 16.98        | 17.15        | 17.30                       |
| HSDPA Subtest-3     | 16.80        | 16.49        | 16.78        | 16.80                       |
| HSDPA Subtest-4     | 16.57        | 16.46        | 16.60        | 16.80                       |
| HSUPA Subtest-1     | 15.18        | 15.19        | 15.01        | 15.30                       |
| HSUPA Subtest-2     | 14.20        | 14.12        | 14.22        | 14.30                       |
| HSUPA Subtest-3     | 15.03        | 14.97        | 15.00        | 15.30                       |
| HSUPA Subtest-4     | 14.42        | 14.43        | 14.48        | 14.80                       |
| HSUPA Subtest-5     | 16.32        | 16.96        | 16.16        | 17.30                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 17.81        | 17.72        | 17.89        | 18.30                       |
| RMC 12.2Kbps        | 17.81        | 17.78        | <b>17.84</b> | 18.30                       |
| HSDPA Subtest-1     | 16.79        | 16.76        | 16.84        | 17.30                       |
| HSDPA Subtest-2     | 16.69        | 16.81        | 16.79        | 17.30                       |
| HSDPA Subtest-3     | 16.14        | 16.32        | 16.34        | 16.80                       |
| HSDPA Subtest-4     | 16.13        | 16.28        | 16.30        | 16.80                       |
| HSUPA Subtest-1     | 15.15        | 15.20        | 15.03        | 15.30                       |
| HSUPA Subtest-2     | 14.17        | 14.27        | 14.17        | 14.30                       |
| HSUPA Subtest-3     | 14.73        | 14.77        | 14.84        | 15.30                       |
| HSUPA Subtest-4     | 14.13        | 14.24        | 14.11        | 14.80                       |
| HSUPA Subtest-5     | 16.63        | 16.76        | 16.69        | 17.30                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 22.93        | 22.76        | 22.91        | 23.80                       |
| RMC 12.2Kbps        | <b>23.03</b> | 22.98        | 23.02        | 23.80                       |
| HSDPA Subtest-1     | 22.07        | 22.12        | 21.98        | 22.80                       |
| HSDPA Subtest-2     | 21.58        | 21.99        | 21.89        | 22.80                       |
| HSDPA Subtest-3     | 21.39        | 21.61        | 21.44        | 22.30                       |
| HSDPA Subtest-4     | 21.20        | 21.43        | 21.56        | 22.30                       |
| HSUPA Subtest-1     | 20.13        | 20.40        | 20.22        | 20.80                       |
| HSUPA Subtest-2     | 19.40        | 19.60        | 19.30        | 19.80                       |
| HSUPA Subtest-3     | 19.87        | 19.85        | 19.97        | 20.80                       |
| HSUPA Subtest-4     | 19.40        | 19.36        | 19.52        | 20.30                       |
| HSUPA Subtest-5     | 21.79        | 22.08        | 21.76        | 22.80                       |

| WCDMA-State 6-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 17.71        | 17.88        | 17.77        | 18.30                       |
| RMC 12.2Kbps        | 17.67        | <b>17.90</b> | 17.75        | 18.30                       |
| HSDPA Subtest-1     | 17.30        | 16.94        | 17.25        | 17.30                       |
| HSDPA Subtest-2     | 17.09        | 16.98        | 17.15        | 17.30                       |
| HSDPA Subtest-3     | 16.80        | 16.49        | 16.78        | 16.80                       |
| HSDPA Subtest-4     | 16.57        | 16.46        | 16.60        | 16.80                       |
| HSUPA Subtest-1     | 15.18        | 15.19        | 15.01        | 15.30                       |
| HSUPA Subtest-2     | 14.20        | 14.12        | 14.22        | 14.30                       |
| HSUPA Subtest-3     | 15.03        | 14.97        | 15.00        | 15.30                       |
| HSUPA Subtest-4     | 14.42        | 14.43        | 14.48        | 14.80                       |
| HSUPA Subtest-5     | 16.32        | 16.96        | 16.16        | 17.30                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 17.81        | 17.72        | 17.89        | 18.30                       |
| RMC 12.2Kbps        | 17.81        | 17.78        | <b>17.84</b> | 18.30                       |
| HSDPA Subtest-1     | 16.79        | 16.76        | 16.84        | 17.30                       |
| HSDPA Subtest-2     | 16.69        | 16.81        | 16.79        | 17.30                       |
| HSDPA Subtest-3     | 16.14        | 16.32        | 16.34        | 16.80                       |
| HSDPA Subtest-4     | 16.13        | 16.28        | 16.30        | 16.80                       |
| HSUPA Subtest-1     | 15.15        | 15.20        | 15.03        | 15.30                       |
| HSUPA Subtest-2     | 14.17        | 14.27        | 14.17        | 14.30                       |
| HSUPA Subtest-3     | 14.73        | 14.77        | 14.84        | 15.30                       |
| HSUPA Subtest-4     | 14.13        | 14.24        | 14.11        | 14.80                       |
| HSUPA Subtest-5     | 16.63        | 16.76        | 16.69        | 17.30                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 22.93        | 22.76        | 22.91        | 23.80                       |
| RMC 12.2Kbps        | <b>23.03</b> | 22.98        | 23.02        | 23.80                       |
| HSDPA Subtest-1     | 22.07        | 22.12        | 21.98        | 22.80                       |
| HSDPA Subtest-2     | 21.58        | 21.99        | 21.89        | 22.80                       |
| HSDPA Subtest-3     | 21.39        | 21.61        | 21.44        | 22.30                       |
| HSDPA Subtest-4     | 21.20        | 21.43        | 21.56        | 22.30                       |
| HSUPA Subtest-1     | 20.13        | 20.40        | 20.22        | 20.80                       |
| HSUPA Subtest-2     | 19.40        | 19.60        | 19.30        | 19.80                       |
| HSUPA Subtest-3     | 19.87        | 19.85        | 19.97        | 20.80                       |
| HSUPA Subtest-4     | 19.40        | 19.36        | 19.52        | 20.30                       |
| HSUPA Subtest-5     | 21.79        | 22.08        | 21.76        | 22.80                       |

## 8.2 WCDMA Output Power

| WCDMA-State 1-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 23.54        | 23.57        | 23.46        | 23.80                       |
| RMC 12.2Kbps        | 23.56        | <b>23.64</b> | 23.41        | 23.80                       |
| HSDPA Subtest-1     | 22.64        | 22.58        | 22.68        | 22.80                       |
| HSDPA Subtest-2     | 22.67        | 22.59        | 22.63        | 22.80                       |
| HSDPA Subtest-3     | 22.17        | 22.16        | 22.21        | 22.30                       |
| HSDPA Subtest-4     | 22.20        | 22.11        | 22.12        | 22.30                       |
| HSUPA Subtest-1     | 20.62        | 20.74        | 20.77        | 20.80                       |
| HSUPA Subtest-2     | 19.58        | 19.60        | 19.60        | 19.80                       |
| HSUPA Subtest-3     | 20.40        | 20.59        | 20.47        | 20.80                       |
| HSUPA Subtest-4     | 19.93        | 20.07        | 20.17        | 20.30                       |
| HSUPA Subtest-5     | 22.49        | 22.60        | 22.46        | 22.80                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 23.34        | 23.29        | 23.38        | 23.80                       |
| RMC 12.2Kbps        | 23.34        | 23.33        | <b>23.42</b> | 23.80                       |
| HSDPA Subtest-1     | 22.31        | 22.31        | 22.40        | 22.80                       |
| HSDPA Subtest-2     | 22.44        | 22.33        | 22.15        | 22.80                       |
| HSDPA Subtest-3     | 21.80        | 21.84        | 21.60        | 22.30                       |
| HSDPA Subtest-4     | 21.83        | 21.79        | 21.55        | 22.30                       |
| HSUPA Subtest-1     | 20.63        | 20.75        | 20.73        | 20.80                       |
| HSUPA Subtest-2     | 19.72        | 19.73        | 19.78        | 19.80                       |
| HSUPA Subtest-3     | 20.50        | 20.50        | 20.27        | 20.80                       |
| HSUPA Subtest-4     | 19.76        | 19.78        | 19.70        | 20.30                       |
| HSUPA Subtest-5     | 22.21        | 22.32        | 22.12        | 22.80                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 24.21        | 24.03        | 24.03        | 24.80                       |
| RMC 12.2Kbps        | <b>24.19</b> | 24.15        | 24.06        | 24.80                       |
| HSDPA Subtest-1     | 23.20        | 23.15        | 23.01        | 23.80                       |
| HSDPA Subtest-2     | 23.10        | 23.17        | 23.12        | 23.80                       |
| HSDPA Subtest-3     | 22.79        | 22.70        | 22.47        | 23.30                       |
| HSDPA Subtest-4     | 22.40        | 22.65        | 22.49        | 23.30                       |
| HSUPA Subtest-1     | 21.43        | 21.60        | 21.71        | 21.80                       |
| HSUPA Subtest-2     | 20.43        | 20.53        | 20.37        | 20.80                       |
| HSUPA Subtest-3     | 21.22        | 21.14        | 21.08        | 21.80                       |
| HSUPA Subtest-4     | 20.54        | 20.62        | 20.52        | 21.30                       |
| HSUPA Subtest-5     | 22.89        | 23.14        | 23.14        | 23.80                       |

| WCDMA-State 2-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 23.54        | 23.57        | 23.46        | 23.80                       |
| RMC 12.2Kbps        | 23.56        | <b>23.64</b> | 23.41        | 23.80                       |
| HSDPA Subtest-1     | 22.64        | 22.58        | 22.68        | 22.80                       |
| HSDPA Subtest-2     | 22.67        | 22.59        | 22.63        | 22.80                       |
| HSDPA Subtest-3     | 22.17        | 22.16        | 22.21        | 22.30                       |
| HSDPA Subtest-4     | 22.20        | 22.11        | 22.12        | 22.30                       |
| HSUPA Subtest-1     | 20.62        | 20.74        | 20.77        | 20.80                       |
| HSUPA Subtest-2     | 19.58        | 19.60        | 19.60        | 19.80                       |
| HSUPA Subtest-3     | 20.40        | 20.59        | 20.47        | 20.80                       |
| HSUPA Subtest-4     | 19.93        | 20.07        | 20.17        | 20.30                       |
| HSUPA Subtest-5     | 22.49        | 22.60        | 22.46        | 22.80                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 23.34        | 23.29        | 23.38        | 23.80                       |
| RMC 12.2Kbps        | 23.34        | 23.33        | <b>23.42</b> | 23.80                       |
| HSDPA Subtest-1     | 22.31        | 22.31        | 22.40        | 22.80                       |
| HSDPA Subtest-2     | 22.44        | 22.33        | 22.15        | 22.80                       |
| HSDPA Subtest-3     | 21.80        | 21.84        | 21.60        | 22.30                       |
| HSDPA Subtest-4     | 21.83        | 21.79        | 21.55        | 22.30                       |
| HSUPA Subtest-1     | 20.63        | 20.75        | 20.73        | 20.80                       |
| HSUPA Subtest-2     | 19.72        | 19.73        | 19.78        | 19.80                       |
| HSUPA Subtest-3     | 20.50        | 20.50        | 20.27        | 20.80                       |
| HSUPA Subtest-4     | 19.76        | 19.78        | 19.70        | 20.30                       |
| HSUPA Subtest-5     | 22.21        | 22.32        | 22.12        | 22.80                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 24.21        | 24.03        | 24.03        | 24.80                       |
| RMC 12.2Kbps        | <b>24.19</b> | 24.15        | 24.06        | 24.80                       |
| HSDPA Subtest-1     | 23.20        | 23.15        | 23.01        | 23.80                       |
| HSDPA Subtest-2     | 23.10        | 23.17        | 23.12        | 23.80                       |
| HSDPA Subtest-3     | 22.79        | 22.70        | 22.47        | 23.30                       |
| HSDPA Subtest-4     | 22.40        | 22.65        | 22.49        | 23.30                       |
| HSUPA Subtest-1     | 21.43        | 21.60        | 21.71        | 21.80                       |
| HSUPA Subtest-2     | 20.43        | 20.53        | 20.37        | 20.80                       |
| HSUPA Subtest-3     | 21.22        | 21.14        | 21.08        | 21.80                       |
| HSUPA Subtest-4     | 20.54        | 20.62        | 20.52        | 21.30                       |
| HSUPA Subtest-5     | 22.89        | 23.14        | 23.14        | 23.80                       |

| WCDMA-State 3-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 23.54        | 23.57        | 23.46        | 23.80                       |
| RMC 12.2Kbps        | 23.56        | <b>23.64</b> | 23.41        | 23.80                       |
| HSDPA Subtest-1     | 22.64        | 22.58        | 22.68        | 22.80                       |
| HSDPA Subtest-2     | 22.67        | 22.59        | 22.63        | 22.80                       |
| HSDPA Subtest-3     | 22.17        | 22.16        | 22.21        | 22.30                       |
| HSDPA Subtest-4     | 22.20        | 22.11        | 22.12        | 22.30                       |
| HSUPA Subtest-1     | 20.62        | 20.74        | 20.77        | 20.80                       |
| HSUPA Subtest-2     | 19.58        | 19.60        | 19.60        | 19.80                       |
| HSUPA Subtest-3     | 20.40        | 20.59        | 20.47        | 20.80                       |
| HSUPA Subtest-4     | 19.93        | 20.07        | 20.17        | 20.30                       |
| HSUPA Subtest-5     | 22.49        | 22.60        | 22.46        | 22.80                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 23.34        | 23.29        | 23.38        | 23.80                       |
| RMC 12.2Kbps        | 23.34        | 23.33        | <b>23.42</b> | 23.80                       |
| HSDPA Subtest-1     | 22.31        | 22.31        | 22.40        | 22.80                       |
| HSDPA Subtest-2     | 22.44        | 22.33        | 22.15        | 22.80                       |
| HSDPA Subtest-3     | 21.80        | 21.84        | 21.60        | 22.30                       |
| HSDPA Subtest-4     | 21.83        | 21.79        | 21.55        | 22.30                       |
| HSUPA Subtest-1     | 20.63        | 20.75        | 20.73        | 20.80                       |
| HSUPA Subtest-2     | 19.72        | 19.73        | 19.78        | 19.80                       |
| HSUPA Subtest-3     | 20.50        | 20.50        | 20.27        | 20.80                       |
| HSUPA Subtest-4     | 19.76        | 19.78        | 19.70        | 20.30                       |
| HSUPA Subtest-5     | 22.21        | 22.32        | 22.12        | 22.80                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 24.21        | 24.03        | 24.03        | 24.80                       |
| RMC 12.2Kbps        | <b>24.19</b> | 24.15        | 24.06        | 24.80                       |
| HSDPA Subtest-1     | 23.20        | 23.15        | 23.01        | 23.80                       |
| HSDPA Subtest-2     | 23.10        | 23.17        | 23.12        | 23.80                       |
| HSDPA Subtest-3     | 22.79        | 22.70        | 22.47        | 23.30                       |
| HSDPA Subtest-4     | 22.40        | 22.65        | 22.49        | 23.30                       |
| HSUPA Subtest-1     | 21.43        | 21.60        | 21.71        | 21.80                       |
| HSUPA Subtest-2     | 20.43        | 20.53        | 20.37        | 20.80                       |
| HSUPA Subtest-3     | 21.22        | 21.14        | 21.08        | 21.80                       |
| HSUPA Subtest-4     | 20.54        | 20.62        | 20.52        | 21.30                       |
| HSUPA Subtest-5     | 22.89        | 23.14        | 23.14        | 23.80                       |

| WCDMA-State 4-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 22.50        | 22.47        | 22.39        | 22.80                       |
| RMC 12.2Kbps        | 22.52        | <b>22.61</b> | 22.41        | 22.80                       |
| HSDPA Subtest-1     | 21.69        | 21.57        | 21.60        | 21.80                       |
| HSDPA Subtest-2     | 21.53        | 21.58        | 21.59        | 21.80                       |
| HSDPA Subtest-3     | 21.19        | 21.13        | 21.10        | 21.30                       |
| HSDPA Subtest-4     | 21.12        | 21.07        | 21.18        | 21.30                       |
| HSUPA Subtest-1     | 19.41        | 19.68        | 19.61        | 19.80                       |
| HSUPA Subtest-2     | 18.56        | 18.48        | 18.44        | 18.80                       |
| HSUPA Subtest-3     | 19.40        | 19.47        | 19.45        | 19.80                       |
| HSUPA Subtest-4     | 18.91        | 18.99        | 18.99        | 19.30                       |
| HSUPA Subtest-5     | 21.51        | 21.35        | 21.44        | 21.80                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 21.37        | 21.38        | 21.41        | 21.80                       |
| RMC 12.2Kbps        | 21.37        | 21.42        | <b>21.45</b> | 21.80                       |
| HSDPA Subtest-1     | 20.30        | 20.36        | 20.42        | 20.80                       |
| HSDPA Subtest-2     | 20.22        | 20.46        | 20.44        | 20.80                       |
| HSDPA Subtest-3     | 19.74        | 19.94        | 19.96        | 20.30                       |
| HSDPA Subtest-4     | 19.95        | 19.71        | 19.93        | 20.30                       |
| HSUPA Subtest-1     | 18.74        | 18.74        | 18.79        | 18.80                       |
| HSUPA Subtest-2     | 17.66        | 17.70        | 17.74        | 17.80                       |
| HSUPA Subtest-3     | 18.23        | 18.28        | 18.43        | 18.80                       |
| HSUPA Subtest-4     | 17.88        | 17.79        | 17.92        | 18.30                       |
| HSUPA Subtest-5     | 20.33        | 20.39        | 20.43        | 20.80                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 24.21        | 24.03        | 24.03        | 24.80                       |
| RMC 12.2Kbps        | <b>24.19</b> | 24.15        | 24.06        | 24.80                       |
| HSDPA Subtest-1     | 23.20        | 23.15        | 23.01        | 23.80                       |
| HSDPA Subtest-2     | 23.10        | 23.17        | 23.12        | 23.80                       |
| HSDPA Subtest-3     | 22.79        | 22.70        | 22.47        | 23.30                       |
| HSDPA Subtest-4     | 22.40        | 22.65        | 22.49        | 23.30                       |
| HSUPA Subtest-1     | 21.43        | 21.60        | 21.71        | 21.80                       |
| HSUPA Subtest-2     | 20.43        | 20.53        | 20.37        | 20.80                       |
| HSUPA Subtest-3     | 21.22        | 21.14        | 21.08        | 21.80                       |
| HSUPA Subtest-4     | 20.54        | 20.62        | 20.52        | 21.30                       |
| HSUPA Subtest-5     | 22.89        | 23.14        | 23.14        | 23.80                       |

| WCDMA-State 5-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 19.71        | 20.11        | 19.77        | 20.30                       |
| RMC 12.2Kbps        | 19.87        | <b>20.19</b> | 19.81        | 20.30                       |
| HSDPA Subtest-1     | 19.07        | 19.17        | 19.05        | 19.30                       |
| HSDPA Subtest-2     | 19.19        | 19.17        | 19.13        | 19.30                       |
| HSDPA Subtest-3     | 18.64        | 18.70        | 18.55        | 18.80                       |
| HSDPA Subtest-4     | 18.72        | 18.68        | 18.59        | 18.80                       |
| HSUPA Subtest-1     | 17.21        | 17.16        | 17.07        | 17.30                       |
| HSUPA Subtest-2     | 16.09        | 16.14        | 15.97        | 16.30                       |
| HSUPA Subtest-3     | 17.24        | 17.19        | 17.26        | 17.30                       |
| HSUPA Subtest-4     | 16.65        | 16.67        | 16.59        | 16.80                       |
| HSUPA Subtest-5     | 18.99        | 19.16        | 19.06        | 19.30                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 18.93        | 18.82        | 18.85        | 19.30                       |
| RMC 12.2Kbps        | 18.91        | 18.86        | <b>18.93</b> | 19.30                       |
| HSDPA Subtest-1     | 17.81        | 17.86        | 17.90        | 18.30                       |
| HSDPA Subtest-2     | 17.89        | 17.87        | 17.96        | 18.30                       |
| HSDPA Subtest-3     | 17.47        | 17.40        | 17.47        | 17.80                       |
| HSDPA Subtest-4     | 17.24        | 17.36        | 17.24        | 17.80                       |
| HSUPA Subtest-1     | 16.24        | 16.21        | 16.11        | 16.30                       |
| HSUPA Subtest-2     | 15.23        | 15.27        | 15.25        | 15.30                       |
| HSUPA Subtest-3     | 15.79        | 15.85        | 15.68        | 16.30                       |
| HSUPA Subtest-4     | 15.31        | 15.31        | 15.33        | 15.80                       |
| HSUPA Subtest-5     | 17.70        | 17.86        | 17.58        | 18.30                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 22.15        | 22.06        | 22.08        | 22.80                       |
| RMC 12.2Kbps        | <b>22.14</b> | 22.10        | 21.99        | 22.80                       |
| HSDPA Subtest-1     | 21.13        | 21.11        | 20.92        | 21.80                       |
| HSDPA Subtest-2     | 20.88        | 21.11        | 20.88        | 21.80                       |
| HSDPA Subtest-3     | 20.47        | 20.64        | 20.47        | 21.30                       |
| HSDPA Subtest-4     | 20.50        | 20.58        | 20.56        | 21.30                       |
| HSUPA Subtest-1     | 19.56        | 19.54        | 19.64        | 19.80                       |
| HSUPA Subtest-2     | 18.61        | 18.52        | 18.50        | 18.80                       |
| HSUPA Subtest-3     | 18.90        | 19.07        | 19.03        | 19.80                       |
| HSUPA Subtest-4     | 18.49        | 18.55        | 18.61        | 19.30                       |
| HSUPA Subtest-5     | 20.95        | 21.08        | 20.85        | 21.80                       |

| WCDMA-State 6-Ant.1 |              |              |              |                             |
|---------------------|--------------|--------------|--------------|-----------------------------|
| Band                | Band 2       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 9262         | 9400         | 9538         |                             |
| Frequency           | 1852.40      | 1880.00      | 1907.60      |                             |
| AMR 12.2Kbps        | 19.71        | 20.11        | 19.77        | 20.30                       |
| RMC 12.2Kbps        | 19.87        | <b>20.19</b> | 19.81        | 20.30                       |
| HSDPA Subtest-1     | 19.07        | 19.17        | 19.05        | 19.30                       |
| HSDPA Subtest-2     | 19.19        | 19.17        | 19.13        | 19.30                       |
| HSDPA Subtest-3     | 18.64        | 18.70        | 18.55        | 18.80                       |
| HSDPA Subtest-4     | 18.72        | 18.68        | 18.59        | 18.80                       |
| HSUPA Subtest-1     | 17.21        | 17.16        | 17.07        | 17.30                       |
| HSUPA Subtest-2     | 16.09        | 16.14        | 15.97        | 16.30                       |
| HSUPA Subtest-3     | 17.24        | 17.19        | 17.26        | 17.30                       |
| HSUPA Subtest-4     | 16.65        | 16.67        | 16.59        | 16.80                       |
| HSUPA Subtest-5     | 18.99        | 19.16        | 19.06        | 19.30                       |
| Band                | Band 4       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 1312         | 1412         | 1513         |                             |
| Frequency           | 1712.40      | 1732.40      | 1752.60      |                             |
| AMR 12.2Kbps        | 18.93        | 18.82        | 18.85        | 19.30                       |
| RMC 12.2Kbps        | 18.91        | 18.86        | <b>18.93</b> | 19.30                       |
| HSDPA Subtest-1     | 17.81        | 17.86        | 17.90        | 18.30                       |
| HSDPA Subtest-2     | 17.89        | 17.87        | 17.96        | 18.30                       |
| HSDPA Subtest-3     | 17.47        | 17.40        | 17.47        | 17.80                       |
| HSDPA Subtest-4     | 17.24        | 17.36        | 17.24        | 17.80                       |
| HSUPA Subtest-1     | 16.24        | 16.21        | 16.11        | 16.30                       |
| HSUPA Subtest-2     | 15.23        | 15.27        | 15.25        | 15.30                       |
| HSUPA Subtest-3     | 15.79        | 15.85        | 15.68        | 16.30                       |
| HSUPA Subtest-4     | 15.31        | 15.31        | 15.33        | 15.80                       |
| HSUPA Subtest-5     | 17.70        | 17.86        | 17.58        | 18.30                       |
| Band                | Band 5       |              |              | Tune-up Limit<br>Power(dBm) |
| Channel             | 4132.00      | 4182.00      | 4233.00      |                             |
| Frequency           | 826.40       | 836.40       | 846.60       |                             |
| AMR 12.2Kbps        | 22.15        | 22.06        | 22.08        | 22.80                       |
| RMC 12.2Kbps        | <b>22.14</b> | 22.10        | 21.99        | 22.80                       |
| HSDPA Subtest-1     | 21.13        | 21.11        | 20.92        | 21.80                       |
| HSDPA Subtest-2     | 20.88        | 21.11        | 20.88        | 21.80                       |
| HSDPA Subtest-3     | 20.47        | 20.64        | 20.47        | 21.30                       |
| HSDPA Subtest-4     | 20.50        | 20.58        | 20.56        | 21.30                       |
| HSUPA Subtest-1     | 19.56        | 19.54        | 19.64        | 19.80                       |
| HSUPA Subtest-2     | 18.61        | 18.52        | 18.50        | 18.80                       |
| HSUPA Subtest-3     | 18.90        | 19.07        | 19.03        | 19.80                       |
| HSUPA Subtest-4     | 18.49        | 18.55        | 18.61        | 19.30                       |
| HSUPA Subtest-5     | 20.95        | 21.08        | 20.85        | 21.80                       |

## 8.3 LTE Output Power

BL-SZ2220432-701

### 8.3.1 LTE Band2 Output Power

| LTE B2-State 1 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 17.30 | 17.34 | 17.11 | 18.30              |
|                       |         | MID       | QPSK       | 17.45 | 17.51 | 17.34 | 18.30              |
|                       |         | HIGH      | QPSK       | 17.60 | 17.62 | 17.28 | 18.30              |
|                       | 3       | LOW       | QPSK       | 17.57 | 17.66 | 17.32 | 18.30              |
|                       |         | MID       | QPSK       | 17.47 | 17.70 | 17.48 | 18.30              |
|                       |         | HIGH      | QPSK       | 17.63 | 17.57 | 17.45 | 18.30              |
|                       | 6       | LOW       | QPSK       | 17.59 | 17.53 | 17.37 | 18.30              |
|                       | 1       | LOW       | Q16        | 17.73 | 17.51 | 17.50 | 18.30              |
|                       |         | MID       | Q16        | 17.58 | 17.71 | 17.57 | 18.30              |
|                       |         | HIGH      | Q16        | 17.72 | 17.49 | 17.40 | 18.30              |
| 1.4                   | 3       | LOW       | Q16        | 17.59 | 17.73 | 17.36 | 18.30              |
|                       |         | MID       | Q16        | 17.68 | 17.78 | 17.30 | 18.30              |
|                       |         | HIGH      | Q16        | 17.55 | 17.55 | 17.51 | 18.30              |
|                       | 6       | LOW       | Q16        | 17.52 | 17.51 | 17.20 | 18.30              |
|                       | 1       | LOW       | 64QAM      | 17.50 | 17.40 | 17.54 | 18.30              |
|                       |         | MID       | 64QAM      | 17.83 | 17.59 | 17.55 | 18.30              |
|                       |         | HIGH      | 64QAM      | 17.59 | 17.65 | 17.28 | 18.30              |
|                       | 3       | LOW       | 64QAM      | 17.38 | 17.50 | 17.24 | 18.30              |
|                       |         | MID       | 64QAM      | 17.33 | 17.64 | 17.41 | 18.30              |
|                       |         | HIGH      | 64QAM      | 17.56 | 17.62 | 17.12 | 18.30              |
|                       | 6       | LOW       | 64QAM      | 17.29 | 17.65 | 17.15 | 18.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 17.30 | 17.39 | 17.14 | 18.30              |
|                       |         | MID       | QPSK       | 17.43 | 17.49 | 17.37 | 18.30              |
|                       |         | HIGH      | QPSK       | 17.47 | 17.64 | 17.07 | 18.30              |
|                       | 8       | LOW       | QPSK       | 17.46 | 17.66 | 17.43 | 18.30              |
|                       |         | MID       | QPSK       | 17.57 | 17.62 | 17.33 | 18.30              |
|                       |         | HIGH      | QPSK       | 17.56 | 17.80 | 17.33 | 18.30              |
|                       | 15      | LOW       | QPSK       | 17.57 | 17.78 | 17.46 | 18.30              |
|                       | 1       | LOW       | Q16        | 17.48 | 17.61 | 17.39 | 18.30              |
|                       |         | MID       | Q16        | 17.72 | 17.82 | 17.71 | 18.30              |
|                       |         | HIGH      | Q16        | 17.79 | 17.68 | 17.50 | 18.30              |
| 3                     | 8       | LOW       | Q16        | 17.66 | 17.70 | 17.36 | 18.30              |
|                       |         | MID       | Q16        | 17.47 | 17.63 | 17.30 | 18.30              |
|                       |         | HIGH      | Q16        | 17.41 | 17.53 | 17.47 | 18.30              |
|                       | 15      | LOW       | Q16        | 17.39 | 17.56 | 17.25 | 18.30              |
|                       | 1       | LOW       | 64QAM      | 17.31 | 17.45 | 17.54 | 18.30              |
|                       |         | MID       | 64QAM      | 17.71 | 17.73 | 17.68 | 18.30              |
|                       |         | HIGH      | 64QAM      | 17.61 | 17.79 | 17.33 | 18.30              |
|                       | 8       | LOW       | 64QAM      | 17.52 | 17.61 | 17.38 | 18.30              |
|                       |         | MID       | 64QAM      | 17.46 | 17.67 | 17.23 | 18.30              |
|                       |         | HIGH      | 64QAM      | 17.58 | 17.34 | 17.19 | 18.30              |
|                       | 15      | LOW       | 64QAM      | 17.43 | 17.58 | 17.27 | 18.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 17.30 | 17.48 | 17.32 | 18.30              |
|                       |         | MID       | QPSK       | 17.59 | 17.61 | 17.35 | 18.30              |
|                       |         | HIGH      | QPSK       | 17.47 | 17.59 | 17.02 | 18.30              |
|                       | 12      | LOW       | QPSK       | 17.45 | 17.61 | 17.48 | 18.30              |
|                       |         | MID       | QPSK       | 17.54 | 17.67 | 17.54 | 18.30              |
|                       |         | HIGH      | QPSK       | 17.49 | 17.62 | 17.40 | 18.30              |
|                       | 25      | LOW       | QPSK       | 17.55 | 17.71 | 17.29 | 18.30              |
|                       | 1       | LOW       | Q16        | 17.62 | 17.59 | 17.64 | 18.30              |
|                       |         | MID       | Q16        | 17.62 | 17.73 | 17.51 | 18.30              |
|                       |         | HIGH      | Q16        | 17.77 | 17.50 | 17.40 | 18.30              |
| 5                     | 12      | LOW       | Q16        | 17.52 | 17.47 | 17.20 | 18.30              |
|                       |         | MID       | Q16        | 17.40 | 17.74 | 17.51 | 18.30              |
|                       |         | HIGH      | Q16        | 17.60 | 17.78 | 17.33 | 18.30              |
|                       | 25      | LOW       | Q16        | 17.52 | 17.65 | 17.34 | 18.30              |
|                       | 1       | LOW       | 64QAM      | 17.34 | 17.41 | 17.57 | 18.30              |
|                       |         | MID       | 64QAM      | 17.85 | 17.79 | 17.52 | 18.30              |
|                       |         | HIGH      | 64QAM      | 17.35 | 17.77 | 17.12 | 18.30              |
|                       | 12      | LOW       | 64QAM      | 17.40 | 17.56 | 17.41 | 18.30              |
|                       |         | MID       | 64QAM      | 17.29 | 17.64 | 17.32 | 18.30              |
|                       |         | HIGH      | 64QAM      | 17.37 | 17.48 | 17.26 | 18.30              |
|                       | 25      | LOW       | 64QAM      | 17.31 | 17.60 | 17.08 | 18.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 17.27      | 17.53 | 17.35 | 18.30              |                    |
|                 |                 | MID       | QPSK       | 17.48      | 17.67 | 17.30 | 18.30              |                    |
|                 |                 | HIGH      | QPSK       | 17.53      | 17.43 | 17.05 | 18.30              |                    |
|                 | 25              | LOW       | QPSK       | 17.53      | 17.71 | 17.50 | 18.30              |                    |
|                 |                 | MID       | QPSK       | 17.45      | 17.83 | 17.33 | 18.30              |                    |
|                 |                 | HIGH      | QPSK       | 17.39      | 17.62 | 17.35 | 18.30              |                    |
|                 | 50              | LOW       | QPSK       | 17.64      | 17.60 | 17.34 | 18.30              |                    |
|                 | 10              | 1         | LOW        | Q16        | 17.61 | 17.54 | 17.53              | 18.30              |
|                 |                 |           | MID        | Q16        | 17.58 | 17.75 | 17.71              | 18.30              |
| HIGH            |                 |           | Q16        | 17.61      | 17.70 | 17.54 | 18.30              |                    |
| 25              |                 | LOW       | Q16        | 17.59      | 17.68 | 17.23 | 18.30              |                    |
|                 |                 | MID       | Q16        | 17.55      | 17.58 | 17.55 | 18.30              |                    |
|                 |                 | HIGH      | Q16        | 17.65      | 17.66 | 17.28 | 18.30              |                    |
| 50              |                 | LOW       | Q16        | 17.57      | 17.67 | 17.27 | 18.30              |                    |
| 10              |                 | 1         | LOW        | 64QAM      | 17.43 | 17.36 | 17.43              | 18.30              |
|                 |                 |           | MID        | 64QAM      | 17.74 | 17.79 | 17.53              | 18.30              |
|                 | HIGH            |           | 64QAM      | 17.61      | 17.61 | 17.19 | 18.30              |                    |
|                 | 25              | LOW       | 64QAM      | 17.54      | 17.52 | 17.25 | 18.30              |                    |
|                 |                 | MID       | 64QAM      | 17.31      | 17.62 | 17.30 | 18.30              |                    |
|                 |                 | HIGH      | 64QAM      | 17.58      | 17.55 | 17.16 | 18.30              |                    |
|                 | 50              | LOW       | 64QAM      | 17.29      | 17.74 | 17.03 | 18.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 17.33 | 17.30 | 17.20              | 18.30              |
| MID             |                 |           | QPSK       | 17.61      | 17.54 | 17.40 | 18.30              |                    |
| HIGH            |                 |           | QPSK       | 17.55      | 17.53 | 17.17 | 18.30              |                    |
| 36              |                 | LOW       | QPSK       | 17.57      | 17.55 | 17.22 | 18.30              |                    |
|                 |                 | MID       | QPSK       | 17.54      | 17.83 | 17.36 | 18.30              |                    |
|                 |                 | HIGH      | QPSK       | 17.46      | 17.69 | 17.56 | 18.30              |                    |
| 75              |                 | LOW       | QPSK       | 17.50      | 17.57 | 17.20 | 18.30              |                    |
| 15              |                 | 1         | LOW        | Q16        | 17.66 | 17.68 | 17.39              | 18.30              |
|                 |                 |           | MID        | Q16        | 17.70 | 17.66 | 17.66              | 18.30              |
|                 | HIGH            |           | Q16        | 17.65      | 17.64 | 17.33 | 18.30              |                    |
|                 | 36              | LOW       | Q16        | 17.62      | 17.50 | 17.42 | 18.30              |                    |
|                 |                 | MID       | Q16        | 17.41      | 17.76 | 17.34 | 18.30              |                    |
|                 |                 | HIGH      | Q16        | 17.42      | 17.61 | 17.49 | 18.30              |                    |
|                 | 75              | LOW       | Q16        | 17.57      | 17.65 | 17.30 | 18.30              |                    |
|                 | 15              | 1         | LOW        | 64QAM      | 17.41 | 17.57 | 17.33              | 18.30              |
|                 |                 |           | MID        | 64QAM      | 17.74 | 17.75 | 17.48              | 18.30              |
| HIGH            |                 |           | 64QAM      | 17.52      | 17.63 | 17.31 | 18.30              |                    |
| 36              |                 | LOW       | 64QAM      | 17.43      | 17.45 | 17.31 | 18.30              |                    |
|                 |                 | MID       | 64QAM      | 17.45      | 17.69 | 17.15 | 18.30              |                    |
|                 |                 | HIGH      | 64QAM      | 17.33      | 17.60 | 17.16 | 18.30              |                    |
| 75              |                 | LOW       | 64QAM      | 17.22      | 17.55 | 17.17 | 18.30              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20              |                 | 1         | LOW        | QPSK       | 17.30 | 17.46 | 17.30              | 18.30              |
|                 | MID             |           | QPSK       | 17.57      | 17.63 | 17.37 | 18.30              |                    |
|                 | HIGH            |           | QPSK       | 17.51      | 17.55 | 17.19 | 18.30              |                    |
|                 | 50              | LOW       | QPSK       | 17.57      | 17.66 | 17.41 | 18.30              |                    |
|                 |                 | MID       | QPSK       | 17.59      | 17.74 | 17.50 | 18.30              |                    |
|                 |                 | HIGH      | QPSK       | 17.58      | 17.71 | 17.47 | 18.30              |                    |
|                 | 100             | LOW       | QPSK       | 17.55      | 17.69 | 17.39 | 18.30              |                    |
|                 | 20              | 1         | LOW        | Q16        | 17.66 | 17.63 | 17.55              | 18.30              |
|                 |                 |           | MID        | Q16        | 17.74 | 17.82 | 17.62              | 18.30              |
| HIGH            |                 |           | Q16        | 17.70      | 17.68 | 17.45 | 18.30              |                    |
| 50              |                 | LOW       | Q16        | 17.57      | 17.66 | 17.39 | 18.30              |                    |
|                 |                 | MID       | Q16        | 17.59      | 17.74 | 17.46 | 18.30              |                    |
|                 |                 | HIGH      | Q16        | 17.60      | 17.73 | 17.42 | 18.30              |                    |
| 100             |                 | LOW       | Q16        | 17.57      | 17.65 | 17.39 | 18.30              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 17.50 | 17.52 | 17.50              | 18.30              |
|                 |                 |           | MID        | 64QAM      | 17.76 | 17.77 | 17.64              | 18.30              |
|                 | HIGH            |           | 64QAM      | 17.54      | 17.72 | 17.31 | 18.30              |                    |
|                 | 50              | LOW       | 64QAM      | 17.45      | 17.54 | 17.41 | 18.30              |                    |
|                 |                 | MID       | 64QAM      | 17.43      | 17.76 | 17.32 | 18.30              |                    |
|                 |                 | HIGH      | 64QAM      | 17.49      | 17.53 | 17.26 | 18.30              |                    |
|                 | 100             | LOW       | 64QAM      | 17.38      | 17.69 | 17.20 | 18.30              |                    |

| LTE B2-State 2 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 16.27 | 16.48 | 16.32 | 17.30              |
|                       |         | MID       | QPSK       | 16.33 | 16.78 | 16.27 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.43 | 16.40 | 16.06 | 17.30              |
|                       | 3       | LOW       | QPSK       | 16.44 | 16.75 | 16.37 | 17.30              |
|                       |         | MID       | QPSK       | 16.45 | 16.68 | 16.40 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.58 | 16.61 | 16.29 | 17.30              |
|                       | 6       | LOW       | QPSK       | 16.62 | 16.45 | 16.48 | 17.30              |
|                       | 1       | LOW       | Q16        | 16.46 | 16.43 | 16.43 | 17.30              |
|                       |         | MID       | Q16        | 16.60 | 16.57 | 16.30 | 17.30              |
|                       |         | HIGH      | Q16        | 16.41 | 16.46 | 16.29 | 17.30              |
| 1.4                   | 3       | LOW       | Q16        | 16.57 | 16.61 | 16.29 | 17.30              |
|                       |         | MID       | Q16        | 16.32 | 16.77 | 16.23 | 17.30              |
|                       |         | HIGH      | Q16        | 16.56 | 16.61 | 16.28 | 17.30              |
|                       | 6       | LOW       | Q16        | 16.54 | 16.49 | 16.23 | 17.30              |
|                       | 1       | LOW       | 64QAM      | 16.40 | 16.36 | 16.56 | 17.30              |
|                       |         | MID       | 64QAM      | 16.63 | 16.65 | 16.48 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.47 | 16.82 | 16.36 | 17.30              |
|                       | 3       | LOW       | 64QAM      | 16.35 | 16.53 | 16.32 | 17.30              |
|                       |         | MID       | 64QAM      | 16.58 | 16.55 | 16.05 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.46 | 16.48 | 16.31 | 17.30              |
|                       | 6       | LOW       | 64QAM      | 16.11 | 16.41 | 16.26 | 17.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 16.28 | 16.46 | 16.40 | 17.30              |
|                       |         | MID       | QPSK       | 16.52 | 16.79 | 16.17 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.46 | 16.40 | 16.11 | 17.30              |
|                       | 8       | LOW       | QPSK       | 16.42 | 16.80 | 16.41 | 17.30              |
|                       |         | MID       | QPSK       | 16.65 | 16.79 | 16.41 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.53 | 16.63 | 16.43 | 17.30              |
|                       | 15      | LOW       | QPSK       | 16.64 | 16.67 | 16.36 | 17.30              |
|                       | 1       | LOW       | Q16        | 16.67 | 16.56 | 16.48 | 17.30              |
|                       |         | MID       | Q16        | 16.59 | 16.62 | 16.53 | 17.30              |
|                       |         | HIGH      | Q16        | 16.43 | 16.63 | 16.22 | 17.30              |
| 3                     | 8       | LOW       | Q16        | 16.65 | 16.51 | 16.49 | 17.30              |
|                       |         | MID       | Q16        | 16.37 | 16.66 | 16.32 | 17.30              |
|                       |         | HIGH      | Q16        | 16.51 | 16.55 | 16.28 | 17.30              |
|                       | 15      | LOW       | Q16        | 16.50 | 16.52 | 16.10 | 17.30              |
|                       | 1       | LOW       | 64QAM      | 16.43 | 16.34 | 16.55 | 17.30              |
|                       |         | MID       | 64QAM      | 16.70 | 16.48 | 16.44 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.35 | 16.87 | 16.28 | 17.30              |
|                       | 8       | LOW       | 64QAM      | 16.36 | 16.36 | 16.41 | 17.30              |
|                       |         | MID       | 64QAM      | 16.39 | 16.46 | 16.06 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.28 | 16.25 | 16.19 | 17.30              |
|                       | 15      | LOW       | 64QAM      | 16.24 | 16.54 | 16.14 | 17.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 16.22 | 16.33 | 16.19 | 17.30              |
|                       |         | MID       | QPSK       | 16.38 | 16.73 | 16.09 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.48 | 16.47 | 16.16 | 17.30              |
|                       | 12      | LOW       | QPSK       | 16.41 | 16.78 | 16.34 | 17.30              |
|                       |         | MID       | QPSK       | 16.44 | 16.61 | 16.43 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.53 | 16.55 | 16.33 | 17.30              |
|                       | 25      | LOW       | QPSK       | 16.42 | 16.45 | 16.53 | 17.30              |
|                       | 1       | LOW       | Q16        | 16.71 | 16.54 | 16.35 | 17.30              |
|                       |         | MID       | Q16        | 16.45 | 16.60 | 16.43 | 17.30              |
|                       |         | HIGH      | Q16        | 16.60 | 16.51 | 16.24 | 17.30              |
| 5                     | 12      | LOW       | Q16        | 16.62 | 16.46 | 16.49 | 17.30              |
|                       |         | MID       | Q16        | 16.32 | 16.66 | 16.41 | 17.30              |
|                       |         | HIGH      | Q16        | 16.60 | 16.66 | 16.20 | 17.30              |
|                       | 25      | LOW       | Q16        | 16.54 | 16.55 | 16.16 | 17.30              |
|                       | 1       | LOW       | 64QAM      | 16.53 | 16.49 | 16.35 | 17.30              |
|                       |         | MID       | 64QAM      | 16.60 | 16.45 | 16.59 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.55 | 16.82 | 16.22 | 17.30              |
|                       | 12      | LOW       | 64QAM      | 16.30 | 16.51 | 16.21 | 17.30              |
|                       |         | MID       | 64QAM      | 16.54 | 16.50 | 16.27 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.32 | 16.33 | 16.18 | 17.30              |
|                       | 25      | LOW       | 64QAM      | 16.11 | 16.38 | 16.05 | 17.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 18650 | 18900 | 19150 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10              | 1       | LOW       | QPSK       | 16.12 | 16.41 | 16.40 | 17.30              |
|                 |         | MID       | QPSK       | 16.42 | 16.53 | 16.16 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.51 | 16.49 | 16.22 | 17.30              |
|                 | 25      | LOW       | QPSK       | 16.54 | 16.71 | 16.56 | 17.30              |
|                 |         | MID       | QPSK       | 16.62 | 16.66 | 16.53 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.48 | 16.56 | 16.32 | 17.30              |
|                 | 50      | LOW       | QPSK       | 16.62 | 16.64 | 16.31 | 17.30              |
|                 |         | LOW       | Q16        | 16.52 | 16.51 | 16.33 | 17.30              |
|                 |         | MID       | Q16        | 16.50 | 16.65 | 16.48 | 17.30              |
| 10              | 1       | HIGH      | Q16        | 16.56 | 16.54 | 16.22 | 17.30              |
|                 |         | LOW       | Q16        | 16.50 | 16.66 | 16.31 | 17.30              |
|                 |         | MID       | Q16        | 16.41 | 16.56 | 16.34 | 17.30              |
|                 | 25      | HIGH      | Q16        | 16.40 | 16.55 | 16.35 | 17.30              |
|                 |         | LOW       | Q16        | 16.50 | 16.35 | 16.34 | 17.30              |
|                 |         | MID       | Q16        | 16.41 | 16.56 | 16.34 | 17.30              |
|                 | 50      | LOW       | Q16        | 16.50 | 16.35 | 16.34 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.34 | 16.57 | 16.35 | 17.30              |
|                 |         | MID       | 64QAM      | 16.83 | 16.57 | 16.48 | 17.30              |
| 10              | 1       | HIGH      | 64QAM      | 16.40 | 16.74 | 16.15 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.55 | 16.41 | 16.37 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.60 | 16.11 | 17.30              |
|                 | 25      | HIGH      | 64QAM      | 16.46 | 16.30 | 16.08 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.25 | 16.39 | 16.26 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.60 | 16.11 | 17.30              |
|                 | 50      | LOW       | 64QAM      | 16.25 | 16.39 | 16.26 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.60 | 16.11 | 17.30              |
|                 |         | HIGH      | 64QAM      | 16.46 | 16.30 | 16.08 | 17.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 18675 | 18900 | 19125 | Tune-up power(dBm) |
| 15              | 1       | LOW       | QPSK       | 16.17 | 16.26 | 16.26 | 17.30              |
|                 |         | MID       | QPSK       | 16.48 | 16.66 | 16.27 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.41 | 16.57 | 16.27 | 17.30              |
|                 | 36      | LOW       | QPSK       | 16.44 | 16.60 | 16.42 | 17.30              |
|                 |         | MID       | QPSK       | 16.49 | 16.69 | 16.60 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.63 | 16.45 | 16.42 | 17.30              |
|                 | 75      | LOW       | QPSK       | 16.42 | 16.70 | 16.34 | 17.30              |
|                 |         | LOW       | Q16        | 16.62 | 16.69 | 16.45 | 17.30              |
|                 |         | MID       | Q16        | 16.42 | 16.62 | 16.35 | 17.30              |
| 15              | 1       | HIGH      | Q16        | 16.46 | 16.51 | 16.32 | 17.30              |
|                 |         | LOW       | Q16        | 16.44 | 16.57 | 16.39 | 17.30              |
|                 |         | MID       | Q16        | 16.31 | 16.82 | 16.47 | 17.30              |
|                 | 36      | HIGH      | Q16        | 16.60 | 16.58 | 16.37 | 17.30              |
|                 |         | LOW       | Q16        | 16.42 | 16.37 | 16.15 | 17.30              |
|                 |         | MID       | Q16        | 16.31 | 16.82 | 16.47 | 17.30              |
|                 | 75      | LOW       | Q16        | 16.42 | 16.37 | 16.15 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.32 | 16.36 | 16.41 | 17.30              |
|                 |         | MID       | 64QAM      | 16.76 | 16.45 | 16.63 | 17.30              |
| 15              | 1       | HIGH      | 64QAM      | 16.35 | 16.84 | 16.17 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.36 | 16.38 | 16.27 | 17.30              |
|                 |         | MID       | 64QAM      | 16.46 | 16.46 | 16.18 | 17.30              |
|                 | 36      | HIGH      | 64QAM      | 16.32 | 16.31 | 16.26 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.27 | 16.41 | 16.04 | 17.30              |
|                 |         | MID       | 64QAM      | 16.46 | 16.46 | 16.18 | 17.30              |
|                 | 75      | LOW       | 64QAM      | 16.27 | 16.41 | 16.04 | 17.30              |
|                 |         | MID       | 64QAM      | 16.46 | 16.46 | 16.18 | 17.30              |
|                 |         | HIGH      | 64QAM      | 16.32 | 16.31 | 16.26 | 17.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 18700 | 18900 | 19100 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 16.30 | 16.41 | 16.37 | 17.30              |
|                 |         | MID       | QPSK       | 16.45 | 16.71 | 16.19 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.48 | 16.52 | 16.19 | 17.30              |
|                 | 50      | LOW       | QPSK       | 16.54 | 16.73 | 16.49 | 17.30              |
|                 |         | MID       | QPSK       | 16.62 | 16.76 | 16.53 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.65 | 16.63 | 16.45 | 17.30              |
|                 | 100     | LOW       | QPSK       | 16.57 | 16.62 | 16.46 | 17.30              |
|                 |         | LOW       | Q16        | 16.64 | 16.61 | 16.48 | 17.30              |
|                 |         | MID       | Q16        | 16.57 | 16.65 | 16.45 | 17.30              |
| 20              | 1       | HIGH      | Q16        | 16.58 | 16.61 | 16.40 | 17.30              |
|                 |         | LOW       | Q16        | 16.57 | 16.59 | 16.44 | 17.30              |
|                 |         | MID       | Q16        | 16.44 | 16.74 | 16.39 | 17.30              |
|                 | 50      | HIGH      | Q16        | 16.53 | 16.73 | 16.35 | 17.30              |
|                 |         | LOW       | Q16        | 16.52 | 16.47 | 16.26 | 17.30              |
|                 |         | MID       | Q16        | 16.52 | 16.47 | 16.26 | 17.30              |
|                 | 100     | LOW       | Q16        | 16.52 | 16.47 | 16.26 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.50 | 16.49 | 16.48 | 17.30              |
|                 |         | MID       | 64QAM      | 16.78 | 16.60 | 16.56 | 17.30              |
| 20              | 1       | HIGH      | 64QAM      | 16.52 | 16.79 | 16.33 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.48 | 16.51 | 16.34 | 17.30              |
|                 |         | MID       | 64QAM      | 16.51 | 16.58 | 16.21 | 17.30              |
|                 | 50      | HIGH      | 64QAM      | 16.39 | 16.41 | 16.26 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.27 | 16.51 | 16.20 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.51 | 16.20 | 17.30              |
|                 | 100     | LOW       | 64QAM      | 16.27 | 16.51 | 16.20 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.51 | 16.20 | 17.30              |
|                 |         | HIGH      | 64QAM      | 16.52 | 16.79 | 16.33 | 17.30              |

| LTE B2-State 3 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 16.27 | 16.48 | 16.32 | 17.30              |
|                       |         | MID       | QPSK       | 16.33 | 16.78 | 16.27 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.43 | 16.40 | 16.06 | 17.30              |
|                       | 3       | LOW       | QPSK       | 16.44 | 16.75 | 16.37 | 17.30              |
|                       |         | MID       | QPSK       | 16.45 | 16.68 | 16.40 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.58 | 16.61 | 16.29 | 17.30              |
|                       | 6       | LOW       | QPSK       | 16.62 | 16.45 | 16.48 | 17.30              |
|                       | 1       | LOW       | Q16        | 16.46 | 16.43 | 16.43 | 17.30              |
|                       |         | MID       | Q16        | 16.60 | 16.57 | 16.30 | 17.30              |
|                       |         | HIGH      | Q16        | 16.41 | 16.46 | 16.29 | 17.30              |
| 1.4                   | 3       | LOW       | Q16        | 16.57 | 16.61 | 16.29 | 17.30              |
|                       |         | MID       | Q16        | 16.32 | 16.77 | 16.23 | 17.30              |
|                       |         | HIGH      | Q16        | 16.56 | 16.61 | 16.28 | 17.30              |
|                       | 6       | LOW       | Q16        | 16.54 | 16.49 | 16.23 | 17.30              |
|                       | 1       | LOW       | 64QAM      | 16.40 | 16.36 | 16.56 | 17.30              |
|                       |         | MID       | 64QAM      | 16.63 | 16.65 | 16.48 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.47 | 16.82 | 16.36 | 17.30              |
|                       | 3       | LOW       | 64QAM      | 16.35 | 16.53 | 16.32 | 17.30              |
|                       |         | MID       | 64QAM      | 16.58 | 16.55 | 16.05 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.46 | 16.48 | 16.31 | 17.30              |
|                       | 6       | LOW       | 64QAM      | 16.11 | 16.41 | 16.26 | 17.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 16.28 | 16.46 | 16.40 | 17.30              |
|                       |         | MID       | QPSK       | 16.52 | 16.79 | 16.17 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.46 | 16.40 | 16.11 | 17.30              |
|                       | 8       | LOW       | QPSK       | 16.42 | 16.80 | 16.41 | 17.30              |
|                       |         | MID       | QPSK       | 16.65 | 16.79 | 16.41 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.53 | 16.63 | 16.43 | 17.30              |
|                       | 15      | LOW       | QPSK       | 16.64 | 16.67 | 16.36 | 17.30              |
|                       | 1       | LOW       | Q16        | 16.67 | 16.56 | 16.48 | 17.30              |
|                       |         | MID       | Q16        | 16.59 | 16.62 | 16.53 | 17.30              |
|                       |         | HIGH      | Q16        | 16.43 | 16.63 | 16.22 | 17.30              |
| 3                     | 8       | LOW       | Q16        | 16.65 | 16.51 | 16.49 | 17.30              |
|                       |         | MID       | Q16        | 16.37 | 16.66 | 16.32 | 17.30              |
|                       |         | HIGH      | Q16        | 16.51 | 16.55 | 16.28 | 17.30              |
|                       | 15      | LOW       | Q16        | 16.50 | 16.52 | 16.10 | 17.30              |
|                       | 1       | LOW       | 64QAM      | 16.43 | 16.34 | 16.55 | 17.30              |
|                       |         | MID       | 64QAM      | 16.70 | 16.48 | 16.44 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.35 | 16.87 | 16.28 | 17.30              |
|                       | 8       | LOW       | 64QAM      | 16.36 | 16.36 | 16.41 | 17.30              |
|                       |         | MID       | 64QAM      | 16.39 | 16.46 | 16.06 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.28 | 16.25 | 16.19 | 17.30              |
|                       | 15      | LOW       | 64QAM      | 16.24 | 16.54 | 16.14 | 17.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 16.22 | 16.33 | 16.19 | 17.30              |
|                       |         | MID       | QPSK       | 16.38 | 16.73 | 16.09 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.48 | 16.47 | 16.16 | 17.30              |
|                       | 12      | LOW       | QPSK       | 16.41 | 16.78 | 16.34 | 17.30              |
|                       |         | MID       | QPSK       | 16.44 | 16.61 | 16.43 | 17.30              |
|                       |         | HIGH      | QPSK       | 16.53 | 16.55 | 16.33 | 17.30              |
|                       | 25      | LOW       | QPSK       | 16.42 | 16.45 | 16.53 | 17.30              |
|                       | 1       | LOW       | Q16        | 16.71 | 16.54 | 16.35 | 17.30              |
|                       |         | MID       | Q16        | 16.45 | 16.60 | 16.43 | 17.30              |
|                       |         | HIGH      | Q16        | 16.60 | 16.51 | 16.24 | 17.30              |
| 5                     | 12      | LOW       | Q16        | 16.62 | 16.46 | 16.49 | 17.30              |
|                       |         | MID       | Q16        | 16.32 | 16.66 | 16.41 | 17.30              |
|                       |         | HIGH      | Q16        | 16.60 | 16.66 | 16.20 | 17.30              |
|                       | 25      | LOW       | Q16        | 16.54 | 16.55 | 16.16 | 17.30              |
|                       | 1       | LOW       | 64QAM      | 16.53 | 16.49 | 16.35 | 17.30              |
|                       |         | MID       | 64QAM      | 16.60 | 16.45 | 16.59 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.55 | 16.82 | 16.22 | 17.30              |
|                       | 12      | LOW       | 64QAM      | 16.30 | 16.51 | 16.21 | 17.30              |
|                       |         | MID       | 64QAM      | 16.54 | 16.50 | 16.27 | 17.30              |
|                       |         | HIGH      | 64QAM      | 16.32 | 16.33 | 16.18 | 17.30              |
|                       | 25      | LOW       | 64QAM      | 16.11 | 16.38 | 16.05 | 17.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 18650 | 18900 | 19150 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10              | 1       | LOW       | QPSK       | 16.12 | 16.41 | 16.40 | 17.30              |
|                 |         | MID       | QPSK       | 16.42 | 16.53 | 16.16 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.51 | 16.49 | 16.22 | 17.30              |
|                 | 25      | LOW       | QPSK       | 16.54 | 16.71 | 16.56 | 17.30              |
|                 |         | MID       | QPSK       | 16.62 | 16.66 | 16.53 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.48 | 16.56 | 16.32 | 17.30              |
|                 | 50      | LOW       | QPSK       | 16.62 | 16.64 | 16.31 | 17.30              |
|                 |         | LOW       | Q16        | 16.52 | 16.51 | 16.33 | 17.30              |
|                 |         | MID       | Q16        | 16.50 | 16.65 | 16.48 | 17.30              |
| 10              | 1       | HIGH      | Q16        | 16.56 | 16.54 | 16.22 | 17.30              |
|                 |         | LOW       | Q16        | 16.50 | 16.66 | 16.31 | 17.30              |
|                 |         | MID       | Q16        | 16.41 | 16.56 | 16.34 | 17.30              |
|                 | 25      | HIGH      | Q16        | 16.40 | 16.55 | 16.35 | 17.30              |
|                 |         | LOW       | Q16        | 16.50 | 16.35 | 16.34 | 17.30              |
|                 |         | MID       | Q16        | 16.41 | 16.56 | 16.34 | 17.30              |
|                 | 50      | HIGH      | Q16        | 16.40 | 16.55 | 16.35 | 17.30              |
|                 |         | LOW       | Q16        | 16.50 | 16.35 | 16.34 | 17.30              |
|                 |         | MID       | Q16        | 16.41 | 16.56 | 16.34 | 17.30              |
| 10              | 1       | HIGH      | 64QAM      | 16.40 | 16.74 | 16.15 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.55 | 16.41 | 16.37 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.60 | 16.11 | 17.30              |
|                 | 25      | HIGH      | 64QAM      | 16.46 | 16.30 | 16.08 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.25 | 16.39 | 16.26 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.60 | 16.11 | 17.30              |
|                 | 50      | HIGH      | 64QAM      | 16.46 | 16.30 | 16.08 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.25 | 16.39 | 16.26 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.60 | 16.11 | 17.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 18675 | 18900 | 19125 | Tune-up power(dBm) |
| 15              | 1       | LOW       | QPSK       | 16.17 | 16.26 | 16.26 | 17.30              |
|                 |         | MID       | QPSK       | 16.48 | 16.66 | 16.27 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.41 | 16.57 | 16.27 | 17.30              |
|                 | 36      | LOW       | QPSK       | 16.44 | 16.60 | 16.42 | 17.30              |
|                 |         | MID       | QPSK       | 16.49 | 16.69 | 16.60 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.63 | 16.45 | 16.42 | 17.30              |
|                 | 75      | LOW       | QPSK       | 16.42 | 16.70 | 16.34 | 17.30              |
|                 |         | LOW       | Q16        | 16.62 | 16.69 | 16.45 | 17.30              |
|                 |         | MID       | Q16        | 16.42 | 16.62 | 16.35 | 17.30              |
| 15              | 1       | HIGH      | Q16        | 16.46 | 16.51 | 16.32 | 17.30              |
|                 |         | LOW       | Q16        | 16.44 | 16.57 | 16.39 | 17.30              |
|                 |         | MID       | Q16        | 16.31 | 16.82 | 16.47 | 17.30              |
|                 | 36      | HIGH      | Q16        | 16.60 | 16.58 | 16.37 | 17.30              |
|                 |         | LOW       | Q16        | 16.42 | 16.37 | 16.15 | 17.30              |
|                 |         | MID       | Q16        | 16.31 | 16.82 | 16.47 | 17.30              |
|                 | 75      | LOW       | Q16        | 16.42 | 16.37 | 16.15 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.32 | 16.36 | 16.41 | 17.30              |
|                 |         | MID       | 64QAM      | 16.76 | 16.45 | 16.63 | 17.30              |
| 15              | 1       | HIGH      | 64QAM      | 16.35 | 16.84 | 16.17 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.36 | 16.38 | 16.27 | 17.30              |
|                 |         | MID       | 64QAM      | 16.46 | 16.46 | 16.18 | 17.30              |
|                 | 36      | HIGH      | 64QAM      | 16.32 | 16.31 | 16.26 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.27 | 16.41 | 16.04 | 17.30              |
|                 |         | MID       | 64QAM      | 16.46 | 16.46 | 16.18 | 17.30              |
|                 | 75      | LOW       | 64QAM      | 16.27 | 16.41 | 16.04 | 17.30              |
|                 |         | LOW       | Q16        | 16.42 | 16.37 | 16.15 | 17.30              |
|                 |         | MID       | Q16        | 16.31 | 16.82 | 16.47 | 17.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 18700 | 18900 | 19100 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 16.30 | 16.41 | 16.37 | 17.30              |
|                 |         | MID       | QPSK       | 16.45 | 16.71 | 16.19 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.48 | 16.52 | 16.19 | 17.30              |
|                 | 50      | LOW       | QPSK       | 16.54 | 16.73 | 16.49 | 17.30              |
|                 |         | MID       | QPSK       | 16.62 | 16.76 | 16.53 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.65 | 16.63 | 16.45 | 17.30              |
|                 | 100     | LOW       | QPSK       | 16.57 | 16.62 | 16.46 | 17.30              |
|                 |         | LOW       | Q16        | 16.64 | 16.61 | 16.48 | 17.30              |
|                 |         | MID       | Q16        | 16.57 | 16.65 | 16.45 | 17.30              |
| 20              | 1       | HIGH      | Q16        | 16.58 | 16.61 | 16.40 | 17.30              |
|                 |         | LOW       | Q16        | 16.57 | 16.59 | 16.44 | 17.30              |
|                 |         | MID       | Q16        | 16.44 | 16.74 | 16.39 | 17.30              |
|                 | 50      | HIGH      | Q16        | 16.53 | 16.73 | 16.35 | 17.30              |
|                 |         | LOW       | Q16        | 16.52 | 16.47 | 16.26 | 17.30              |
|                 |         | MID       | Q16        | 16.44 | 16.74 | 16.39 | 17.30              |
|                 | 100     | LOW       | Q16        | 16.52 | 16.47 | 16.26 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.50 | 16.49 | 16.48 | 17.30              |
|                 |         | MID       | 64QAM      | 16.78 | 16.60 | 16.56 | 17.30              |
| 20              | 1       | HIGH      | 64QAM      | 16.52 | 16.79 | 16.33 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.48 | 16.51 | 16.34 | 17.30              |
|                 |         | MID       | 64QAM      | 16.51 | 16.58 | 16.21 | 17.30              |
|                 | 50      | HIGH      | 64QAM      | 16.39 | 16.41 | 16.26 | 17.30              |
|                 |         | LOW       | 64QAM      | 16.27 | 16.51 | 16.20 | 17.30              |
|                 |         | MID       | 64QAM      | 16.48 | 16.51 | 16.34 | 17.30              |
|                 | 100     | LOW       | 64QAM      | 16.27 | 16.51 | 16.20 | 17.30              |
|                 |         | LOW       | Q16        | 16.52 | 16.47 | 16.26 | 17.30              |
|                 |         | MID       | Q16        | 16.44 | 16.74 | 16.39 | 17.30              |

| LTE B2-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 21.39 | 21.34 | 21.40 | 22.30              |
|                       |         | MID       | QPSK       | 21.22 | 21.55 | 21.23 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.22 | 21.60 | 21.24 | 22.30              |
|                       | 3       | LOW       | QPSK       | 21.35 | 21.70 | 21.18 | 22.30              |
|                       |         | MID       | QPSK       | 21.59 | 21.70 | 21.31 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.45 | 21.82 | 21.44 | 22.30              |
|                       | 6       | LOW       | QPSK       | 21.31 | 21.51 | 21.35 | 22.30              |
|                       | 1       | LOW       | Q16        | 21.42 | 21.32 | 21.42 | 22.30              |
|                       |         | MID       | Q16        | 21.69 | 21.75 | 21.84 | 22.30              |
|                       |         | HIGH      | Q16        | 21.57 | 21.36 | 21.49 | 22.30              |
| 1.4                   | 3       | LOW       | Q16        | 22.02 | 22.07 | 21.75 | 22.80              |
|                       |         | MID       | Q16        | 22.02 | 21.92 | 21.98 | 22.80              |
|                       |         | HIGH      | Q16        | 22.04 | 22.11 | 21.54 | 22.80              |
|                       | 6       | LOW       | Q16        | 20.95 | 21.26 | 20.75 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.35 | 21.07 | 21.17 | 21.80              |
|                       |         | MID       | 64QAM      | 21.32 | 21.28 | 20.86 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.36 | 21.21 | 21.12 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 21.01 | 20.80 | 20.73 | 21.80              |
|                       |         | MID       | 64QAM      | 20.89 | 20.92 | 21.10 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.06 | 21.01 | 20.72 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 20.09 | 20.05 | 19.55 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 21.05 | 21.40 | 21.42 | 22.30              |
|                       |         | MID       | QPSK       | 21.18 | 21.63 | 21.23 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.54 | 21.36 | 21.05 | 22.30              |
|                       | 8       | LOW       | QPSK       | 21.35 | 21.64 | 21.27 | 22.30              |
|                       |         | MID       | QPSK       | 21.42 | 21.72 | 21.31 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.56 | 21.62 | 21.39 | 22.30              |
|                       | 15      | LOW       | QPSK       | 21.54 | 21.66 | 21.25 | 22.30              |
|                       | 1       | LOW       | Q16        | 21.51 | 21.50 | 21.57 | 22.30              |
|                       |         | MID       | Q16        | 21.43 | 21.84 | 21.53 | 22.30              |
|                       |         | HIGH      | Q16        | 21.52 | 21.68 | 21.36 | 22.30              |
| 3                     | 8       | LOW       | Q16        | 21.17 | 21.18 | 20.86 | 21.80              |
|                       |         | MID       | Q16        | 20.94 | 21.03 | 20.94 | 21.80              |
|                       |         | HIGH      | Q16        | 20.87 | 21.32 | 20.94 | 21.80              |
|                       | 15      | LOW       | Q16        | 21.00 | 21.25 | 21.04 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.26 | 21.20 | 21.19 | 21.80              |
|                       |         | MID       | 64QAM      | 21.43 | 21.30 | 21.17 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.27 | 21.47 | 21.11 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.13 | 19.94 | 19.73 | 20.80              |
|                       |         | MID       | 64QAM      | 19.93 | 19.84 | 19.82 | 20.80              |
|                       |         | HIGH      | 64QAM      | 19.94 | 20.03 | 19.70 | 20.80              |
|                       | 15      | LOW       | 64QAM      | 19.99 | 20.29 | 19.63 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 21.19 | 21.49 | 21.27 | 22.30              |
|                       |         | MID       | QPSK       | 21.37 | 21.55 | 21.49 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.47 | 21.55 | 21.22 | 22.30              |
|                       | 12      | LOW       | QPSK       | 21.39 | 21.62 | 21.18 | 22.30              |
|                       |         | MID       | QPSK       | 21.33 | 21.48 | 21.59 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.45 | 21.62 | 21.24 | 22.30              |
|                       | 25      | LOW       | QPSK       | 21.52 | 21.70 | 21.20 | 22.30              |
|                       | 1       | LOW       | Q16        | 21.69 | 21.74 | 21.68 | 22.30              |
|                       |         | MID       | Q16        | 21.78 | 21.70 | 21.40 | 22.30              |
|                       |         | HIGH      | Q16        | 21.83 | 21.60 | 21.53 | 22.30              |
| 5                     | 12      | LOW       | Q16        | 21.10 | 21.26 | 20.86 | 21.80              |
|                       |         | MID       | Q16        | 21.01 | 21.30 | 20.94 | 21.80              |
|                       |         | HIGH      | Q16        | 21.02 | 21.32 | 20.90 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.04 | 21.17 | 21.02 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.41 | 20.99 | 21.04 | 21.80              |
|                       |         | MID       | 64QAM      | 21.58 | 21.15 | 21.11 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.17 | 21.17 | 21.20 | 21.80              |
|                       | 12      | LOW       | 64QAM      | 19.97 | 19.82 | 19.87 | 20.80              |
|                       |         | MID       | 64QAM      | 19.93 | 19.86 | 20.02 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.10 | 20.19 | 19.78 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 19.93 | 20.05 | 19.93 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 21.26      | 21.42 | 21.15 | 22.30              |                    |
|                 |                 | MID       | QPSK       | 21.24      | 21.42 | 21.42 | 22.30              |                    |
|                 |                 | HIGH      | QPSK       | 21.49      | 21.47 | 21.28 | 22.30              |                    |
|                 | 25              | LOW       | QPSK       | 21.46      | 21.47 | 21.21 | 22.30              |                    |
|                 |                 | MID       | QPSK       | 21.42      | 21.79 | 21.33 | 22.30              |                    |
|                 |                 | HIGH      | QPSK       | 21.60      | 21.64 | 21.52 | 22.30              |                    |
|                 | 50              | LOW       | QPSK       | 21.41      | 21.42 | 21.31 | 22.30              |                    |
|                 | 10              | 1         | LOW        | Q16        | 21.56 | 21.47 | 21.65              | 22.30              |
|                 |                 |           | MID        | Q16        | 21.74 | 21.84 | 21.64              | 22.30              |
| HIGH            |                 |           | Q16        | 21.74      | 21.68 | 21.43 | 22.30              |                    |
| 25              |                 | LOW       | Q16        | 21.00      | 20.99 | 21.02 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.90      | 21.07 | 20.77 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.18      | 21.26 | 20.81 | 21.80              |                    |
| 50              |                 | LOW       | Q16        | 21.12      | 21.00 | 20.81 | 21.80              |                    |
| 10              |                 | 1         | LOW        | 64QAM      | 21.37 | 21.16 | 21.21              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.43 | 21.07 | 20.90              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.44      | 21.29 | 21.20 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 19.87      | 19.84 | 19.73 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.03      | 19.90 | 19.88 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.02      | 20.07 | 19.66 | 20.80              |                    |
|                 | 50              | LOW       | 64QAM      | 19.99      | 19.99 | 19.69 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 21.22 | 21.42 | 21.36              | 22.30              |
| MID             |                 |           | QPSK       | 21.41      | 21.55 | 21.36 | 22.30              |                    |
| HIGH            |                 |           | QPSK       | 21.26      | 21.55 | 21.09 | 22.30              |                    |
| 36              |                 | LOW       | QPSK       | 21.33      | 21.40 | 21.31 | 22.30              |                    |
|                 |                 | MID       | QPSK       | 21.66      | 21.48 | 21.35 | 22.30              |                    |
|                 |                 | HIGH      | QPSK       | 21.32      | 21.75 | 21.31 | 22.30              |                    |
| 75              |                 | LOW       | QPSK       | 21.48      | 21.66 | 21.29 | 22.30              |                    |
| 15              |                 | 1         | LOW        | Q16        | 21.64 | 21.78 | 21.55              | 22.30              |
|                 |                 |           | MID        | Q16        | 21.65 | 21.75 | 21.64              | 22.30              |
|                 | HIGH            |           | Q16        | 21.65      | 21.86 | 21.41 | 22.30              |                    |
|                 | 36              | LOW       | Q16        | 21.06      | 21.01 | 20.77 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.09      | 21.20 | 20.85 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.18      | 21.30 | 21.02 | 21.80              |                    |
|                 | 75              | LOW       | Q16        | 20.85      | 21.27 | 20.98 | 21.80              |                    |
|                 | 15              | 1         | LOW        | 64QAM      | 21.41 | 20.93 | 21.04              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.30 | 21.17 | 20.90              | 21.80              |
| HIGH            |                 |           | 64QAM      | 21.34      | 21.32 | 21.09 | 21.80              |                    |
| 36              |                 | LOW       | 64QAM      | 19.93      | 19.76 | 19.73 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.13      | 19.90 | 20.04 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.04      | 20.23 | 19.68 | 20.80              |                    |
| 75              |                 | LOW       | 64QAM      | 19.95      | 20.05 | 19.81 | 20.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20              |                 | 1         | LOW        | QPSK       | 21.28 | 21.38 | 21.36              | 22.30              |
|                 | MID             |           | QPSK       | 21.35      | 21.59 | 21.40 | 22.30              |                    |
|                 | HIGH            |           | QPSK       | 21.43      | 21.49 | 21.22 | 22.30              |                    |
|                 | 50              | LOW       | QPSK       | 21.52      | 21.64 | 21.42 | 22.30              |                    |
|                 |                 | MID       | QPSK       | 21.57      | 21.72 | 21.50 | 22.30              |                    |
|                 |                 | HIGH      | QPSK       | 21.56      | 21.71 | 21.48 | 22.30              |                    |
|                 | 100             | LOW       | QPSK       | 21.50      | 21.66 | 21.44 | 22.30              |                    |
|                 | 20              | 1         | LOW        | Q16        | 21.60 | 21.67 | 21.59              | 22.30              |
|                 |                 |           | MID        | Q16        | 21.67 | 21.88 | 21.64              | 22.30              |
| HIGH            |                 |           | Q16        | 21.72      | 21.75 | 21.47 | 22.30              |                    |
| 50              |                 | LOW       | Q16        | 21.06      | 21.18 | 20.92 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.07      | 21.26 | 20.98 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.10      | 21.24 | 20.98 | 21.80              |                    |
| 100             |                 | LOW       | Q16        | 21.06      | 21.19 | 20.94 | 21.80              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 21.41 | 21.16 | 21.23              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.47 | 21.28 | 21.09              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.38      | 21.38 | 21.26 | 21.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.09      | 19.98 | 19.89 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.09      | 20.06 | 19.94 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.02      | 20.19 | 19.78 | 20.80              |                    |
|                 | 100             | LOW       | 64QAM      | 19.99      | 20.21 | 19.85 | 20.80              |                    |

| LTE B2-State 5 -Ant.1 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 19.03      | 19.34 | 19.35 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.25      | 19.50 | 19.13 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.29      | 19.46 | 19.07 | 20.30              |                    |
|                       | 3               | LOW       | QPSK       | 19.38      | 19.35 | 19.52 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.33      | 19.50 | 19.51 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.56      | 19.75 | 19.44 | 20.30              |                    |
|                       | 6               | LOW       | QPSK       | 19.29      | 19.46 | 19.46 | 20.30              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 19.28 | 19.34 | 19.70              | 20.30              |
|                       |                 |           | MID        | Q16        | 19.38 | 19.66 | 19.34              | 20.30              |
| HIGH                  |                 |           | Q16        | 19.43      | 19.33 | 19.14 | 20.30              |                    |
| 3                     |                 | LOW       | Q16        | 19.49      | 19.43 | 19.44 | 20.30              |                    |
|                       |                 | MID       | Q16        | 19.37      | 19.77 | 19.42 | 20.30              |                    |
|                       |                 | HIGH      | Q16        | 19.42      | 19.76 | 19.22 | 20.30              |                    |
| 6                     |                 | LOW       | Q16        | 19.35      | 19.41 | 19.41 | 20.30              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 19.46 | 19.48 | 19.50              | 20.30              |
|                       |                 |           | MID        | 64QAM      | 19.56 | 19.64 | 19.28              | 20.30              |
|                       | HIGH            |           | 64QAM      | 19.51      | 19.37 | 19.21 | 20.30              |                    |
|                       | 3               | LOW       | 64QAM      | 19.24      | 19.27 | 19.52 | 20.30              |                    |
|                       |                 | MID       | 64QAM      | 19.21      | 19.69 | 19.48 | 20.30              |                    |
|                       |                 | HIGH      | 64QAM      | 19.44      | 19.62 | 19.27 | 20.30              |                    |
|                       | 6               | LOW       | 64QAM      | 19.14      | 19.22 | 19.13 | 20.30              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 19.10 | 19.16 | 19.31              | 20.30              |
| MID                   |                 |           | QPSK       | 19.29      | 19.32 | 19.17 | 20.30              |                    |
| HIGH                  |                 |           | QPSK       | 19.39      | 19.32 | 19.28 | 20.30              |                    |
| 8                     |                 | LOW       | QPSK       | 19.46      | 19.51 | 19.54 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.33      | 19.66 | 19.37 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.42      | 19.67 | 19.25 | 20.30              |                    |
| 15                    |                 | LOW       | QPSK       | 19.53      | 19.50 | 19.30 | 20.30              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 19.34 | 19.38 | 19.50              | 20.30              |
|                       |                 |           | MID        | Q16        | 19.62 | 19.46 | 19.52              | 20.30              |
|                       | HIGH            |           | Q16        | 19.61      | 19.47 | 19.39 | 20.30              |                    |
|                       | 8               | LOW       | Q16        | 19.51      | 19.37 | 19.64 | 20.30              |                    |
|                       |                 | MID       | Q16        | 19.63      | 19.65 | 19.28 | 20.30              |                    |
|                       |                 | HIGH      | Q16        | 19.50      | 19.74 | 19.39 | 20.30              |                    |
|                       | 15              | LOW       | Q16        | 19.61      | 19.61 | 19.21 | 20.30              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 19.36 | 19.28 | 19.42              | 20.30              |
|                       |                 |           | MID        | 64QAM      | 19.40 | 19.62 | 19.44              | 20.30              |
| HIGH                  |                 |           | 64QAM      | 19.24      | 19.24 | 19.17 | 20.30              |                    |
| 8                     |                 | LOW       | 64QAM      | 19.53      | 19.26 | 19.54 | 20.30              |                    |
|                       |                 | MID       | 64QAM      | 19.35      | 19.69 | 19.27 | 20.30              |                    |
|                       |                 | HIGH      | 64QAM      | 19.42      | 19.74 | 19.27 | 20.30              |                    |
| 15                    |                 | LOW       | 64QAM      | 19.45      | 19.53 | 19.25 | 20.30              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 18.97 | 19.28 | 19.47              | 20.30              |
|                       | MID             |           | QPSK       | 19.19      | 19.34 | 19.42 | 20.30              |                    |
|                       | HIGH            |           | QPSK       | 19.27      | 19.30 | 19.26 | 20.30              |                    |
|                       | 12              | LOW       | QPSK       | 19.38      | 19.57 | 19.54 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.57      | 19.72 | 19.29 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.32      | 19.57 | 19.46 | 20.30              |                    |
|                       | 25              | LOW       | QPSK       | 19.43      | 19.44 | 19.24 | 20.30              |                    |
|                       | 5               | 1         | LOW        | Q16        | 19.30 | 19.30 | 19.56              | 20.30              |
|                       |                 |           | MID        | Q16        | 19.62 | 19.56 | 19.54              | 20.30              |
| HIGH                  |                 |           | Q16        | 19.41      | 19.41 | 19.18 | 20.30              |                    |
| 12                    |                 | LOW       | Q16        | 19.37      | 19.59 | 19.46 | 20.30              |                    |
|                       |                 | MID       | Q16        | 19.43      | 19.77 | 19.48 | 20.30              |                    |
|                       |                 | HIGH      | Q16        | 19.38      | 19.50 | 19.49 | 20.30              |                    |
| 25                    |                 | LOW       | Q16        | 19.31      | 19.65 | 19.35 | 20.30              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 19.44 | 19.34 | 19.40              | 20.30              |
|                       |                 |           | MID        | 64QAM      | 19.32 | 19.64 | 19.28              | 20.30              |
|                       | HIGH            |           | 64QAM      | 19.31      | 19.33 | 19.12 | 20.30              |                    |
|                       | 12              | LOW       | 64QAM      | 19.41      | 19.41 | 19.42 | 20.30              |                    |
|                       |                 | MID       | 64QAM      | 19.20      | 19.71 | 19.52 | 20.30              |                    |
|                       |                 | HIGH      | 64QAM      | 19.36      | 19.60 | 19.23 | 20.30              |                    |
|                       | 25              | LOW       | 64QAM      | 19.20      | 19.24 | 19.19 | 20.30              |                    |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 19.14      | 19.15 | 19.51 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.25      | 19.31 | 19.44 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.21      | 19.54 | 19.14 | 20.30              |                    |
|                 | 25              | LOW       | QPSK       | 19.50      | 19.53 | 19.38 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.30      | 19.68 | 19.41 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.31      | 19.71 | 19.50 | 20.30              |                    |
|                 | 50              | LOW       | QPSK       | 19.24      | 19.50 | 19.17 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.30      | 19.28 | 19.68 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.36      | 19.62 | 19.44 | 20.30              |                    |
| 10              | 1               | HIGH      | Q16        | 19.63      | 19.53 | 19.21 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.35      | 19.59 | 19.36 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.53      | 19.57 | 19.48 | 20.30              |                    |
|                 | 25              | HIGH      | Q16        | 19.50      | 19.58 | 19.35 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.65 | 19.35 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.44      | 19.44 | 19.48 | 20.30              |                    |
|                 | 1               | MID       | 64QAM      | 19.48      | 19.50 | 19.38 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.39      | 19.39 | 19.31 | 20.30              |                    |
|                 |                 | 25        | LOW        | 64QAM      | 19.45 | 19.26 | 19.38              | 20.30              |
| MID             | 64QAM           |           | 19.16      | 19.65      | 19.30 | 20.30 |                    |                    |
| HIGH            | 64QAM           |           | 19.54      | 19.58      | 19.12 | 20.30 |                    |                    |
| 50              | LOW             | 64QAM     | 19.14      | 19.29      | 19.31 | 20.30 |                    |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 19.20 | 19.40 | 19.35              | 20.30              |
| MID             |                 |           | QPSK       | 19.39      | 19.48 | 19.38 | 20.30              |                    |
| HIGH            |                 |           | QPSK       | 19.33      | 19.28 | 19.20 | 20.30              |                    |
| 36              |                 | LOW       | QPSK       | 19.58      | 19.47 | 19.48 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.37      | 19.50 | 19.35 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.48      | 19.69 | 19.36 | 20.30              |                    |
| 75              |                 | LOW       | QPSK       | 19.39      | 19.42 | 19.32 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.27      | 19.34 | 19.42 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.48      | 19.60 | 19.46 | 20.30              |                    |
| 15              | 1               | HIGH      | Q16        | 19.32      | 19.49 | 19.12 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.47      | 19.39 | 19.66 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.59      | 19.51 | 19.34 | 20.30              |                    |
|                 | 36              | HIGH      | Q16        | 19.48      | 19.46 | 19.24 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.53      | 19.47 | 19.37 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.48      | 19.50 | 19.50 | 20.30              |                    |
|                 | 1               | MID       | 64QAM      | 19.50      | 19.58 | 19.19 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.24      | 19.24 | 19.14 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.27      | 19.35 | 19.48 | 20.30              |                    |
| 36              | MID             | 64QAM     | 19.29      | 19.47      | 19.25 | 20.30 |                    |                    |
|                 | HIGH            | 64QAM     | 19.60      | 19.66      | 19.27 | 20.30 |                    |                    |
|                 | 75              | LOW       | 64QAM      | 19.14      | 19.26 | 19.04 | 20.30              |                    |
| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18700      | 18900 | 19100 | Tune-up power(dBm) |                    |
| 20              | 1               | LOW       | QPSK       | 19.16      | 19.30 | 19.45 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.29      | 19.52 | 19.34 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.33      | 19.44 | 19.20 | 20.30              |                    |
|                 | 50              | LOW       | QPSK       | 19.48      | 19.57 | 19.56 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.49      | 19.66 | 19.43 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.50      | 19.65 | 19.46 | 20.30              |                    |
|                 | 100             | LOW       | QPSK       | 19.45      | 19.58 | 19.38 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.46      | 19.42 | 19.60 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.52      | 19.66 | 19.52 | 20.30              |                    |
| 20              | 1               | HIGH      | Q16        | 19.53      | 19.53 | 19.33 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.57 | 19.56 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.53      | 19.67 | 19.42 | 20.30              |                    |
|                 | 50              | HIGH      | Q16        | 19.54      | 19.68 | 19.41 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.61 | 19.35 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.44      | 19.40 | 19.60 | 20.30              |                    |
|                 | 1               | MID       | 64QAM      | 19.50      | 19.60 | 19.40 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.45      | 19.41 | 19.27 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.43      | 19.45 | 19.58 | 20.30              |                    |
| 50              | MID             | 64QAM     | 19.35      | 19.61      | 19.46 | 20.30 |                    |                    |
|                 | HIGH            | 64QAM     | 19.54      | 19.78      | 19.31 | 20.30 |                    |                    |
|                 | 100             | LOW       | 64QAM      | 19.35      | 19.43 | 19.25 | 20.30              |                    |

| LTE B2-State 6 -Ant.1 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 19.03      | 19.34 | 19.35 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.25      | 19.50 | 19.13 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.29      | 19.46 | 19.07 | 20.30              |                    |
|                       | 3               | LOW       | QPSK       | 19.38      | 19.35 | 19.52 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.33      | 19.50 | 19.51 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.56      | 19.75 | 19.44 | 20.30              |                    |
|                       | 6               | LOW       | QPSK       | 19.29      | 19.46 | 19.46 | 20.30              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 19.28 | 19.34 | 19.70              | 20.30              |
|                       |                 |           | MID        | Q16        | 19.38 | 19.66 | 19.34              | 20.30              |
| HIGH                  |                 |           | Q16        | 19.43      | 19.33 | 19.14 | 20.30              |                    |
| 3                     |                 | LOW       | Q16        | 19.49      | 19.43 | 19.44 | 20.30              |                    |
|                       |                 | MID       | Q16        | 19.37      | 19.77 | 19.42 | 20.30              |                    |
|                       |                 | HIGH      | Q16        | 19.42      | 19.76 | 19.22 | 20.30              |                    |
| 6                     |                 | LOW       | Q16        | 19.35      | 19.41 | 19.41 | 20.30              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 19.46 | 19.48 | 19.50              | 20.30              |
|                       |                 |           | MID        | 64QAM      | 19.56 | 19.64 | 19.28              | 20.30              |
|                       | HIGH            |           | 64QAM      | 19.51      | 19.37 | 19.21 | 20.30              |                    |
|                       | 3               | LOW       | 64QAM      | 19.24      | 19.27 | 19.52 | 20.30              |                    |
|                       |                 | MID       | 64QAM      | 19.21      | 19.69 | 19.48 | 20.30              |                    |
|                       |                 | HIGH      | 64QAM      | 19.44      | 19.62 | 19.27 | 20.30              |                    |
|                       | 6               | LOW       | 64QAM      | 19.14      | 19.22 | 19.13 | 20.30              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 19.10 | 19.16 | 19.31              | 20.30              |
| MID                   |                 |           | QPSK       | 19.29      | 19.32 | 19.17 | 20.30              |                    |
| HIGH                  |                 |           | QPSK       | 19.39      | 19.32 | 19.28 | 20.30              |                    |
| 8                     |                 | LOW       | QPSK       | 19.46      | 19.51 | 19.54 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.33      | 19.66 | 19.37 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.42      | 19.67 | 19.25 | 20.30              |                    |
| 15                    |                 | LOW       | QPSK       | 19.53      | 19.50 | 19.30 | 20.30              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 19.34 | 19.38 | 19.50              | 20.30              |
|                       |                 |           | MID        | Q16        | 19.62 | 19.46 | 19.52              | 20.30              |
|                       | HIGH            |           | Q16        | 19.61      | 19.47 | 19.39 | 20.30              |                    |
|                       | 8               | LOW       | Q16        | 19.51      | 19.37 | 19.64 | 20.30              |                    |
|                       |                 | MID       | Q16        | 19.63      | 19.65 | 19.28 | 20.30              |                    |
|                       |                 | HIGH      | Q16        | 19.50      | 19.74 | 19.39 | 20.30              |                    |
|                       | 15              | LOW       | Q16        | 19.61      | 19.61 | 19.21 | 20.30              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 19.36 | 19.28 | 19.42              | 20.30              |
|                       |                 |           | MID        | 64QAM      | 19.40 | 19.62 | 19.44              | 20.30              |
| HIGH                  |                 |           | 64QAM      | 19.24      | 19.24 | 19.17 | 20.30              |                    |
| 8                     |                 | LOW       | 64QAM      | 19.53      | 19.26 | 19.54 | 20.30              |                    |
|                       |                 | MID       | 64QAM      | 19.35      | 19.69 | 19.27 | 20.30              |                    |
|                       |                 | HIGH      | 64QAM      | 19.42      | 19.74 | 19.27 | 20.30              |                    |
| 15                    |                 | LOW       | 64QAM      | 19.45      | 19.53 | 19.25 | 20.30              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 18.97 | 19.28 | 19.47              | 20.30              |
|                       | MID             |           | QPSK       | 19.19      | 19.34 | 19.42 | 20.30              |                    |
|                       | HIGH            |           | QPSK       | 19.27      | 19.30 | 19.26 | 20.30              |                    |
|                       | 12              | LOW       | QPSK       | 19.38      | 19.57 | 19.54 | 20.30              |                    |
|                       |                 | MID       | QPSK       | 19.57      | 19.72 | 19.29 | 20.30              |                    |
|                       |                 | HIGH      | QPSK       | 19.32      | 19.57 | 19.46 | 20.30              |                    |
|                       | 25              | LOW       | QPSK       | 19.43      | 19.44 | 19.24 | 20.30              |                    |
|                       | 5               | 1         | LOW        | Q16        | 19.30 | 19.30 | 19.56              | 20.30              |
|                       |                 |           | MID        | Q16        | 19.62 | 19.56 | 19.54              | 20.30              |
| HIGH                  |                 |           | Q16        | 19.41      | 19.41 | 19.18 | 20.30              |                    |
| 12                    |                 | LOW       | Q16        | 19.37      | 19.59 | 19.46 | 20.30              |                    |
|                       |                 | MID       | Q16        | 19.43      | 19.77 | 19.48 | 20.30              |                    |
|                       |                 | HIGH      | Q16        | 19.38      | 19.50 | 19.49 | 20.30              |                    |
| 25                    |                 | LOW       | Q16        | 19.31      | 19.65 | 19.35 | 20.30              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 19.44 | 19.34 | 19.40              | 20.30              |
|                       |                 |           | MID        | 64QAM      | 19.32 | 19.64 | 19.28              | 20.30              |
|                       | HIGH            |           | 64QAM      | 19.31      | 19.33 | 19.12 | 20.30              |                    |
|                       | 12              | LOW       | 64QAM      | 19.41      | 19.41 | 19.42 | 20.30              |                    |
|                       |                 | MID       | 64QAM      | 19.20      | 19.71 | 19.52 | 20.30              |                    |
|                       |                 | HIGH      | 64QAM      | 19.36      | 19.60 | 19.23 | 20.30              |                    |
|                       | 25              | LOW       | 64QAM      | 19.20      | 19.24 | 19.19 | 20.30              |                    |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 19.14      | 19.15 | 19.51 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.25      | 19.31 | 19.44 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.21      | 19.54 | 19.14 | 20.30              |                    |
|                 | 25              | LOW       | QPSK       | 19.50      | 19.53 | 19.38 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.30      | 19.68 | 19.41 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.31      | 19.71 | 19.50 | 20.30              |                    |
|                 | 50              | LOW       | QPSK       | 19.24      | 19.50 | 19.17 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.30      | 19.28 | 19.68 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.36      | 19.62 | 19.44 | 20.30              |                    |
| 10              | 1               | HIGH      | Q16        | 19.63      | 19.53 | 19.21 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.35      | 19.59 | 19.36 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.53      | 19.57 | 19.48 | 20.30              |                    |
|                 | 25              | HIGH      | Q16        | 19.50      | 19.58 | 19.35 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.65 | 19.35 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.44      | 19.44 | 19.48 | 20.30              |                    |
|                 | 1               | MID       | 64QAM      | 19.48      | 19.50 | 19.38 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.39      | 19.39 | 19.31 | 20.30              |                    |
|                 |                 | 25        | LOW        | 64QAM      | 19.45 | 19.26 | 19.38              | 20.30              |
| MID             | 64QAM           |           | 19.16      | 19.65      | 19.30 | 20.30 |                    |                    |
| HIGH            | 64QAM           |           | 19.54      | 19.58      | 19.12 | 20.30 |                    |                    |
| 50              | LOW             | 64QAM     | 19.14      | 19.29      | 19.31 | 20.30 |                    |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 19.20 | 19.40 | 19.35              | 20.30              |
| MID             |                 |           | QPSK       | 19.39      | 19.48 | 19.38 | 20.30              |                    |
| HIGH            |                 |           | QPSK       | 19.33      | 19.28 | 19.20 | 20.30              |                    |
| 36              |                 | LOW       | QPSK       | 19.58      | 19.47 | 19.48 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.37      | 19.50 | 19.35 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.48      | 19.69 | 19.36 | 20.30              |                    |
| 75              |                 | LOW       | QPSK       | 19.39      | 19.42 | 19.32 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.27      | 19.34 | 19.42 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.48      | 19.60 | 19.46 | 20.30              |                    |
| 15              | 1               | HIGH      | Q16        | 19.32      | 19.49 | 19.12 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.47      | 19.39 | 19.66 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.59      | 19.51 | 19.34 | 20.30              |                    |
|                 | 36              | HIGH      | Q16        | 19.48      | 19.46 | 19.24 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.53      | 19.47 | 19.37 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.48      | 19.50 | 19.50 | 20.30              |                    |
|                 | 1               | MID       | 64QAM      | 19.50      | 19.58 | 19.19 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.24      | 19.24 | 19.14 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.27      | 19.35 | 19.48 | 20.30              |                    |
| 36              | MID             | 64QAM     | 19.29      | 19.47      | 19.25 | 20.30 |                    |                    |
|                 | HIGH            | 64QAM     | 19.60      | 19.66      | 19.27 | 20.30 |                    |                    |
|                 | LOW             | 64QAM     | 19.14      | 19.26      | 19.04 | 20.30 |                    |                    |
| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18700      | 18900 | 19100 | Tune-up power(dBm) |                    |
| 20              | 1               | LOW       | QPSK       | 19.16      | 19.30 | 19.45 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.29      | 19.52 | 19.34 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.33      | 19.44 | 19.20 | 20.30              |                    |
|                 | 50              | LOW       | QPSK       | 19.48      | 19.57 | 19.56 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.49      | 19.66 | 19.43 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.50      | 19.65 | 19.46 | 20.30              |                    |
|                 | 100             | LOW       | QPSK       | 19.45      | 19.58 | 19.38 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.46      | 19.42 | 19.60 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.52      | 19.66 | 19.52 | 20.30              |                    |
| 20              | 1               | HIGH      | Q16        | 19.53      | 19.53 | 19.33 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.57 | 19.56 | 20.30              |                    |
|                 |                 | MID       | Q16        | 19.53      | 19.67 | 19.42 | 20.30              |                    |
|                 | 50              | HIGH      | Q16        | 19.54      | 19.68 | 19.41 | 20.30              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.61 | 19.35 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.44      | 19.40 | 19.60 | 20.30              |                    |
|                 | 1               | MID       | 64QAM      | 19.50      | 19.60 | 19.40 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.45      | 19.41 | 19.27 | 20.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.43      | 19.45 | 19.58 | 20.30              |                    |
| 50              | MID             | 64QAM     | 19.35      | 19.61      | 19.46 | 20.30 |                    |                    |
|                 | HIGH            | 64QAM     | 19.54      | 19.78      | 19.31 | 20.30 |                    |                    |
|                 | LOW             | 64QAM     | 19.35      | 19.43      | 19.25 | 20.30 |                    |                    |

## 8.3 LTE Output Power

BL-SZ2220432-701

### 8.3.1 LTE Band2 Output Power

| LTE B2-State 1 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.05 | 23.08 | 22.78 | 23.80              |
|                       |         | MID       | QPSK       | 23.35 | 23.58 | 22.99 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.45 | 23.39 | 23.14 | 23.80              |
|                       | 3       | LOW       | QPSK       | 23.15 | 23.33 | 23.04 | 23.80              |
|                       |         | MID       | QPSK       | 23.26 | 23.39 | 23.17 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.45 | 23.31 | 22.98 | 23.80              |
|                       | 6       | LOW       | QPSK       | 22.29 | 22.25 | 22.00 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.51 | 22.55 | 22.54 | 22.80              |
|                       |         | MID       | Q16        | 22.68 | 22.68 | 22.48 | 22.80              |
|                       |         | HIGH      | Q16        | 22.62 | 22.38 | 22.49 | 22.80              |
| 1.4                   | 3       | LOW       | Q16        | 22.50 | 22.35 | 21.81 | 22.80              |
|                       |         | MID       | Q16        | 22.47 | 22.27 | 22.26 | 22.80              |
|                       |         | HIGH      | Q16        | 22.32 | 22.55 | 22.09 | 22.80              |
|                       | 6       | LOW       | Q16        | 21.38 | 21.45 | 21.13 | 21.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.44 | 21.48 | 21.29 | 21.80              |
|                       |         | MID       | 64QAM      | 21.61 | 21.68 | 21.17 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.39 | 21.66 | 21.22 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 21.50 | 21.62 | 20.85 | 21.80              |
|                       |         | MID       | 64QAM      | 21.28 | 21.42 | 21.33 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.51 | 21.48 | 21.16 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 20.23 | 20.21 | 20.06 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.19 | 23.08 | 23.05 | 23.80              |
|                       |         | MID       | QPSK       | 23.37 | 23.55 | 22.92 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.10 | 23.15 | 22.90 | 23.80              |
|                       | 8       | LOW       | QPSK       | 22.27 | 22.44 | 22.13 | 22.80              |
|                       |         | MID       | QPSK       | 22.37 | 22.57 | 22.25 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.36 | 22.42 | 22.22 | 22.80              |
|                       | 15      | LOW       | QPSK       | 22.15 | 22.25 | 21.87 | 22.80              |
|                       | 3       | LOW       | Q16        | 22.54 | 22.65 | 22.36 | 22.80              |
|                       |         | MID       | Q16        | 22.50 | 22.52 | 22.35 | 22.80              |
|                       |         | HIGH      | Q16        | 22.47 | 22.67 | 22.29 | 22.80              |
| 3                     | 8       | LOW       | Q16        | 21.26 | 21.48 | 20.89 | 21.80              |
|                       |         | MID       | Q16        | 21.58 | 21.24 | 21.09 | 21.80              |
|                       |         | HIGH      | Q16        | 21.21 | 21.55 | 21.07 | 21.80              |
|                       | 15      | LOW       | Q16        | 21.27 | 21.47 | 21.03 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.40 | 21.39 | 21.14 | 21.80              |
|                       |         | MID       | 64QAM      | 21.66 | 21.62 | 21.36 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.41 | 21.42 | 21.47 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.50 | 20.31 | 20.15 | 20.80              |
|                       |         | MID       | 64QAM      | 20.30 | 20.39 | 20.37 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.47 | 20.39 | 20.02 | 20.80              |
| 3                     | 15      | LOW       | 64QAM      | 20.27 | 20.19 | 20.10 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 22.98 | 23.06 | 22.87 | 23.80              |
|                       |         | MID       | QPSK       | 23.25 | 23.37 | 23.10 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.24 | 23.13 | 22.88 | 23.80              |
|                       | 12      | LOW       | QPSK       | 22.38 | 22.42 | 21.88 | 22.80              |
|                       |         | MID       | QPSK       | 22.26 | 22.48 | 22.10 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.41 | 22.40 | 22.02 | 22.80              |
|                       | 25      | LOW       | QPSK       | 22.29 | 22.34 | 22.03 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.58 | 22.55 | 22.32 | 22.80              |
|                       |         | MID       | Q16        | 22.64 | 22.66 | 22.44 | 22.80              |
|                       |         | HIGH      | Q16        | 22.42 | 22.65 | 22.47 | 22.80              |
| 5                     | 12      | LOW       | Q16        | 21.26 | 21.29 | 21.00 | 21.80              |
|                       |         | MID       | Q16        | 21.28 | 21.39 | 21.21 | 21.80              |
|                       |         | HIGH      | Q16        | 21.30 | 21.25 | 21.15 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.55 | 21.50 | 21.18 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.47 | 21.61 | 21.26 | 21.80              |
|                       |         | MID       | 64QAM      | 21.46 | 21.77 | 21.41 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.67 | 21.51 | 21.50 | 21.80              |
|                       | 12      | LOW       | 64QAM      | 20.68 | 20.48 | 20.11 | 20.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.62 | 20.27 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.27 | 20.54 | 20.16 | 20.80              |
| 5                     | 25      | LOW       | 64QAM      | 20.11 | 20.51 | 20.32 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 23.26      | 23.15 | 22.82 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 23.46      | 23.37 | 23.13 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.45      | 23.32 | 23.14 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.42      | 22.46 | 21.99 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.26      | 22.55 | 22.28 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.30      | 22.42 | 22.04 | 22.80              |                    |
|                 | 50              | LOW       | QPSK       | 22.22      | 22.25 | 21.96 | 22.80              |                    |
|                 | 10              | 1         | LOW        | Q16        | 22.40 | 22.71 | 22.50              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.75 | 22.64 | 22.50              | 22.80              |
| HIGH            |                 |           | Q16        | 22.60      | 22.33 | 22.25 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.50      | 21.42 | 20.91 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.32      | 21.31 | 21.26 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.49      | 21.42 | 21.17 | 21.80              |                    |
| 50              |                 | LOW       | Q16        | 21.35      | 21.41 | 21.05 | 21.80              |                    |
| 10              |                 | 1         | LOW        | 64QAM      | 21.57 | 21.33 | 21.46              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.48 | 21.68 | 21.09              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.52      | 21.46 | 21.52 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.68      | 20.62 | 20.03 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.22      | 20.54 | 20.45 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.31      | 20.41 | 20.14 | 20.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.37      | 20.27 | 20.30 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 23.36 | 23.27 | 22.94              | 23.80              |
| MID             |                 |           | QPSK       | 23.39      | 23.27 | 23.08 | 23.80              |                    |
| HIGH            |                 |           | QPSK       | 23.20      | 23.22 | 22.81 | 23.80              |                    |
| 36              |                 | LOW       | QPSK       | 22.24      | 22.49 | 21.86 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.24      | 22.39 | 22.14 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.34      | 22.42 | 22.15 | 22.80              |                    |
| 75              |                 | LOW       | QPSK       | 22.51      | 22.23 | 22.05 | 22.80              |                    |
| 15              |                 | 1         | LOW        | Q16        | 22.47 | 22.65 | 22.32              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.57 | 22.66 | 22.50              | 22.80              |
|                 | HIGH            |           | Q16        | 22.42      | 22.49 | 22.45 | 22.80              |                    |
|                 | 36              | LOW       | Q16        | 21.32      | 21.46 | 21.02 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.36      | 21.59 | 21.07 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.30      | 21.44 | 21.15 | 21.80              |                    |
|                 | 75              | LOW       | Q16        | 21.40      | 21.52 | 21.13 | 21.80              |                    |
|                 | 15              | 1         | LOW        | 64QAM      | 21.47 | 21.29 | 21.22              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.66 | 21.72 | 21.17              | 21.80              |
| HIGH            |                 |           | 64QAM      | 21.54      | 21.35 | 21.24 | 21.80              |                    |
| 36              |                 | LOW       | 64QAM      | 20.50      | 20.50 | 19.93 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.12      | 20.42 | 20.19 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.49      | 20.46 | 19.98 | 20.80              |                    |
| 75              |                 | LOW       | 64QAM      | 20.29      | 20.27 | 20.16 | 20.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20              |                 | 1         | LOW        | QPSK       | 23.24 | 23.27 | 22.96              | 23.80              |
|                 | MID             |           | QPSK       | 23.37      | 23.46 | 23.08 | 23.80              |                    |
|                 | HIGH            |           | QPSK       | 23.36      | 23.27 | 23.02 | 23.80              |                    |
|                 | 50              | LOW       | QPSK       | 22.40      | 22.42 | 22.06 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.44      | 22.46 | 22.21 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.43      | 22.44 | 22.13 | 22.80              |                    |
|                 | 100             | LOW       | QPSK       | 22.40      | 22.41 | 22.07 | 22.80              |                    |
|                 | 20              | 1         | LOW        | Q16        | 22.65 | 22.60 | 22.43              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.75 | 22.77 | 22.48              | 22.80              |
| HIGH            |                 |           | Q16        | 22.67      | 22.56 | 22.47 | 22.80              |                    |
| 50              |                 | LOW       | Q16        | 21.41      | 21.46 | 21.04 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.49      | 21.48 | 21.15 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.45      | 21.44 | 21.11 | 21.80              |                    |
| 100             |                 | LOW       | Q16        | 21.44      | 21.41 | 21.07 | 21.80              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 21.53 | 21.50 | 21.35              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.70 | 21.79 | 21.32              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.63      | 21.57 | 21.41 | 21.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.58      | 20.54 | 20.05 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.26      | 20.58 | 20.37 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.45      | 20.60 | 20.08 | 20.80              |                    |
|                 | 100             | LOW       | 64QAM      | 20.31      | 20.41 | 20.22 | 20.80              |                    |

| LTE B2-State 2 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.05 | 23.08 | 22.78 | 23.80              |
|                       |         | MID       | QPSK       | 23.35 | 23.58 | 22.99 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.45 | 23.39 | 23.14 | 23.80              |
|                       | 3       | LOW       | QPSK       | 23.15 | 23.33 | 23.04 | 23.80              |
|                       |         | MID       | QPSK       | 23.26 | 23.39 | 23.17 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.45 | 23.31 | 22.98 | 23.80              |
|                       | 6       | LOW       | QPSK       | 22.29 | 22.25 | 22.00 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.51 | 22.55 | 22.54 | 22.80              |
|                       |         | MID       | Q16        | 22.68 | 22.68 | 22.48 | 22.80              |
|                       |         | HIGH      | Q16        | 22.62 | 22.38 | 22.49 | 22.80              |
| 1.4                   | 3       | LOW       | Q16        | 22.50 | 22.35 | 21.81 | 22.80              |
|                       |         | MID       | Q16        | 22.47 | 22.27 | 22.26 | 22.80              |
|                       |         | HIGH      | Q16        | 22.32 | 22.55 | 22.09 | 22.80              |
|                       | 6       | LOW       | Q16        | 21.38 | 21.45 | 21.13 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.44 | 21.48 | 21.29 | 21.80              |
|                       |         | MID       | 64QAM      | 21.61 | 21.68 | 21.17 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.39 | 21.66 | 21.22 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 21.50 | 21.62 | 20.85 | 21.80              |
|                       |         | MID       | 64QAM      | 21.28 | 21.42 | 21.33 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.51 | 21.48 | 21.16 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 20.23 | 20.21 | 20.06 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.19 | 23.08 | 23.05 | 23.80              |
|                       |         | MID       | QPSK       | 23.37 | 23.55 | 22.92 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.10 | 23.15 | 22.90 | 23.80              |
|                       | 8       | LOW       | QPSK       | 22.27 | 22.44 | 22.13 | 22.80              |
|                       |         | MID       | QPSK       | 22.37 | 22.57 | 22.25 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.36 | 22.42 | 22.22 | 22.80              |
|                       | 15      | LOW       | QPSK       | 22.15 | 22.25 | 21.87 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.54 | 22.65 | 22.36 | 22.80              |
|                       |         | MID       | Q16        | 22.50 | 22.52 | 22.35 | 22.80              |
|                       |         | HIGH      | Q16        | 22.47 | 22.67 | 22.29 | 22.80              |
| 3                     | 8       | LOW       | Q16        | 21.26 | 21.48 | 20.89 | 21.80              |
|                       |         | MID       | Q16        | 21.58 | 21.24 | 21.09 | 21.80              |
|                       |         | HIGH      | Q16        | 21.21 | 21.55 | 21.07 | 21.80              |
|                       | 15      | LOW       | Q16        | 21.27 | 21.47 | 21.03 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.40 | 21.39 | 21.14 | 21.80              |
|                       |         | MID       | 64QAM      | 21.66 | 21.62 | 21.36 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.41 | 21.42 | 21.47 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.50 | 20.31 | 20.15 | 20.80              |
|                       |         | MID       | 64QAM      | 20.30 | 20.39 | 20.37 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.47 | 20.39 | 20.02 | 20.80              |
|                       | 15      | LOW       | 64QAM      | 20.27 | 20.19 | 20.10 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 22.98 | 23.06 | 22.87 | 23.80              |
|                       |         | MID       | QPSK       | 23.25 | 23.37 | 23.10 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.24 | 23.13 | 22.88 | 23.80              |
|                       | 12      | LOW       | QPSK       | 22.38 | 22.42 | 21.88 | 22.80              |
|                       |         | MID       | QPSK       | 22.26 | 22.48 | 22.10 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.41 | 22.40 | 22.02 | 22.80              |
|                       | 25      | LOW       | QPSK       | 22.29 | 22.34 | 22.03 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.58 | 22.55 | 22.32 | 22.80              |
|                       |         | MID       | Q16        | 22.64 | 22.66 | 22.44 | 22.80              |
|                       |         | HIGH      | Q16        | 22.42 | 22.65 | 22.47 | 22.80              |
| 5                     | 12      | LOW       | Q16        | 21.26 | 21.29 | 21.00 | 21.80              |
|                       |         | MID       | Q16        | 21.28 | 21.39 | 21.21 | 21.80              |
|                       |         | HIGH      | Q16        | 21.30 | 21.25 | 21.15 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.55 | 21.50 | 21.18 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.47 | 21.61 | 21.26 | 21.80              |
|                       |         | MID       | 64QAM      | 21.46 | 21.77 | 21.41 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.67 | 21.51 | 21.50 | 21.80              |
|                       | 12      | LOW       | 64QAM      | 20.68 | 20.48 | 20.11 | 20.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.62 | 20.27 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.27 | 20.54 | 20.16 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.11 | 20.51 | 20.32 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 23.26      | 23.15 | 22.82 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 23.46      | 23.37 | 23.13 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.45      | 23.32 | 23.14 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.42      | 22.46 | 21.99 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.26      | 22.55 | 22.28 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.30      | 22.42 | 22.04 | 22.80              |                    |
|                 | 50              | LOW       | QPSK       | 22.22      | 22.25 | 21.96 | 22.80              |                    |
|                 | 10              | 1         | LOW        | Q16        | 22.40 | 22.71 | 22.50              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.75 | 22.64 | 22.50              | 22.80              |
| HIGH            |                 |           | Q16        | 22.60      | 22.33 | 22.25 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.50      | 21.42 | 20.91 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.32      | 21.31 | 21.26 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.49      | 21.42 | 21.17 | 21.80              |                    |
| 50              |                 | LOW       | Q16        | 21.35      | 21.41 | 21.05 | 21.80              |                    |
| 10              |                 | 1         | LOW        | 64QAM      | 21.57 | 21.33 | 21.46              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.48 | 21.68 | 21.09              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.52      | 21.46 | 21.52 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.68      | 20.62 | 20.03 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.22      | 20.54 | 20.45 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.31      | 20.41 | 20.14 | 20.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.37      | 20.27 | 20.30 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 23.36 | 23.27 | 22.94              | 23.80              |
| MID             |                 |           | QPSK       | 23.39      | 23.27 | 23.08 | 23.80              |                    |
| HIGH            |                 |           | QPSK       | 23.20      | 23.22 | 22.81 | 23.80              |                    |
| 36              |                 | LOW       | QPSK       | 22.24      | 22.49 | 21.86 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.24      | 22.39 | 22.14 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.34      | 22.42 | 22.15 | 22.80              |                    |
| 75              |                 | LOW       | QPSK       | 22.51      | 22.23 | 22.05 | 22.80              |                    |
| 15              |                 | 1         | LOW        | Q16        | 22.47 | 22.65 | 22.32              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.57 | 22.66 | 22.50              | 22.80              |
|                 | HIGH            |           | Q16        | 22.42      | 22.49 | 22.45 | 22.80              |                    |
|                 | 36              | LOW       | Q16        | 21.32      | 21.46 | 21.02 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.36      | 21.59 | 21.07 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.30      | 21.44 | 21.15 | 21.80              |                    |
|                 | 75              | LOW       | Q16        | 21.40      | 21.52 | 21.13 | 21.80              |                    |
|                 | 15              | 1         | LOW        | 64QAM      | 21.47 | 21.29 | 21.22              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.66 | 21.72 | 21.17              | 21.80              |
| HIGH            |                 |           | 64QAM      | 21.54      | 21.35 | 21.24 | 21.80              |                    |
| 36              |                 | LOW       | 64QAM      | 20.50      | 20.50 | 19.93 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.12      | 20.42 | 20.19 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.49      | 20.46 | 19.98 | 20.80              |                    |
| 75              |                 | LOW       | 64QAM      | 20.29      | 20.27 | 20.16 | 20.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20              |                 | 1         | LOW        | QPSK       | 23.24 | 23.27 | 22.96              | 23.80              |
|                 | MID             |           | QPSK       | 23.37      | 23.46 | 23.08 | 23.80              |                    |
|                 | HIGH            |           | QPSK       | 23.36      | 23.27 | 23.02 | 23.80              |                    |
|                 | 50              | LOW       | QPSK       | 22.40      | 22.42 | 22.06 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.44      | 22.46 | 22.21 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.43      | 22.44 | 22.13 | 22.80              |                    |
|                 | 100             | LOW       | QPSK       | 22.40      | 22.41 | 22.07 | 22.80              |                    |
|                 | 20              | 1         | LOW        | Q16        | 22.65 | 22.60 | 22.43              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.75 | 22.77 | 22.48              | 22.80              |
| HIGH            |                 |           | Q16        | 22.67      | 22.56 | 22.47 | 22.80              |                    |
| 50              |                 | LOW       | Q16        | 21.41      | 21.46 | 21.04 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.49      | 21.48 | 21.15 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.45      | 21.44 | 21.11 | 21.80              |                    |
| 100             |                 | LOW       | Q16        | 21.44      | 21.41 | 21.07 | 21.80              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 21.53 | 21.50 | 21.35              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.70 | 21.79 | 21.32              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.63      | 21.57 | 21.41 | 21.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.58      | 20.54 | 20.05 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.26      | 20.58 | 20.37 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.45      | 20.60 | 20.08 | 20.80              |                    |
|                 | 100             | LOW       | 64QAM      | 20.31      | 20.41 | 20.22 | 20.80              |                    |

| LTE B2-State 3 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.05 | 23.08 | 22.78 | 23.80              |
|                       |         | MID       | QPSK       | 23.35 | 23.58 | 22.99 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.45 | 23.39 | 23.14 | 23.80              |
|                       | 3       | LOW       | QPSK       | 23.15 | 23.33 | 23.04 | 23.80              |
|                       |         | MID       | QPSK       | 23.26 | 23.39 | 23.17 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.45 | 23.31 | 22.98 | 23.80              |
|                       | 6       | LOW       | QPSK       | 22.29 | 22.25 | 22.00 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.51 | 22.55 | 22.54 | 22.80              |
|                       |         | MID       | Q16        | 22.68 | 22.68 | 22.48 | 22.80              |
|                       |         | HIGH      | Q16        | 22.62 | 22.38 | 22.49 | 22.80              |
| 1.4                   | 3       | LOW       | Q16        | 22.50 | 22.35 | 21.81 | 22.80              |
|                       |         | MID       | Q16        | 22.47 | 22.27 | 22.26 | 22.80              |
|                       |         | HIGH      | Q16        | 22.32 | 22.55 | 22.09 | 22.80              |
|                       | 6       | LOW       | Q16        | 21.38 | 21.45 | 21.13 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.44 | 21.48 | 21.29 | 21.80              |
|                       |         | MID       | 64QAM      | 21.61 | 21.68 | 21.17 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.39 | 21.66 | 21.22 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 21.50 | 21.62 | 20.85 | 21.80              |
|                       |         | MID       | 64QAM      | 21.28 | 21.42 | 21.33 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.51 | 21.48 | 21.16 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 20.23 | 20.21 | 20.06 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.19 | 23.08 | 23.05 | 23.80              |
|                       |         | MID       | QPSK       | 23.37 | 23.55 | 22.92 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.10 | 23.15 | 22.90 | 23.80              |
|                       | 8       | LOW       | QPSK       | 22.27 | 22.44 | 22.13 | 22.80              |
|                       |         | MID       | QPSK       | 22.37 | 22.57 | 22.25 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.36 | 22.42 | 22.22 | 22.80              |
|                       | 15      | LOW       | QPSK       | 22.15 | 22.25 | 21.87 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.54 | 22.65 | 22.36 | 22.80              |
|                       |         | MID       | Q16        | 22.50 | 22.52 | 22.35 | 22.80              |
|                       |         | HIGH      | Q16        | 22.47 | 22.67 | 22.29 | 22.80              |
| 3                     | 8       | LOW       | Q16        | 21.26 | 21.48 | 20.89 | 21.80              |
|                       |         | MID       | Q16        | 21.58 | 21.24 | 21.09 | 21.80              |
|                       |         | HIGH      | Q16        | 21.21 | 21.55 | 21.07 | 21.80              |
|                       | 15      | LOW       | Q16        | 21.27 | 21.47 | 21.03 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.40 | 21.39 | 21.14 | 21.80              |
|                       |         | MID       | 64QAM      | 21.66 | 21.62 | 21.36 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.41 | 21.42 | 21.47 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.50 | 20.31 | 20.15 | 20.80              |
|                       |         | MID       | 64QAM      | 20.30 | 20.39 | 20.37 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.47 | 20.39 | 20.02 | 20.80              |
|                       | 15      | LOW       | 64QAM      | 20.27 | 20.19 | 20.10 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 22.98 | 23.06 | 22.87 | 23.80              |
|                       |         | MID       | QPSK       | 23.25 | 23.37 | 23.10 | 23.80              |
|                       |         | HIGH      | QPSK       | 23.24 | 23.13 | 22.88 | 23.80              |
|                       | 12      | LOW       | QPSK       | 22.38 | 22.42 | 21.88 | 22.80              |
|                       |         | MID       | QPSK       | 22.26 | 22.48 | 22.10 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.41 | 22.40 | 22.02 | 22.80              |
|                       | 25      | LOW       | QPSK       | 22.29 | 22.34 | 22.03 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.58 | 22.55 | 22.32 | 22.80              |
|                       |         | MID       | Q16        | 22.64 | 22.66 | 22.44 | 22.80              |
|                       |         | HIGH      | Q16        | 22.42 | 22.65 | 22.47 | 22.80              |
| 5                     | 12      | LOW       | Q16        | 21.26 | 21.29 | 21.00 | 21.80              |
|                       |         | MID       | Q16        | 21.28 | 21.39 | 21.21 | 21.80              |
|                       |         | HIGH      | Q16        | 21.30 | 21.25 | 21.15 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.55 | 21.50 | 21.18 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.47 | 21.61 | 21.26 | 21.80              |
|                       |         | MID       | 64QAM      | 21.46 | 21.77 | 21.41 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.67 | 21.51 | 21.50 | 21.80              |
|                       | 12      | LOW       | 64QAM      | 20.68 | 20.48 | 20.11 | 20.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.62 | 20.27 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.27 | 20.54 | 20.16 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.11 | 20.51 | 20.32 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 23.26      | 23.15 | 22.82 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 23.46      | 23.37 | 23.13 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.45      | 23.32 | 23.14 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.42      | 22.46 | 21.99 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.26      | 22.55 | 22.28 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.30      | 22.42 | 22.04 | 22.80              |                    |
|                 | 50              | LOW       | QPSK       | 22.22      | 22.25 | 21.96 | 22.80              |                    |
|                 | 10              | 1         | LOW        | Q16        | 22.40 | 22.71 | 22.50              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.75 | 22.64 | 22.50              | 22.80              |
| HIGH            |                 |           | Q16        | 22.60      | 22.33 | 22.25 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.50      | 21.42 | 20.91 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.32      | 21.31 | 21.26 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.49      | 21.42 | 21.17 | 21.80              |                    |
| 50              |                 | LOW       | Q16        | 21.35      | 21.41 | 21.05 | 21.80              |                    |
| 10              |                 | 1         | LOW        | 64QAM      | 21.57 | 21.33 | 21.46              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.48 | 21.68 | 21.09              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.52      | 21.46 | 21.52 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.68      | 20.62 | 20.03 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.22      | 20.54 | 20.45 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.31      | 20.41 | 20.14 | 20.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.37      | 20.27 | 20.30 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 23.36 | 23.27 | 22.94              | 23.80              |
| MID             |                 |           | QPSK       | 23.39      | 23.27 | 23.08 | 23.80              |                    |
| HIGH            |                 |           | QPSK       | 23.20      | 23.22 | 22.81 | 23.80              |                    |
| 36              |                 | LOW       | QPSK       | 22.24      | 22.49 | 21.86 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.24      | 22.39 | 22.14 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.34      | 22.42 | 22.15 | 22.80              |                    |
| 75              |                 | LOW       | QPSK       | 22.51      | 22.23 | 22.05 | 22.80              |                    |
| 15              |                 | 1         | LOW        | Q16        | 22.47 | 22.65 | 22.32              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.57 | 22.66 | 22.50              | 22.80              |
|                 | HIGH            |           | Q16        | 22.42      | 22.49 | 22.45 | 22.80              |                    |
|                 | 36              | LOW       | Q16        | 21.32      | 21.46 | 21.02 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.36      | 21.59 | 21.07 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.30      | 21.44 | 21.15 | 21.80              |                    |
|                 | 75              | LOW       | Q16        | 21.40      | 21.52 | 21.13 | 21.80              |                    |
|                 | 15              | 1         | LOW        | 64QAM      | 21.47 | 21.29 | 21.22              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.66 | 21.72 | 21.17              | 21.80              |
| HIGH            |                 |           | 64QAM      | 21.54      | 21.35 | 21.24 | 21.80              |                    |
| 36              |                 | LOW       | 64QAM      | 20.50      | 20.50 | 19.93 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.12      | 20.42 | 20.19 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.49      | 20.46 | 19.98 | 20.80              |                    |
| 75              |                 | LOW       | 64QAM      | 20.29      | 20.27 | 20.16 | 20.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20              |                 | 1         | LOW        | QPSK       | 23.24 | 23.27 | 22.96              | 23.80              |
|                 | MID             |           | QPSK       | 23.37      | 23.46 | 23.08 | 23.80              |                    |
|                 | HIGH            |           | QPSK       | 23.36      | 23.27 | 23.02 | 23.80              |                    |
|                 | 50              | LOW       | QPSK       | 22.40      | 22.42 | 22.06 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.44      | 22.46 | 22.21 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.43      | 22.44 | 22.13 | 22.80              |                    |
|                 | 100             | LOW       | QPSK       | 22.40      | 22.41 | 22.07 | 22.80              |                    |
|                 | 20              | 1         | LOW        | Q16        | 22.65 | 22.60 | 22.43              | 22.80              |
|                 |                 |           | MID        | Q16        | 22.75 | 22.77 | 22.48              | 22.80              |
| HIGH            |                 |           | Q16        | 22.67      | 22.56 | 22.47 | 22.80              |                    |
| 50              |                 | LOW       | Q16        | 21.41      | 21.46 | 21.04 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.49      | 21.48 | 21.15 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.45      | 21.44 | 21.11 | 21.80              |                    |
| 100             |                 | LOW       | Q16        | 21.44      | 21.41 | 21.07 | 21.80              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 21.53 | 21.50 | 21.35              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.70 | 21.79 | 21.32              | 21.80              |
|                 | HIGH            |           | 64QAM      | 21.63      | 21.57 | 21.41 | 21.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.58      | 20.54 | 20.05 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.26      | 20.58 | 20.37 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.45      | 20.60 | 20.08 | 20.80              |                    |
|                 | 100             | LOW       | 64QAM      | 20.31      | 20.41 | 20.22 | 20.80              |                    |

| LTE B2-State 4 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 22.47 | 22.52 | 22.42 | 23.30              |
|                       |         | MID       | QPSK       | 22.64 | 22.77 | 22.55 | 23.30              |
|                       |         | HIGH      | QPSK       | 22.70 | 22.56 | 22.52 | 23.30              |
|                       | 3       | LOW       | QPSK       | 22.47 | 22.75 | 22.55 | 23.30              |
|                       |         | MID       | QPSK       | 22.78 | 22.66 | 22.28 | 23.30              |
|                       |         | HIGH      | QPSK       | 22.77 | 22.75 | 22.18 | 23.30              |
|                       | 6       | LOW       | QPSK       | 22.40 | 22.23 | 22.08 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.63 | 22.31 | 22.10 | 22.80              |
|                       |         | MID       | Q16        | 22.54 | 22.63 | 22.42 | 22.80              |
|                       |         | HIGH      | Q16        | 22.48 | 22.41 | 22.36 | 22.80              |
| 1.4                   | 3       | LOW       | Q16        | 22.40 | 22.34 | 21.91 | 22.80              |
|                       |         | MID       | Q16        | 22.15 | 22.28 | 22.14 | 22.80              |
|                       |         | HIGH      | Q16        | 22.20 | 22.38 | 21.98 | 22.80              |
|                       | 6       | LOW       | Q16        | 21.19 | 21.26 | 20.97 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.40 | 21.60 | 21.57 | 21.80              |
|                       |         | MID       | 64QAM      | 21.39 | 21.66 | 21.09 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.38 | 21.68 | 21.11 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 21.46 | 21.62 | 20.89 | 21.80              |
|                       |         | MID       | 64QAM      | 21.10 | 21.41 | 21.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.55 | 21.50 | 20.86 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 20.17 | 20.43 | 20.28 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 22.56 | 22.75 | 22.55 | 23.30              |
|                       |         | MID       | QPSK       | 22.53 | 22.75 | 22.32 | 23.30              |
|                       |         | HIGH      | QPSK       | 22.58 | 22.65 | 22.32 | 23.30              |
|                       | 8       | LOW       | QPSK       | 22.14 | 22.31 | 21.95 | 22.80              |
|                       |         | MID       | QPSK       | 22.28 | 22.40 | 22.24 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.33 | 22.34 | 21.85 | 22.80              |
|                       | 15      | LOW       | QPSK       | 22.11 | 22.26 | 22.00 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.38 | 22.27 | 22.46 | 22.80              |
|                       |         | MID       | Q16        | 22.52 | 22.60 | 22.22 | 22.80              |
|                       |         | HIGH      | Q16        | 22.46 | 22.41 | 22.36 | 22.80              |
| 3                     | 8       | LOW       | Q16        | 21.35 | 21.21 | 20.99 | 21.80              |
|                       |         | MID       | Q16        | 21.43 | 21.37 | 21.06 | 21.80              |
|                       |         | HIGH      | Q16        | 21.39 | 21.23 | 21.04 | 21.80              |
|                       | 15      | LOW       | Q16        | 21.25 | 21.36 | 21.05 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.27 | 21.63 | 21.48 | 21.80              |
|                       |         | MID       | 64QAM      | 21.72 | 21.44 | 21.17 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.57 | 21.55 | 21.41 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.36 | 20.44 | 19.79 | 20.80              |
|                       |         | MID       | 64QAM      | 20.20 | 20.27 | 20.51 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.31 | 20.58 | 19.96 | 20.80              |
|                       | 15      | LOW       | 64QAM      | 20.17 | 20.53 | 20.12 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 22.61 | 22.43 | 22.55 | 23.30              |
|                       |         | MID       | QPSK       | 22.59 | 22.82 | 22.28 | 23.30              |
|                       |         | HIGH      | QPSK       | 22.77 | 22.63 | 22.45 | 23.30              |
|                       | 12      | LOW       | QPSK       | 22.19 | 22.20 | 21.86 | 22.80              |
|                       |         | MID       | QPSK       | 22.28 | 22.42 | 22.13 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.15 | 22.36 | 21.98 | 22.80              |
|                       | 25      | LOW       | QPSK       | 22.37 | 22.41 | 22.13 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.63 | 22.31 | 22.42 | 22.80              |
|                       |         | MID       | Q16        | 22.72 | 22.67 | 22.28 | 22.80              |
|                       |         | HIGH      | Q16        | 22.55 | 22.43 | 22.42 | 22.80              |
| 5                     | 12      | LOW       | Q16        | 21.10 | 21.25 | 20.87 | 21.80              |
|                       |         | MID       | Q16        | 21.26 | 21.22 | 20.99 | 21.80              |
|                       |         | HIGH      | Q16        | 21.46 | 21.28 | 20.91 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.40 | 21.19 | 20.84 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 21.12 | 21.56 | 21.44 | 21.80              |
|                       |         | MID       | 64QAM      | 21.74 | 21.77 | 21.19 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.61 | 21.66 | 21.26 | 21.80              |
|                       | 12      | LOW       | 64QAM      | 20.50 | 20.42 | 19.69 | 20.80              |
|                       |         | MID       | 64QAM      | 19.96 | 20.31 | 20.39 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.35 | 20.35 | 19.90 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.25 | 20.49 | 20.20 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 22.56      | 22.48 | 22.26 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 22.66      | 22.75 | 22.39 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 22.61      | 22.56 | 22.18 | 23.30              |                    |
|                 | 25              | LOW       | QPSK       | 22.12      | 22.15 | 21.75 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.39      | 22.24 | 22.20 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.31      | 22.40 | 21.83 | 22.80              |                    |
|                 | 50              | LOW       | QPSK       | 22.26      | 22.23 | 21.93 | 22.80              |                    |
|                 |                 | LOW       | Q16        | 22.43      | 22.43 | 22.17 | 22.80              |                    |
|                 |                 | MID       | Q16        | 22.65      | 22.72 | 22.42 | 22.80              |                    |
| 10              | 1               | HIGH      | Q16        | 22.48      | 22.52 | 22.36 | 22.80              |                    |
|                 |                 | LOW       | Q16        | 21.12      | 21.27 | 20.72 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.21      | 21.30 | 20.89 | 21.80              |                    |
|                 | 25              | HIGH      | Q16        | 21.31      | 21.13 | 20.98 | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.36      | 21.09 | 21.07 | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 21.16      | 21.50 | 21.37 | 21.80              |                    |
|                 | 1               | MID       | 64QAM      | 21.57      | 21.64 | 21.11 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.33      | 21.77 | 21.24 | 21.80              |                    |
|                 |                 | 25        | LOW        | 64QAM      | 20.48 | 20.38 | 19.85              | 20.80              |
| MID             | 64QAM           |           | 20.04      | 20.39      | 20.27 | 20.80 |                    |                    |
| HIGH            | 64QAM           |           | 20.55      | 20.37      | 19.92 | 20.80 |                    |                    |
| 50              | LOW             | 64QAM     | 20.15      | 20.31      | 20.34 | 20.80 |                    |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 22.72 | 22.50 | 22.51              | 23.30              |
| MID             |                 |           | QPSK       | 22.48      | 22.89 | 22.34 | 23.30              |                    |
| HIGH            |                 |           | QPSK       | 22.81      | 22.72 | 22.47 | 23.30              |                    |
| 36              |                 | LOW       | QPSK       | 22.28      | 22.27 | 22.06 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.19      | 22.18 | 22.00 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.22      | 22.25 | 21.92 | 22.80              |                    |
| 75              |                 | LOW       | QPSK       | 22.35      | 22.46 | 21.97 | 22.80              |                    |
|                 |                 | LOW       | Q16        | 22.52      | 22.38 | 22.37 | 22.80              |                    |
|                 |                 | MID       | Q16        | 22.75      | 22.49 | 22.35 | 22.80              |                    |
| 15              | 1               | HIGH      | Q16        | 22.50      | 22.61 | 22.42 | 22.80              |                    |
|                 |                 | LOW       | Q16        | 21.40      | 21.45 | 20.97 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.17      | 21.37 | 21.12 | 21.80              |                    |
|                 | 36              | HIGH      | Q16        | 21.12      | 21.45 | 21.06 | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.19      | 21.17 | 20.78 | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 21.31      | 21.30 | 21.48 | 21.80              |                    |
|                 | 1               | MID       | 64QAM      | 21.69      | 21.46 | 21.38 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.35      | 21.42 | 21.30 | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 20.48      | 20.62 | 19.73 | 20.80              |                    |
| 36              | MID             | 64QAM     | 19.98      | 20.29      | 20.25 | 20.80 |                    |                    |
|                 | HIGH            | 64QAM     | 20.41      | 20.44      | 19.88 | 20.80 |                    |                    |
|                 | 75              | LOW       | 64QAM      | 20.21      | 20.29 | 20.10 | 20.80              |                    |
| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18700      | 18900 | 19100 | Tune-up power(dBm) |                    |
| 20              | 1               | LOW       | QPSK       | 22.63      | 22.66 | 22.44 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 22.73      | 22.84 | 22.50 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 22.72      | 22.70 | 22.43 | 23.30              |                    |
|                 | 50              | LOW       | QPSK       | 22.30      | 22.31 | 21.99 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.37      | 22.40 | 22.13 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.31      | 22.36 | 22.07 | 22.80              |                    |
|                 | 100             | LOW       | QPSK       | 22.33      | 22.39 | 22.04 | 22.80              |                    |
|                 |                 | LOW       | Q16        | 22.61      | 22.47 | 22.35 | 22.80              |                    |
|                 |                 | MID       | Q16        | 22.70      | 22.65 | 22.44 | 22.80              |                    |
| 20              | 1               | HIGH      | Q16        | 22.64      | 22.52 | 22.38 | 22.80              |                    |
|                 |                 | LOW       | Q16        | 21.29      | 21.36 | 20.95 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.32      | 21.39 | 21.10 | 21.80              |                    |
|                 | 50              | HIGH      | Q16        | 21.35      | 21.34 | 21.04 | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.34      | 21.32 | 21.01 | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 21.29      | 21.54 | 21.46 | 21.80              |                    |
|                 | 1               | MID       | 64QAM      | 21.63      | 21.68 | 21.32 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.57      | 21.66 | 21.30 | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 20.42      | 20.52 | 19.91 | 20.80              |                    |
| 50              | MID             | 64QAM     | 20.12      | 20.37      | 20.45 | 20.80 |                    |                    |
|                 | HIGH            | 64QAM     | 20.47      | 20.56      | 19.96 | 20.80 |                    |                    |
|                 | 100             | LOW       | 64QAM      | 20.25      | 20.45 | 20.28 | 20.80              |                    |

| LTE B2-State 5 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 20.44 | 20.52 | 20.38 | 21.30              |
|                       |         | MID       | QPSK       | 20.66 | 20.82 | 20.40 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.75 | 20.70 | 20.43 | 21.30              |
|                       | 3       | LOW       | QPSK       | 20.60 | 20.62 | 20.32 | 21.30              |
|                       |         | MID       | QPSK       | 20.66 | 20.64 | 20.44 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.71 | 20.58 | 20.47 | 21.30              |
|                       | 6       | LOW       | QPSK       | 20.52 | 20.66 | 20.36 | 21.30              |
|                       | 1       | LOW       | Q16        | 20.76 | 20.72 | 20.38 | 21.30              |
|                       |         | MID       | Q16        | 20.67 | 20.72 | 20.33 | 21.30              |
|                       |         | HIGH      | Q16        | 20.40 | 20.44 | 20.24 | 21.30              |
| 1.4                   | 3       | LOW       | Q16        | 20.64 | 20.68 | 20.44 | 21.30              |
|                       |         | MID       | Q16        | 20.69 | 20.56 | 20.45 | 21.30              |
|                       |         | HIGH      | Q16        | 20.62 | 20.46 | 20.50 | 21.30              |
|                       | 6       | LOW       | Q16        | 20.70 | 20.80 | 20.44 | 21.30              |
|                       | 1       | LOW       | 64QAM      | 20.59 | 20.56 | 20.23 | 21.30              |
|                       |         | MID       | 64QAM      | 20.60 | 20.62 | 20.34 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.72 | 20.53 | 20.25 | 21.30              |
|                       | 3       | LOW       | 64QAM      | 20.56 | 20.50 | 20.42 | 21.30              |
|                       |         | MID       | 64QAM      | 20.62 | 20.70 | 20.56 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.42 | 20.47 | 20.47 | 21.30              |
|                       | 6       | LOW       | 64QAM      | 20.31 | 20.35 | 20.34 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 20.37 | 20.68 | 20.30 | 21.30              |
|                       |         | MID       | QPSK       | 20.70 | 20.66 | 20.38 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.42 | 20.45 | 20.33 | 21.30              |
|                       | 8       | LOW       | QPSK       | 20.64 | 20.61 | 20.33 | 21.30              |
|                       |         | MID       | QPSK       | 20.91 | 20.72 | 20.57 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.86 | 20.66 | 20.62 | 21.30              |
|                       | 15      | LOW       | QPSK       | 20.74 | 20.94 | 20.57 | 21.30              |
|                       | 1       | LOW       | Q16        | 20.95 | 20.94 | 20.52 | 21.30              |
|                       |         | MID       | Q16        | 20.81 | 20.83 | 20.95 | 21.30              |
|                       |         | HIGH      | Q16        | 20.85 | 20.84 | 20.54 | 21.30              |
| 3                     | 8       | LOW       | Q16        | 20.83 | 20.85 | 20.48 | 21.30              |
|                       |         | MID       | Q16        | 20.80 | 20.64 | 20.64 | 21.30              |
|                       |         | HIGH      | Q16        | 20.59 | 20.89 | 20.58 | 21.30              |
|                       | 15      | LOW       | Q16        | 20.69 | 20.57 | 20.26 | 21.30              |
|                       | 1       | LOW       | 64QAM      | 20.97 | 20.73 | 20.71 | 21.30              |
|                       |         | MID       | 64QAM      | 20.83 | 21.10 | 20.81 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.78 | 20.88 | 20.71 | 21.30              |
|                       | 8       | LOW       | 64QAM      | 20.32 | 20.50 | 19.99 | 20.80              |
|                       |         | MID       | 64QAM      | 19.96 | 20.35 | 20.25 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.21 | 20.46 | 19.60 | 20.80              |
|                       | 15      | LOW       | 64QAM      | 20.21 | 20.39 | 20.46 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 20.35 | 20.62 | 20.36 | 21.30              |
|                       |         | MID       | QPSK       | 20.56 | 20.74 | 20.36 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.63 | 20.56 | 20.25 | 21.30              |
|                       | 12      | LOW       | QPSK       | 20.74 | 20.88 | 20.33 | 21.30              |
|                       |         | MID       | QPSK       | 20.60 | 20.82 | 20.47 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.80 | 20.79 | 20.40 | 21.30              |
|                       | 25      | LOW       | QPSK       | 20.68 | 20.82 | 20.33 | 21.30              |
|                       | 1       | LOW       | Q16        | 20.83 | 20.80 | 20.71 | 21.30              |
|                       |         | MID       | Q16        | 20.94 | 20.81 | 20.79 | 21.30              |
|                       |         | HIGH      | Q16        | 20.97 | 20.86 | 20.54 | 21.30              |
| 5                     | 12      | LOW       | Q16        | 20.79 | 20.56 | 20.30 | 21.30              |
|                       |         | MID       | Q16        | 20.78 | 20.64 | 20.42 | 21.30              |
|                       |         | HIGH      | Q16        | 20.88 | 20.77 | 20.42 | 21.30              |
|                       | 25      | LOW       | Q16        | 20.86 | 20.70 | 20.39 | 21.30              |
|                       | 1       | LOW       | 64QAM      | 20.76 | 20.96 | 20.87 | 21.30              |
|                       |         | MID       | 64QAM      | 21.00 | 21.15 | 20.60 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.76 | 20.69 | 20.48 | 21.30              |
|                       | 12      | LOW       | 64QAM      | 20.12 | 20.52 | 20.09 | 20.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.45 | 20.23 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.15 | 20.42 | 19.60 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.17 | 20.33 | 20.48 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 20.58      | 20.58 | 20.40 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.62      | 20.64 | 20.34 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.46      | 20.68 | 20.33 | 21.30              |                    |
|                 | 25              | LOW       | QPSK       | 20.70      | 20.63 | 20.35 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.71      | 20.84 | 20.51 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.57      | 20.81 | 20.52 | 21.30              |                    |
|                 | 50              | LOW       | QPSK       | 20.74      | 20.67 | 20.41 | 21.30              |                    |
|                 | 10              | 1         | LOW        | Q16        | 20.91 | 20.88 | 20.63              | 21.30              |
|                 |                 |           | MID        | Q16        | 20.92 | 20.83 | 20.93              | 21.30              |
| HIGH            |                 |           | Q16        | 20.83      | 20.98 | 20.77 | 21.30              |                    |
| 25              |                 | LOW       | Q16        | 20.60      | 20.81 | 20.50 | 21.30              |                    |
|                 |                 | MID       | Q16        | 20.92      | 20.75 | 20.68 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 20.59      | 20.73 | 20.42 | 21.30              |                    |
| 50              |                 | LOW       | Q16        | 20.76      | 20.59 | 20.43 | 21.30              |                    |
| 10              |                 | 1         | LOW        | 64QAM      | 20.82 | 20.73 | 20.60              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 20.89 | 21.08 | 20.87              | 21.30              |
|                 | HIGH            |           | 64QAM      | 20.74      | 20.88 | 20.63 | 21.30              |                    |
|                 | 25              | LOW       | 64QAM      | 20.30      | 20.30 | 20.11 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.00      | 20.29 | 20.31 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.31      | 20.40 | 19.56 | 20.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.23      | 20.29 | 20.20 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 20.56 | 20.44 | 20.38              | 21.30              |
| MID             |                 |           | QPSK       | 20.45      | 20.66 | 20.50 | 21.30              |                    |
| HIGH            |                 |           | QPSK       | 20.46      | 20.47 | 20.39 | 21.30              |                    |
| 36              |                 | LOW       | QPSK       | 20.59      | 20.72 | 20.29 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.89      | 20.92 | 20.59 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.76      | 20.64 | 20.38 | 21.30              |                    |
| 75              |                 | LOW       | QPSK       | 20.65      | 20.63 | 20.49 | 21.30              |                    |
| 15              |                 | 1         | LOW        | Q16        | 20.72 | 20.90 | 20.50              | 21.30              |
|                 |                 |           | MID        | Q16        | 21.04 | 20.85 | 20.68              | 21.30              |
|                 | HIGH            |           | Q16        | 20.70      | 20.77 | 20.52 | 21.30              |                    |
|                 | 36              | LOW       | Q16        | 20.54      | 20.60 | 20.42 | 21.30              |                    |
|                 |                 | MID       | Q16        | 20.67      | 20.69 | 20.44 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 20.76      | 20.75 | 20.32 | 21.30              |                    |
|                 | 75              | LOW       | Q16        | 20.86      | 20.80 | 20.33 | 21.30              |                    |
|                 | 15              | 1         | LOW        | 64QAM      | 20.89 | 20.92 | 20.81              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 20.98 | 21.06 | 20.54              | 21.30              |
| HIGH            |                 |           | 64QAM      | 20.72      | 20.92 | 20.42 | 21.30              |                    |
| 36              |                 | LOW       | 64QAM      | 20.42      | 20.38 | 19.95 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.04      | 20.23 | 20.19 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.31      | 20.60 | 19.68 | 20.80              |                    |
| 75              |                 | LOW       | 64QAM      | 20.27      | 20.37 | 20.36 | 20.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20              |                 | 1         | LOW        | QPSK       | 20.56 | 20.58 | 20.44              | 21.30              |
|                 | MID             |           | QPSK       | 20.66      | 20.74 | 20.48 | 21.30              |                    |
|                 | HIGH            |           | QPSK       | 20.65      | 20.64 | 20.41 | 21.30              |                    |
|                 | 50              | LOW       | QPSK       | 20.76      | 20.80 | 20.47 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.81      | 20.82 | 20.59 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.78      | 20.81 | 20.54 | 21.30              |                    |
|                 | 100             | LOW       | QPSK       | 20.80      | 20.86 | 20.47 | 21.30              |                    |
|                 | 20              | 1         | LOW        | Q16        | 20.87 | 20.86 | 20.73              | 21.30              |
|                 |                 |           | MID        | Q16        | 20.96 | 21.02 | 20.85              | 21.30              |
| HIGH            |                 |           | Q16        | 20.93      | 20.90 | 20.75 | 21.30              |                    |
| 50              |                 | LOW       | Q16        | 20.77      | 20.79 | 20.46 | 21.30              |                    |
|                 |                 | MID       | Q16        | 20.82      | 20.81 | 20.58 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 20.80      | 20.81 | 20.50 | 21.30              |                    |
| 100             |                 | LOW       | Q16        | 20.84      | 20.76 | 20.49 | 21.30              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 20.95 | 20.88 | 20.77              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 21.04 | 21.04 | 20.77              | 21.30              |
|                 | HIGH            |           | 64QAM      | 20.93      | 20.90 | 20.65 | 21.30              |                    |
|                 | 50              | LOW       | 64QAM      | 20.32      | 20.48 | 20.01 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.16      | 20.41 | 20.39 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.27      | 20.52 | 19.76 | 20.80              |                    |
|                 | 100             | LOW       | 64QAM      | 20.25      | 20.45 | 20.38 | 20.80              |                    |

| LTE B2-State 6 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18607 | 18900 | 19193 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 20.44 | 20.52 | 20.38 | 21.30              |
|                       |         | MID       | QPSK       | 20.66 | 20.82 | 20.40 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.75 | 20.70 | 20.43 | 21.30              |
|                       | 3       | LOW       | QPSK       | 20.60 | 20.62 | 20.32 | 21.30              |
|                       |         | MID       | QPSK       | 20.66 | 20.64 | 20.44 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.71 | 20.58 | 20.47 | 21.30              |
|                       | 6       | LOW       | QPSK       | 20.52 | 20.66 | 20.36 | 21.30              |
|                       | 1       | LOW       | Q16        | 20.76 | 20.72 | 20.38 | 21.30              |
|                       |         | MID       | Q16        | 20.67 | 20.72 | 20.33 | 21.30              |
|                       |         | HIGH      | Q16        | 20.40 | 20.44 | 20.24 | 21.30              |
| 1.4                   | 3       | LOW       | Q16        | 20.64 | 20.68 | 20.44 | 21.30              |
|                       |         | MID       | Q16        | 20.69 | 20.56 | 20.45 | 21.30              |
|                       |         | HIGH      | Q16        | 20.62 | 20.46 | 20.50 | 21.30              |
|                       | 6       | LOW       | Q16        | 20.70 | 20.80 | 20.44 | 21.30              |
|                       | 1       | LOW       | 64QAM      | 20.59 | 20.56 | 20.23 | 21.30              |
|                       |         | MID       | 64QAM      | 20.60 | 20.62 | 20.34 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.72 | 20.53 | 20.25 | 21.30              |
|                       | 3       | LOW       | 64QAM      | 20.56 | 20.50 | 20.42 | 21.30              |
|                       |         | MID       | 64QAM      | 20.62 | 20.70 | 20.56 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.42 | 20.47 | 20.47 | 21.30              |
|                       | 6       | LOW       | 64QAM      | 20.31 | 20.35 | 20.34 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18615 | 18900 | 19185 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 20.37 | 20.68 | 20.30 | 21.30              |
|                       |         | MID       | QPSK       | 20.70 | 20.66 | 20.38 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.42 | 20.45 | 20.33 | 21.30              |
|                       | 8       | LOW       | QPSK       | 20.64 | 20.61 | 20.33 | 21.30              |
|                       |         | MID       | QPSK       | 20.91 | 20.72 | 20.57 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.86 | 20.66 | 20.62 | 21.30              |
|                       | 15      | LOW       | QPSK       | 20.74 | 20.94 | 20.57 | 21.30              |
|                       | 1       | LOW       | Q16        | 20.95 | 20.94 | 20.52 | 21.30              |
|                       |         | MID       | Q16        | 20.81 | 20.83 | 20.95 | 21.30              |
|                       |         | HIGH      | Q16        | 20.85 | 20.84 | 20.54 | 21.30              |
| 3                     | 8       | LOW       | Q16        | 20.83 | 20.85 | 20.48 | 21.30              |
|                       |         | MID       | Q16        | 20.80 | 20.64 | 20.64 | 21.30              |
|                       |         | HIGH      | Q16        | 20.59 | 20.89 | 20.58 | 21.30              |
|                       | 15      | LOW       | Q16        | 20.69 | 20.57 | 20.26 | 21.30              |
|                       | 1       | LOW       | 64QAM      | 20.97 | 20.73 | 20.71 | 21.30              |
|                       |         | MID       | 64QAM      | 20.83 | 21.10 | 20.81 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.78 | 20.88 | 20.71 | 21.30              |
|                       | 8       | LOW       | 64QAM      | 20.32 | 20.50 | 19.99 | 20.80              |
|                       |         | MID       | 64QAM      | 19.96 | 20.35 | 20.25 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.21 | 20.46 | 19.60 | 20.80              |
|                       | 15      | LOW       | 64QAM      | 20.21 | 20.39 | 20.46 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 18625 | 18900 | 19175 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 20.35 | 20.62 | 20.36 | 21.30              |
|                       |         | MID       | QPSK       | 20.56 | 20.74 | 20.36 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.63 | 20.56 | 20.25 | 21.30              |
|                       | 12      | LOW       | QPSK       | 20.74 | 20.88 | 20.33 | 21.30              |
|                       |         | MID       | QPSK       | 20.60 | 20.82 | 20.47 | 21.30              |
|                       |         | HIGH      | QPSK       | 20.80 | 20.79 | 20.40 | 21.30              |
|                       | 25      | LOW       | QPSK       | 20.68 | 20.82 | 20.33 | 21.30              |
|                       | 1       | LOW       | Q16        | 20.83 | 20.80 | 20.71 | 21.30              |
|                       |         | MID       | Q16        | 20.94 | 20.81 | 20.79 | 21.30              |
|                       |         | HIGH      | Q16        | 20.97 | 20.86 | 20.54 | 21.30              |
| 5                     | 12      | LOW       | Q16        | 20.79 | 20.56 | 20.30 | 21.30              |
|                       |         | MID       | Q16        | 20.78 | 20.64 | 20.42 | 21.30              |
|                       |         | HIGH      | Q16        | 20.88 | 20.77 | 20.42 | 21.30              |
|                       | 25      | LOW       | Q16        | 20.86 | 20.70 | 20.39 | 21.30              |
|                       | 1       | LOW       | 64QAM      | 20.76 | 20.96 | 20.87 | 21.30              |
|                       |         | MID       | 64QAM      | 21.00 | 21.15 | 20.60 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.76 | 20.69 | 20.48 | 21.30              |
|                       | 12      | LOW       | 64QAM      | 20.12 | 20.52 | 20.09 | 20.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.45 | 20.23 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.15 | 20.42 | 19.60 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.17 | 20.33 | 20.48 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 20.58      | 20.58 | 20.40 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.62      | 20.64 | 20.34 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.46      | 20.68 | 20.33 | 21.30              |                    |
|                 | 25              | LOW       | QPSK       | 20.70      | 20.63 | 20.35 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.71      | 20.84 | 20.51 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.57      | 20.81 | 20.52 | 21.30              |                    |
|                 | 50              | LOW       | QPSK       | 20.74      | 20.67 | 20.41 | 21.30              |                    |
|                 | 10              | 1         | LOW        | Q16        | 20.91 | 20.88 | 20.63              | 21.30              |
|                 |                 |           | MID        | Q16        | 20.92 | 20.83 | 20.93              | 21.30              |
| HIGH            |                 |           | Q16        | 20.83      | 20.98 | 20.77 | 21.30              |                    |
| 25              |                 | LOW       | Q16        | 20.60      | 20.81 | 20.50 | 21.30              |                    |
|                 |                 | MID       | Q16        | 20.92      | 20.75 | 20.68 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 20.59      | 20.73 | 20.42 | 21.30              |                    |
| 50              |                 | LOW       | Q16        | 20.76      | 20.59 | 20.43 | 21.30              |                    |
| 10              |                 | 1         | LOW        | 64QAM      | 20.82 | 20.73 | 20.60              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 20.89 | 21.08 | 20.87              | 21.30              |
|                 | HIGH            |           | 64QAM      | 20.74      | 20.88 | 20.63 | 21.30              |                    |
|                 | 25              | LOW       | 64QAM      | 20.30      | 20.30 | 20.11 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.00      | 20.29 | 20.31 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.31      | 20.40 | 19.56 | 20.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.23      | 20.29 | 20.20 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 20.56 | 20.44 | 20.38              | 21.30              |
| MID             |                 |           | QPSK       | 20.45      | 20.66 | 20.50 | 21.30              |                    |
| HIGH            |                 |           | QPSK       | 20.46      | 20.47 | 20.39 | 21.30              |                    |
| 36              |                 | LOW       | QPSK       | 20.59      | 20.72 | 20.29 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.89      | 20.92 | 20.59 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.76      | 20.64 | 20.38 | 21.30              |                    |
| 75              |                 | LOW       | QPSK       | 20.65      | 20.63 | 20.49 | 21.30              |                    |
| 15              |                 | 1         | LOW        | Q16        | 20.72 | 20.90 | 20.50              | 21.30              |
|                 |                 |           | MID        | Q16        | 21.04 | 20.85 | 20.68              | 21.30              |
|                 | HIGH            |           | Q16        | 20.70      | 20.77 | 20.52 | 21.30              |                    |
|                 | 36              | LOW       | Q16        | 20.54      | 20.60 | 20.42 | 21.30              |                    |
|                 |                 | MID       | Q16        | 20.67      | 20.69 | 20.44 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 20.76      | 20.75 | 20.32 | 21.30              |                    |
|                 | 75              | LOW       | Q16        | 20.86      | 20.80 | 20.33 | 21.30              |                    |
|                 | 15              | 1         | LOW        | 64QAM      | 20.89 | 20.92 | 20.81              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 20.98 | 21.06 | 20.54              | 21.30              |
| HIGH            |                 |           | 64QAM      | 20.72      | 20.92 | 20.42 | 21.30              |                    |
| 36              |                 | LOW       | 64QAM      | 20.42      | 20.38 | 19.95 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.04      | 20.23 | 20.19 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.31      | 20.60 | 19.68 | 20.80              |                    |
| 75              |                 | LOW       | 64QAM      | 20.27      | 20.37 | 20.36 | 20.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20              |                 | 1         | LOW        | QPSK       | 20.56 | 20.58 | 20.44              | 21.30              |
|                 | MID             |           | QPSK       | 20.66      | 20.74 | 20.48 | 21.30              |                    |
|                 | HIGH            |           | QPSK       | 20.65      | 20.64 | 20.41 | 21.30              |                    |
|                 | 50              | LOW       | QPSK       | 20.76      | 20.80 | 20.47 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 20.81      | 20.82 | 20.59 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.78      | 20.81 | 20.54 | 21.30              |                    |
|                 | 100             | LOW       | QPSK       | 20.80      | 20.86 | 20.47 | 21.30              |                    |
|                 | 20              | 1         | LOW        | Q16        | 20.87 | 20.86 | 20.73              | 21.30              |
|                 |                 |           | MID        | Q16        | 20.96 | 21.02 | 20.85              | 21.30              |
| HIGH            |                 |           | Q16        | 20.93      | 20.90 | 20.75 | 21.30              |                    |
| 50              |                 | LOW       | Q16        | 20.77      | 20.79 | 20.46 | 21.30              |                    |
|                 |                 | MID       | Q16        | 20.82      | 20.81 | 20.58 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 20.80      | 20.81 | 20.50 | 21.30              |                    |
| 100             |                 | LOW       | Q16        | 20.84      | 20.76 | 20.49 | 21.30              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 20.95 | 20.88 | 20.77              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 21.04 | 21.04 | 20.77              | 21.30              |
|                 | HIGH            |           | 64QAM      | 20.93      | 20.90 | 20.65 | 21.30              |                    |
|                 | 50              | LOW       | 64QAM      | 20.32      | 20.48 | 20.01 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.16      | 20.41 | 20.39 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.27      | 20.52 | 19.76 | 20.80              |                    |
|                 | 100             | LOW       | 64QAM      | 20.25      | 20.45 | 20.38 | 20.80              |                    |

### 8.3.2 LTE Band4 Output Power

BL-SZ2220432-701

| LTE B4-State 1 -Ant.1 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 16.98      | 16.98 | 17.04 | 17.80              |                    |
|                       |                 | MID       | QPSK       | 17.07      | 17.00 | 17.09 | 17.80              |                    |
|                       |                 | HIGH      | QPSK       | 16.96      | 17.11 | 17.21 | 17.80              |                    |
|                       | 3               | LOW       | QPSK       | 16.98      | 16.95 | 17.21 | 17.80              |                    |
|                       |                 | MID       | QPSK       | 17.22      | 17.31 | 17.16 | 17.80              |                    |
|                       |                 | HIGH      | QPSK       | 17.09      | 17.13 | 17.05 | 17.80              |                    |
|                       | 6               | LOW       | QPSK       | 17.03      | 17.28 | 17.07 | 17.80              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 17.44 | 17.37 | 17.25              | 17.80              |
|                       |                 |           | MID        | Q16        | 17.35 | 17.45 | 17.42              | 17.80              |
| HIGH                  |                 |           | Q16        | 17.30      | 17.55 | 17.21 | 17.80              |                    |
| 3                     |                 | LOW       | Q16        | 16.99      | 17.09 | 17.10 | 17.80              |                    |
| MID                   | Q16             | 17.19     | 17.02      | 17.12      | 17.80 |       |                    |                    |
| HIGH                  | Q16             | 17.25     | 17.11      | 17.20      | 17.80 |       |                    |                    |
| 6                     | LOW             | Q16       | 17.13      | 17.16      | 17.14 | 17.80 |                    |                    |
| 1.4                   | 1               | LOW       | 64QAM      | 17.25      | 17.21 | 17.11 | 17.80              |                    |
|                       |                 | MID       | 64QAM      | 17.21      | 17.45 | 17.42 | 17.80              |                    |
|                       |                 | HIGH      | 64QAM      | 17.25      | 17.38 | 17.37 | 17.80              |                    |
|                       | 3               | LOW       | 64QAM      | 17.16      | 17.20 | 17.01 | 17.80              |                    |
|                       |                 | MID       | 64QAM      | 17.21      | 16.92 | 17.02 | 17.80              |                    |
|                       |                 | HIGH      | 64QAM      | 17.06      | 17.10 | 17.01 | 17.80              |                    |
|                       | 6               | LOW       | 64QAM      | 17.18      | 17.11 | 16.98 | 17.80              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 16.93 | 16.92 | 17.14              | 17.80              |
| MID                   |                 |           | QPSK       | 17.00      | 17.02 | 17.18 | 17.80              |                    |
| HIGH                  |                 |           | QPSK       | 17.22      | 17.18 | 17.22 | 17.80              |                    |
| 8                     |                 | LOW       | QPSK       | 17.03      | 17.12 | 17.12 | 17.80              |                    |
|                       |                 | MID       | QPSK       | 17.24      | 17.22 | 17.18 | 17.80              |                    |
|                       |                 | HIGH      | QPSK       | 17.02      | 17.10 | 17.03 | 17.80              |                    |
| 15                    |                 | LOW       | QPSK       | 17.11      | 17.14 | 17.14 | 17.80              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 17.34 | 17.40 | 17.19              | 17.80              |
|                       |                 |           | MID        | Q16        | 17.26 | 17.58 | 17.30              | 17.80              |
|                       | HIGH            |           | Q16        | 17.23      | 17.54 | 17.32 | 17.80              |                    |
|                       | 8               | LOW       | Q16        | 17.16      | 17.21 | 17.12 | 17.80              |                    |
| MID                   | Q16             | 17.09     | 17.14      | 17.31      | 17.80 |       |                    |                    |
| HIGH                  | Q16             | 17.11     | 17.15      | 17.15      | 17.80 |       |                    |                    |
| 15                    | LOW             | Q16       | 17.20      | 17.19      | 17.22 | 17.80 |                    |                    |
| 3                     | 1               | LOW       | 64QAM      | 17.11      | 17.33 | 17.01 | 17.80              |                    |
|                       |                 | MID       | 64QAM      | 17.16      | 17.48 | 17.39 | 17.80              |                    |
|                       |                 | HIGH      | 64QAM      | 17.18      | 17.24 | 17.21 | 17.80              |                    |
|                       | 8               | LOW       | 64QAM      | 16.97      | 17.05 | 17.19 | 17.80              |                    |
|                       |                 | MID       | 64QAM      | 17.29      | 17.01 | 17.03 | 17.80              |                    |
|                       |                 | HIGH      | 64QAM      | 16.99      | 17.31 | 17.22 | 17.80              |                    |
|                       | 15              | LOW       | 64QAM      | 17.01      | 17.15 | 17.01 | 17.80              |                    |
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 19975      | 20175 | 20375 | Tune-up power(dBm) |                    |
| 5                     | 1               | LOW       | QPSK       | 17.11      | 16.92 | 17.02 | 17.80              |                    |
|                       |                 | MID       | QPSK       | 17.12      | 17.00 | 17.28 | 17.80              |                    |
|                       |                 | HIGH      | QPSK       | 17.17      | 16.94 | 17.28 | 17.80              |                    |
|                       | 12              | LOW       | QPSK       | 17.13      | 17.12 | 17.12 | 17.80              |                    |
|                       |                 | MID       | QPSK       | 17.04      | 17.33 | 17.32 | 17.80              |                    |
|                       |                 | HIGH      | QPSK       | 17.11      | 17.29 | 17.24 | 17.80              |                    |
|                       | 25              | LOW       | QPSK       | 17.08      | 17.05 | 17.25 | 17.80              |                    |
| 5                     | 1               | LOW       | Q16        | 17.27      | 17.33 | 17.27 | 17.80              |                    |
|                       |                 | MID       | Q16        | 17.24      | 17.37 | 17.53 | 17.80              |                    |
|                       |                 | HIGH      | Q16        | 17.35      | 17.52 | 17.32 | 17.80              |                    |
|                       | 12              | LOW       | Q16        | 16.99      | 17.26 | 17.17 | 17.80              |                    |
|                       |                 | MID       | Q16        | 17.24      | 17.11 | 17.31 | 17.80              |                    |
|                       |                 | HIGH      | Q16        | 17.06      | 17.20 | 17.20 | 17.80              |                    |
|                       | 25              | LOW       | Q16        | 17.20      | 17.09 | 17.14 | 17.80              |                    |
| 5                     | 1               | LOW       | 64QAM      | 17.16      | 17.09 | 17.05 | 17.80              |                    |
|                       |                 | MID       | 64QAM      | 17.07      | 17.38 | 17.51 | 17.80              |                    |
|                       |                 | HIGH      | 64QAM      | 17.25      | 17.28 | 17.09 | 17.80              |                    |
|                       | 12              | LOW       | 64QAM      | 16.90      | 16.98 | 17.21 | 17.80              |                    |
|                       |                 | MID       | 64QAM      | 17.09      | 16.96 | 17.19 | 17.80              |                    |
|                       |                 | HIGH      | 64QAM      | 16.98      | 17.31 | 17.18 | 17.80              |                    |
|                       | 25              | LOW       | 64QAM      | 17.01      | 16.97 | 17.18 | 17.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 17.06 | 17.03 | 17.04 | 17.80              |
|           |         | MID       | QPSK       | 17.04 | 17.16 | 17.37 | 17.80              |
|           |         | HIGH      | QPSK       | 17.01 | 17.16 | 17.26 | 17.80              |
|           | 25      | LOW       | QPSK       | 17.03 | 17.10 | 17.14 | 17.80              |
|           |         | MID       | QPSK       | 17.09 | 17.07 | 17.30 | 17.80              |
|           |         | HIGH      | QPSK       | 16.97 | 17.10 | 17.25 | 17.80              |
|           | 50      | LOW       | QPSK       | 17.05 | 17.28 | 17.30 | 17.80              |
|           |         | LOW       | Q16        | 17.39 | 17.26 | 17.03 | 17.80              |
|           |         | MID       | Q16        | 17.40 | 17.61 | 17.34 | 17.80              |
| 10        | 1       | MID       | Q16        | 17.27 | 17.48 | 17.35 | 17.80              |
|           |         | LOW       | Q16        | 16.94 | 17.22 | 17.00 | 17.80              |
|           |         | MID       | Q16        | 17.19 | 17.12 | 17.07 | 17.80              |
|           | 25      | HIGH      | Q16        | 17.01 | 17.22 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.25 | 17.30 | 17.25 | 17.80              |
|           |         | MID       | 64QAM      | 17.09 | 17.38 | 17.41 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.15 | 17.19 | 17.31 | 17.80              |
| 10        | 1       | LOW       | 64QAM      | 17.05 | 17.22 | 17.02 | 17.80              |
|           |         | MID       | 64QAM      | 17.31 | 16.92 | 17.15 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.06 | 17.34 | 17.04 | 17.80              |
|           | 25      | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 16.93 | 16.90 | 17.05 | 17.80              |
|           |         | MID       | QPSK       | 17.16 | 17.24 | 17.31 | 17.80              |
|           |         | HIGH      | QPSK       | 17.24 | 17.04 | 17.24 | 17.80              |
|           | 36      | LOW       | QPSK       | 17.17 | 16.98 | 17.19 | 17.80              |
|           |         | MID       | QPSK       | 17.26 | 17.10 | 17.18 | 17.80              |
|           |         | HIGH      | QPSK       | 17.25 | 17.15 | 17.17 | 17.80              |
|           | 75      | LOW       | QPSK       | 17.25 | 17.02 | 17.11 | 17.80              |
|           |         | LOW       | Q16        | 17.30 | 17.23 | 17.25 | 17.80              |
|           |         | MID       | Q16        | 17.43 | 17.60 | 17.35 | 17.80              |
| 15        | 1       | HIGH      | Q16        | 17.20 | 17.41 | 17.26 | 17.80              |
|           |         | LOW       | Q16        | 17.16 | 17.00 | 17.00 | 17.80              |
|           |         | MID       | Q16        | 17.04 | 17.24 | 17.16 | 17.80              |
|           | 36      | HIGH      | Q16        | 17.23 | 17.11 | 17.10 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           | 75      | LOW       | 64QAM      | 17.13 | 17.31 | 17.08 | 17.80              |
|           |         | MID       | 64QAM      | 17.21 | 17.41 | 17.57 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.16 | 17.40 | 17.21 | 17.80              |
| 15        | 1       | LOW       | 64QAM      | 16.97 | 17.07 | 17.19 | 17.80              |
|           |         | MID       | 64QAM      | 17.17 | 16.94 | 17.00 | 17.80              |
|           |         | HIGH      | 64QAM      | 16.82 | 17.13 | 17.04 | 17.80              |
|           | 36      | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           | 75      | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 17.08 | 17.00 | 17.07 | 17.80              |
|           |         | MID       | QPSK       | 17.19 | 17.19 | 17.28 | 17.80              |
|           |         | HIGH      | QPSK       | 17.15 | 17.13 | 17.19 | 17.80              |
|           | 50      | LOW       | QPSK       | 17.15 | 17.12 | 17.21 | 17.80              |
|           |         | MID       | QPSK       | 17.19 | 17.24 | 17.25 | 17.80              |
|           |         | HIGH      | QPSK       | 17.16 | 17.20 | 17.22 | 17.80              |
|           | 100     | LOW       | QPSK       | 17.20 | 17.19 | 17.23 | 17.80              |
|           |         | LOW       | Q16        | 17.37 | 17.35 | 17.22 | 17.80              |
|           |         | MID       | Q16        | 17.38 | 17.56 | 17.44 | 17.80              |
| 20        | 1       | HIGH      | Q16        | 17.37 | 17.50 | 17.35 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.19 | 17.19 | 17.80              |
|           |         | MID       | Q16        | 17.21 | 17.21 | 17.26 | 17.80              |
|           | 50      | HIGH      | Q16        | 17.18 | 17.27 | 17.22 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           | 100     | LOW       | 64QAM      | 17.30 | 17.28 | 17.20 | 17.80              |
|           |         | MID       | 64QAM      | 17.21 | 17.52 | 17.53 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.18 | 17.33 | 17.28 | 17.80              |
| 20        | 1       | LOW       | 64QAM      | 17.07 | 17.17 | 17.16 | 17.80              |
|           |         | MID       | 64QAM      | 17.26 | 17.06 | 17.17 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.01 | 17.29 | 17.13 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           | 100     | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |

| LTE B4-State 2 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 16.98 | 16.98 | 17.04 | 17.80              |
|                       |         | MID       | QPSK       | 17.07 | 17.00 | 17.09 | 17.80              |
|                       |         | HIGH      | QPSK       | 16.96 | 17.11 | 17.21 | 17.80              |
|                       | 3       | LOW       | QPSK       | 16.98 | 16.95 | 17.21 | 17.80              |
|                       |         | MID       | QPSK       | 17.22 | 17.31 | 17.16 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.09 | 17.13 | 17.05 | 17.80              |
|                       | 6       | LOW       | QPSK       | 17.03 | 17.28 | 17.07 | 17.80              |
|                       | 1.4     | LOW       | Q16        | 17.44 | 17.37 | 17.25 | 17.80              |
|                       |         | MID       | Q16        | 17.35 | 17.45 | 17.42 | 17.80              |
|                       |         | HIGH      | Q16        | 17.30 | 17.55 | 17.21 | 17.80              |
|                       | 3       | LOW       | Q16        | 16.99 | 17.09 | 17.10 | 17.80              |
|                       |         | MID       | Q16        | 17.19 | 17.02 | 17.12 | 17.80              |
|                       |         | HIGH      | Q16        | 17.25 | 17.11 | 17.20 | 17.80              |
|                       | 6       | LOW       | Q16        | 17.13 | 17.16 | 17.14 | 17.80              |
|                       | 1.4     | LOW       | 64QAM      | 17.25 | 17.21 | 17.11 | 17.80              |
|                       |         | MID       | 64QAM      | 17.21 | 17.45 | 17.42 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.25 | 17.38 | 17.37 | 17.80              |
|                       | 3       | LOW       | 64QAM      | 17.16 | 17.20 | 17.01 | 17.80              |
|                       |         | MID       | 64QAM      | 17.21 | 16.92 | 17.02 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.06 | 17.10 | 17.01 | 17.80              |
|                       | 6       | LOW       | 64QAM      | 17.18 | 17.11 | 16.98 | 17.80              |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 16.93 | 16.92 | 17.14 | 17.80              |
|                       |         | MID       | QPSK       | 17.00 | 17.02 | 17.18 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.22 | 17.18 | 17.22 | 17.80              |
|                       | 8       | LOW       | QPSK       | 17.03 | 17.12 | 17.12 | 17.80              |
|                       |         | MID       | QPSK       | 17.24 | 17.22 | 17.18 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.02 | 17.10 | 17.03 | 17.80              |
|                       | 15      | LOW       | QPSK       | 17.11 | 17.14 | 17.14 | 17.80              |
|                       | 3       | LOW       | Q16        | 17.34 | 17.40 | 17.19 | 17.80              |
|                       |         | MID       | Q16        | 17.26 | 17.58 | 17.30 | 17.80              |
|                       |         | HIGH      | Q16        | 17.23 | 17.54 | 17.32 | 17.80              |
|                       | 8       | LOW       | Q16        | 17.16 | 17.21 | 17.12 | 17.80              |
|                       |         | MID       | Q16        | 17.09 | 17.14 | 17.31 | 17.80              |
|                       |         | HIGH      | Q16        | 17.11 | 17.15 | 17.15 | 17.80              |
|                       | 15      | LOW       | Q16        | 17.20 | 17.19 | 17.22 | 17.80              |
|                       | 3       | LOW       | 64QAM      | 17.11 | 17.33 | 17.01 | 17.80              |
|                       |         | MID       | 64QAM      | 17.16 | 17.48 | 17.39 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.18 | 17.24 | 17.21 | 17.80              |
|                       | 8       | LOW       | 64QAM      | 16.97 | 17.05 | 17.19 | 17.80              |
|                       |         | MID       | 64QAM      | 17.29 | 17.01 | 17.03 | 17.80              |
|                       |         | HIGH      | 64QAM      | 16.99 | 17.31 | 17.22 | 17.80              |
|                       | 15      | LOW       | 64QAM      | 17.01 | 17.15 | 17.01 | 17.80              |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 17.11 | 16.92 | 17.02 | 17.80              |
|                       |         | MID       | QPSK       | 17.12 | 17.00 | 17.28 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.17 | 16.94 | 17.28 | 17.80              |
|                       | 12      | LOW       | QPSK       | 17.13 | 17.12 | 17.12 | 17.80              |
|                       |         | MID       | QPSK       | 17.04 | 17.33 | 17.32 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.11 | 17.29 | 17.24 | 17.80              |
|                       | 25      | LOW       | QPSK       | 17.08 | 17.05 | 17.25 | 17.80              |
|                       | 5       | LOW       | Q16        | 17.27 | 17.33 | 17.27 | 17.80              |
|                       |         | MID       | Q16        | 17.24 | 17.37 | 17.53 | 17.80              |
|                       |         | HIGH      | Q16        | 17.35 | 17.52 | 17.32 | 17.80              |
|                       | 12      | LOW       | Q16        | 16.99 | 17.26 | 17.17 | 17.80              |
|                       |         | MID       | Q16        | 17.24 | 17.11 | 17.31 | 17.80              |
|                       |         | HIGH      | Q16        | 17.06 | 17.20 | 17.20 | 17.80              |
|                       | 25      | LOW       | Q16        | 17.20 | 17.09 | 17.14 | 17.80              |
|                       | 5       | LOW       | 64QAM      | 17.16 | 17.09 | 17.05 | 17.80              |
|                       |         | MID       | 64QAM      | 17.07 | 17.38 | 17.51 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.25 | 17.28 | 17.09 | 17.80              |
|                       | 12      | LOW       | 64QAM      | 16.90 | 16.98 | 17.21 | 17.80              |
|                       |         | MID       | 64QAM      | 17.09 | 16.96 | 17.19 | 17.80              |
|                       |         | HIGH      | 64QAM      | 16.98 | 17.31 | 17.18 | 17.80              |
|                       | 25      | LOW       | 64QAM      | 17.01 | 16.97 | 17.18 | 17.80              |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 17.06 | 17.03 | 17.04 | 17.80              |
|           |         | MID       | QPSK       | 17.04 | 17.16 | 17.37 | 17.80              |
|           |         | HIGH      | QPSK       | 17.01 | 17.16 | 17.26 | 17.80              |
|           | 25      | LOW       | QPSK       | 17.03 | 17.10 | 17.14 | 17.80              |
|           |         | MID       | QPSK       | 17.09 | 17.07 | 17.30 | 17.80              |
|           |         | HIGH      | QPSK       | 16.97 | 17.10 | 17.25 | 17.80              |
|           | 50      | LOW       | QPSK       | 17.05 | 17.28 | 17.30 | 17.80              |
|           |         | LOW       | Q16        | 17.39 | 17.26 | 17.03 | 17.80              |
|           |         | MID       | Q16        | 17.40 | 17.61 | 17.34 | 17.80              |
| 10        | 1       | MID       | Q16        | 17.27 | 17.48 | 17.35 | 17.80              |
|           |         | LOW       | Q16        | 16.94 | 17.22 | 17.00 | 17.80              |
|           |         | MID       | Q16        | 17.19 | 17.12 | 17.07 | 17.80              |
|           | 25      | HIGH      | Q16        | 17.01 | 17.22 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           | 50      | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
| 10        | 1       | LOW       | 64QAM      | 17.25 | 17.30 | 17.25 | 17.80              |
|           |         | MID       | 64QAM      | 17.09 | 17.38 | 17.41 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.15 | 17.19 | 17.31 | 17.80              |
|           | 25      | LOW       | 64QAM      | 17.05 | 17.22 | 17.02 | 17.80              |
|           |         | MID       | 64QAM      | 17.31 | 16.92 | 17.15 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.06 | 17.34 | 17.04 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 16.93 | 16.90 | 17.05 | 17.80              |
|           |         | MID       | QPSK       | 17.16 | 17.24 | 17.31 | 17.80              |
|           |         | HIGH      | QPSK       | 17.24 | 17.04 | 17.24 | 17.80              |
|           | 36      | LOW       | QPSK       | 17.17 | 16.98 | 17.19 | 17.80              |
|           |         | MID       | QPSK       | 17.26 | 17.10 | 17.18 | 17.80              |
|           |         | HIGH      | QPSK       | 17.25 | 17.15 | 17.17 | 17.80              |
|           | 75      | LOW       | QPSK       | 17.25 | 17.02 | 17.11 | 17.80              |
|           |         | LOW       | Q16        | 17.30 | 17.23 | 17.25 | 17.80              |
|           |         | MID       | Q16        | 17.43 | 17.60 | 17.35 | 17.80              |
| 15        | 1       | HIGH      | Q16        | 17.20 | 17.41 | 17.26 | 17.80              |
|           |         | LOW       | Q16        | 17.16 | 17.00 | 17.00 | 17.80              |
|           |         | MID       | Q16        | 17.04 | 17.24 | 17.16 | 17.80              |
|           | 36      | HIGH      | Q16        | 17.23 | 17.11 | 17.10 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           | 75      | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
| 15        | 1       | LOW       | 64QAM      | 17.13 | 17.31 | 17.08 | 17.80              |
|           |         | MID       | 64QAM      | 17.21 | 17.41 | 17.57 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.16 | 17.40 | 17.21 | 17.80              |
|           | 36      | LOW       | 64QAM      | 16.97 | 17.07 | 17.19 | 17.80              |
|           |         | MID       | 64QAM      | 17.17 | 16.94 | 17.00 | 17.80              |
|           |         | HIGH      | 64QAM      | 16.82 | 17.13 | 17.04 | 17.80              |
|           | 75      | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 17.08 | 17.00 | 17.07 | 17.80              |
|           |         | MID       | QPSK       | 17.19 | 17.19 | 17.28 | 17.80              |
|           |         | HIGH      | QPSK       | 17.15 | 17.13 | 17.19 | 17.80              |
|           | 50      | LOW       | QPSK       | 17.15 | 17.12 | 17.21 | 17.80              |
|           |         | MID       | QPSK       | 17.19 | 17.24 | 17.25 | 17.80              |
|           |         | HIGH      | QPSK       | 17.16 | 17.20 | 17.22 | 17.80              |
|           | 100     | LOW       | QPSK       | 17.20 | 17.19 | 17.23 | 17.80              |
|           |         | LOW       | Q16        | 17.37 | 17.35 | 17.22 | 17.80              |
|           |         | MID       | Q16        | 17.38 | 17.56 | 17.44 | 17.80              |
| 20        | 1       | HIGH      | Q16        | 17.37 | 17.50 | 17.35 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.19 | 17.19 | 17.80              |
|           |         | MID       | Q16        | 17.21 | 17.21 | 17.26 | 17.80              |
|           | 50      | HIGH      | Q16        | 17.18 | 17.27 | 17.22 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           | 100     | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
| 20        | 1       | LOW       | 64QAM      | 17.30 | 17.28 | 17.20 | 17.80              |
|           |         | MID       | 64QAM      | 17.21 | 17.52 | 17.53 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.18 | 17.33 | 17.28 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.07 | 17.17 | 17.16 | 17.80              |
|           |         | MID       | 64QAM      | 17.26 | 17.06 | 17.17 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.01 | 17.29 | 17.13 | 17.80              |
|           | 100     | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |

| LTE B4-State 3 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 16.98 | 16.98 | 17.04 | 17.80              |
|                       |         | MID       | QPSK       | 17.07 | 17.00 | 17.09 | 17.80              |
|                       |         | HIGH      | QPSK       | 16.96 | 17.11 | 17.21 | 17.80              |
|                       | 3       | LOW       | QPSK       | 16.98 | 16.95 | 17.21 | 17.80              |
|                       |         | MID       | QPSK       | 17.22 | 17.31 | 17.16 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.09 | 17.13 | 17.05 | 17.80              |
|                       | 6       | LOW       | QPSK       | 17.03 | 17.28 | 17.07 | 17.80              |
|                       | 1.4     | LOW       | Q16        | 17.44 | 17.37 | 17.25 | 17.80              |
|                       |         | MID       | Q16        | 17.35 | 17.45 | 17.42 | 17.80              |
|                       |         | HIGH      | Q16        | 17.30 | 17.55 | 17.21 | 17.80              |
|                       | 3       | LOW       | Q16        | 16.99 | 17.09 | 17.10 | 17.80              |
|                       |         | MID       | Q16        | 17.19 | 17.02 | 17.12 | 17.80              |
|                       |         | HIGH      | Q16        | 17.25 | 17.11 | 17.20 | 17.80              |
|                       | 6       | LOW       | Q16        | 17.13 | 17.16 | 17.14 | 17.80              |
|                       | 1.4     | LOW       | 64QAM      | 17.25 | 17.21 | 17.11 | 17.80              |
|                       |         | MID       | 64QAM      | 17.21 | 17.45 | 17.42 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.25 | 17.38 | 17.37 | 17.80              |
|                       | 3       | LOW       | 64QAM      | 17.16 | 17.20 | 17.01 | 17.80              |
|                       |         | MID       | 64QAM      | 17.21 | 16.92 | 17.02 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.06 | 17.10 | 17.01 | 17.80              |
|                       | 6       | LOW       | 64QAM      | 17.18 | 17.11 | 16.98 | 17.80              |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 16.93 | 16.92 | 17.14 | 17.80              |
|                       |         | MID       | QPSK       | 17.00 | 17.02 | 17.18 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.22 | 17.18 | 17.22 | 17.80              |
|                       | 8       | LOW       | QPSK       | 17.03 | 17.12 | 17.12 | 17.80              |
|                       |         | MID       | QPSK       | 17.24 | 17.22 | 17.18 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.02 | 17.10 | 17.03 | 17.80              |
|                       | 15      | LOW       | QPSK       | 17.11 | 17.14 | 17.14 | 17.80              |
|                       | 3       | LOW       | Q16        | 17.34 | 17.40 | 17.19 | 17.80              |
|                       |         | MID       | Q16        | 17.26 | 17.58 | 17.30 | 17.80              |
|                       |         | HIGH      | Q16        | 17.23 | 17.54 | 17.32 | 17.80              |
|                       | 8       | LOW       | Q16        | 17.16 | 17.21 | 17.12 | 17.80              |
|                       |         | MID       | Q16        | 17.09 | 17.14 | 17.31 | 17.80              |
|                       |         | HIGH      | Q16        | 17.11 | 17.15 | 17.15 | 17.80              |
|                       | 15      | LOW       | Q16        | 17.20 | 17.19 | 17.22 | 17.80              |
|                       | 3       | LOW       | 64QAM      | 17.11 | 17.33 | 17.01 | 17.80              |
|                       |         | MID       | 64QAM      | 17.16 | 17.48 | 17.39 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.18 | 17.24 | 17.21 | 17.80              |
|                       | 8       | LOW       | 64QAM      | 16.97 | 17.05 | 17.19 | 17.80              |
|                       |         | MID       | 64QAM      | 17.29 | 17.01 | 17.03 | 17.80              |
|                       |         | HIGH      | 64QAM      | 16.99 | 17.31 | 17.22 | 17.80              |
|                       | 15      | LOW       | 64QAM      | 17.01 | 17.15 | 17.01 | 17.80              |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 17.11 | 16.92 | 17.02 | 17.80              |
|                       |         | MID       | QPSK       | 17.12 | 17.00 | 17.28 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.17 | 16.94 | 17.28 | 17.80              |
|                       | 12      | LOW       | QPSK       | 17.13 | 17.12 | 17.12 | 17.80              |
|                       |         | MID       | QPSK       | 17.04 | 17.33 | 17.32 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.11 | 17.29 | 17.24 | 17.80              |
|                       | 25      | LOW       | QPSK       | 17.08 | 17.05 | 17.25 | 17.80              |
|                       | 5       | LOW       | Q16        | 17.27 | 17.33 | 17.27 | 17.80              |
|                       |         | MID       | Q16        | 17.24 | 17.37 | 17.53 | 17.80              |
|                       |         | HIGH      | Q16        | 17.35 | 17.52 | 17.32 | 17.80              |
|                       | 12      | LOW       | Q16        | 16.99 | 17.26 | 17.17 | 17.80              |
|                       |         | MID       | Q16        | 17.24 | 17.11 | 17.31 | 17.80              |
|                       |         | HIGH      | Q16        | 17.06 | 17.20 | 17.20 | 17.80              |
|                       | 25      | LOW       | Q16        | 17.20 | 17.09 | 17.14 | 17.80              |
|                       | 5       | LOW       | 64QAM      | 17.16 | 17.09 | 17.05 | 17.80              |
|                       |         | MID       | 64QAM      | 17.07 | 17.38 | 17.51 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.25 | 17.28 | 17.09 | 17.80              |
|                       | 12      | LOW       | 64QAM      | 16.90 | 16.98 | 17.21 | 17.80              |
|                       |         | MID       | 64QAM      | 17.09 | 16.96 | 17.19 | 17.80              |
|                       |         | HIGH      | 64QAM      | 16.98 | 17.31 | 17.18 | 17.80              |
|                       | 25      | LOW       | 64QAM      | 17.01 | 16.97 | 17.18 | 17.80              |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 17.06 | 17.03 | 17.04 | 17.80              |
|           |         | MID       | QPSK       | 17.04 | 17.16 | 17.37 | 17.80              |
|           |         | HIGH      | QPSK       | 17.01 | 17.16 | 17.26 | 17.80              |
|           | 25      | LOW       | QPSK       | 17.03 | 17.10 | 17.14 | 17.80              |
|           |         | MID       | QPSK       | 17.09 | 17.07 | 17.30 | 17.80              |
|           |         | HIGH      | QPSK       | 16.97 | 17.10 | 17.25 | 17.80              |
|           | 50      | LOW       | QPSK       | 17.05 | 17.28 | 17.30 | 17.80              |
|           |         | LOW       | Q16        | 17.39 | 17.26 | 17.03 | 17.80              |
|           |         | MID       | Q16        | 17.40 | 17.61 | 17.34 | 17.80              |
| 10        | 1       | MID       | Q16        | 17.27 | 17.48 | 17.35 | 17.80              |
|           |         | LOW       | Q16        | 16.94 | 17.22 | 17.00 | 17.80              |
|           |         | MID       | Q16        | 17.19 | 17.12 | 17.07 | 17.80              |
|           | 25      | HIGH      | Q16        | 17.01 | 17.22 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.16 | 17.05 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.25 | 17.30 | 17.25 | 17.80              |
|           |         | MID       | 64QAM      | 17.09 | 17.38 | 17.41 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.15 | 17.19 | 17.31 | 17.80              |
| 10        | 1       | LOW       | 64QAM      | 17.05 | 17.22 | 17.02 | 17.80              |
|           |         | MID       | 64QAM      | 17.31 | 16.92 | 17.15 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.06 | 17.34 | 17.04 | 17.80              |
|           | 25      | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.99 | 17.03 | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 16.93 | 16.90 | 17.05 | 17.80              |
|           |         | MID       | QPSK       | 17.16 | 17.24 | 17.31 | 17.80              |
|           |         | HIGH      | QPSK       | 17.24 | 17.04 | 17.24 | 17.80              |
|           | 36      | LOW       | QPSK       | 17.17 | 16.98 | 17.19 | 17.80              |
|           |         | MID       | QPSK       | 17.26 | 17.10 | 17.18 | 17.80              |
|           |         | HIGH      | QPSK       | 17.25 | 17.15 | 17.17 | 17.80              |
|           | 75      | LOW       | QPSK       | 17.25 | 17.02 | 17.11 | 17.80              |
|           |         | LOW       | Q16        | 17.30 | 17.23 | 17.25 | 17.80              |
|           |         | MID       | Q16        | 17.43 | 17.60 | 17.35 | 17.80              |
| 15        | 1       | HIGH      | Q16        | 17.20 | 17.41 | 17.26 | 17.80              |
|           |         | LOW       | Q16        | 17.16 | 17.00 | 17.00 | 17.80              |
|           |         | MID       | Q16        | 17.04 | 17.24 | 17.16 | 17.80              |
|           | 36      | HIGH      | Q16        | 17.23 | 17.11 | 17.10 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           |         | LOW       | Q16        | 17.25 | 17.14 | 17.19 | 17.80              |
|           | 75      | LOW       | 64QAM      | 17.13 | 17.31 | 17.08 | 17.80              |
|           |         | MID       | 64QAM      | 17.21 | 17.41 | 17.57 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.16 | 17.40 | 17.21 | 17.80              |
| 15        | 1       | LOW       | 64QAM      | 16.97 | 17.07 | 17.19 | 17.80              |
|           |         | MID       | 64QAM      | 17.17 | 16.94 | 17.00 | 17.80              |
|           |         | HIGH      | 64QAM      | 16.82 | 17.13 | 17.04 | 17.80              |
|           | 36      | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           | 75      | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
|           |         | LOW       | 64QAM      | 17.23 | 16.89 | 16.96 | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 17.08 | 17.00 | 17.07 | 17.80              |
|           |         | MID       | QPSK       | 17.19 | 17.19 | 17.28 | 17.80              |
|           |         | HIGH      | QPSK       | 17.15 | 17.13 | 17.19 | 17.80              |
|           | 50      | LOW       | QPSK       | 17.15 | 17.12 | 17.21 | 17.80              |
|           |         | MID       | QPSK       | 17.19 | 17.24 | 17.25 | 17.80              |
|           |         | HIGH      | QPSK       | 17.16 | 17.20 | 17.22 | 17.80              |
|           | 100     | LOW       | QPSK       | 17.20 | 17.19 | 17.23 | 17.80              |
|           |         | LOW       | Q16        | 17.37 | 17.35 | 17.22 | 17.80              |
|           |         | MID       | Q16        | 17.38 | 17.56 | 17.44 | 17.80              |
| 20        | 1       | HIGH      | Q16        | 17.37 | 17.50 | 17.35 | 17.80              |
|           |         | LOW       | Q16        | 17.09 | 17.19 | 17.19 | 17.80              |
|           |         | MID       | Q16        | 17.21 | 17.21 | 17.26 | 17.80              |
|           | 50      | HIGH      | Q16        | 17.18 | 17.27 | 17.22 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           |         | LOW       | Q16        | 17.23 | 17.21 | 17.24 | 17.80              |
|           | 100     | LOW       | 64QAM      | 17.30 | 17.28 | 17.20 | 17.80              |
|           |         | MID       | 64QAM      | 17.21 | 17.52 | 17.53 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.18 | 17.33 | 17.28 | 17.80              |
| 20        | 1       | LOW       | 64QAM      | 17.07 | 17.17 | 17.16 | 17.80              |
|           |         | MID       | 64QAM      | 17.26 | 17.06 | 17.17 | 17.80              |
|           |         | HIGH      | 64QAM      | 17.01 | 17.29 | 17.13 | 17.80              |
|           | 50      | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           | 100     | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |
|           |         | LOW       | 64QAM      | 17.16 | 17.06 | 17.15 | 17.80              |

| LTE B4-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 21.63 | 21.38 | 21.50 | 22.30              |
|                       |         | MID       | QPSK       | 21.53 | 21.58 | 21.45 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.41 | 21.67 | 21.57 | 22.30              |
|                       | 3       | LOW       | QPSK       | 21.52 | 21.23 | 21.57 | 22.30              |
|                       |         | MID       | QPSK       | 21.44 | 21.69 | 21.49 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.49 | 21.37 | 21.65 | 22.30              |
|                       | 6       | LOW       | QPSK       | 21.57 | 21.54 | 21.59 | 22.30              |
|                       | 1       | LOW       | Q16        | 21.75 | 21.78 | 21.68 | 22.30              |
|                       |         | MID       | Q16        | 21.65 | 21.88 | 21.84 | 22.30              |
| HIGH                  |         | Q16       | 21.80      | 21.79 | 21.62 | 22.30 |                    |
| 1.4                   | 3       | LOW       | Q16        | 22.22 | 21.94 | 22.27 | 22.30              |
|                       |         | MID       | Q16        | 22.06 | 22.21 | 22.17 | 22.30              |
|                       |         | HIGH      | Q16        | 22.15 | 22.26 | 22.18 | 22.30              |
|                       | 6       | LOW       | Q16        | 21.01 | 21.26 | 21.01 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 20.79 | 20.94 | 20.72 | 21.80              |
|                       |         | MID       | 64QAM      | 20.75 | 20.88 | 21.10 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.04 | 21.25 | 21.16 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 20.90 | 20.84 | 21.11 | 21.80              |
|                       |         | MID       | 64QAM      | 20.79 | 21.33 | 21.21 | 21.80              |
| HIGH                  |         | 64QAM     | 21.07      | 20.83 | 21.22 | 21.80 |                    |
| 6                     | LOW     | 64QAM     | 20.50      | 20.30 | 20.42 | 20.80 |                    |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 21.39 | 21.53 | 21.50 | 22.30              |
|                       |         | MID       | QPSK       | 21.61 | 21.49 | 21.69 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.64 | 21.56 | 21.46 | 22.30              |
|                       | 8       | LOW       | QPSK       | 21.41 | 21.37 | 21.67 | 22.30              |
|                       |         | MID       | QPSK       | 21.72 | 21.83 | 21.87 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.80 | 21.73 | 21.73 | 22.30              |
|                       | 15      | LOW       | QPSK       | 21.61 | 21.48 | 21.83 | 22.30              |
|                       | 1       | LOW       | Q16        | 21.84 | 21.63 | 21.48 | 22.30              |
|                       |         | MID       | Q16        | 21.52 | 21.75 | 21.77 | 22.30              |
| HIGH                  |         | Q16       | 21.80      | 21.68 | 21.88 | 22.30 |                    |
| 3                     | 8       | LOW       | Q16        | 21.11 | 20.90 | 21.08 | 21.80              |
|                       |         | MID       | Q16        | 20.95 | 21.00 | 21.05 | 21.80              |
|                       |         | HIGH      | Q16        | 21.19 | 21.05 | 21.20 | 21.80              |
|                       | 15      | LOW       | Q16        | 20.97 | 21.01 | 21.07 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 20.77 | 21.00 | 20.68 | 21.80              |
|                       |         | MID       | 64QAM      | 20.69 | 20.86 | 21.22 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.00 | 21.21 | 21.00 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.10 | 19.84 | 20.03 | 20.80              |
|                       |         | MID       | 64QAM      | 19.75 | 20.33 | 20.11 | 20.80              |
| HIGH                  |         | 64QAM     | 20.15      | 20.07 | 20.14 | 20.80 |                    |
| 15                    | LOW     | 64QAM     | 20.34      | 20.26 | 20.26 | 20.80 |                    |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 21.60 | 21.35 | 21.54 | 22.30              |
|                       |         | MID       | QPSK       | 21.59 | 21.56 | 21.58 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.62 | 21.34 | 21.37 | 22.30              |
|                       | 12      | LOW       | QPSK       | 21.50 | 21.50 | 21.51 | 22.30              |
|                       |         | MID       | QPSK       | 21.72 | 21.54 | 21.85 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.56 | 21.49 | 21.66 | 22.30              |
|                       | 25      | LOW       | QPSK       | 21.72 | 21.52 | 21.54 | 22.30              |
|                       | 1       | LOW       | Q16        | 21.84 | 21.67 | 21.68 | 22.30              |
|                       |         | MID       | Q16        | 21.78 | 21.71 | 21.77 | 22.30              |
| HIGH                  |         | Q16       | 21.60      | 21.75 | 21.70 | 22.30 |                    |
| 5                     | 12      | LOW       | Q16        | 20.98 | 20.90 | 21.21 | 21.80              |
|                       |         | MID       | Q16        | 21.08 | 21.00 | 21.05 | 21.80              |
|                       |         | HIGH      | Q16        | 20.98 | 21.32 | 21.18 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.16 | 21.28 | 21.18 | 21.80              |
|                       | 1       | LOW       | 64QAM      | 20.89 | 20.73 | 20.76 | 21.80              |
|                       |         | MID       | 64QAM      | 20.69 | 21.20 | 21.26 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.94 | 21.27 | 20.87 | 21.80              |
|                       | 12      | LOW       | 64QAM      | 20.08 | 20.04 | 20.05 | 20.80              |
|                       |         | MID       | 64QAM      | 19.85 | 20.31 | 20.37 | 20.80              |
| HIGH                  |         | 64QAM     | 19.97      | 19.89 | 20.14 | 20.80 |                    |
| 25                    | LOW     | 64QAM     | 20.28      | 20.34 | 20.42 | 20.80 |                    |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 21.50 | 21.53 | 21.27 | 22.30              |
|           |         | MID       | QPSK       | 21.55 | 21.49 | 21.45 | 22.30              |
|           |         | HIGH      | QPSK       | 21.36 | 21.54 | 21.37 | 22.30              |
|           | 25      | LOW       | QPSK       | 21.39 | 21.63 | 21.80 | 22.30              |
|           |         | MID       | QPSK       | 21.65 | 21.65 | 21.83 | 22.30              |
|           |         | HIGH      | QPSK       | 21.54 | 21.65 | 21.62 | 22.30              |
|           | 50      | LOW       | QPSK       | 21.66 | 21.59 | 21.78 | 22.30              |
|           |         | LOW       | Q16        | 21.71 | 21.57 | 21.46 | 22.30              |
|           |         | MID       | Q16        | 21.67 | 21.75 | 21.84 | 22.30              |
| 10        | 1       | MID       | Q16        | 21.80 | 21.88 | 21.70 | 22.30              |
|           |         | LOW       | Q16        | 21.11 | 20.90 | 21.29 | 21.80              |
|           |         | HIGH      | Q16        | 21.08 | 21.08 | 21.32 | 21.80              |
|           | 25      | MID       | Q16        | 21.10 | 21.28 | 21.30 | 21.80              |
|           |         | LOW       | Q16        | 21.20 | 21.11 | 21.09 | 21.80              |
|           |         | HIGH      | Q16        | 21.20 | 21.11 | 21.09 | 21.80              |
|           | 50      | LOW       | 64QAM      | 20.75 | 20.73 | 20.72 | 21.80              |
|           |         | MID       | 64QAM      | 20.94 | 21.13 | 21.22 | 21.80              |
|           |         | HIGH      | 64QAM      | 20.83 | 21.36 | 21.02 | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 20.10 | 19.98 | 20.17 | 20.80              |
|           |         | MID       | 64QAM      | 19.95 | 20.23 | 20.37 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.17 | 20.09 | 20.04 | 20.80              |
|           | 25      | LOW       | 64QAM      | 20.48 | 20.08 | 20.10 | 20.80              |
|           |         | LOW       | 64QAM      | 20.48 | 20.08 | 20.10 | 20.80              |
|           |         | MID       | 64QAM      | 20.48 | 20.08 | 20.10 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.48 | 20.08 | 20.10 | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.48 | 20.08 | 20.10 | 20.80              |
|           |         | MID       | 64QAM      | 20.48 | 20.08 | 20.10 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.48 | 20.08 | 20.10 | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 21.39 | 21.33 | 21.33 | 22.30              |
|           |         | MID       | QPSK       | 21.46 | 21.69 | 21.67 | 22.30              |
|           |         | HIGH      | QPSK       | 21.58 | 21.60 | 21.39 | 22.30              |
|           | 36      | LOW       | QPSK       | 21.65 | 21.48 | 21.49 | 22.30              |
|           |         | MID       | QPSK       | 21.61 | 21.54 | 21.76 | 22.30              |
|           |         | HIGH      | QPSK       | 21.69 | 21.45 | 21.84 | 22.30              |
|           | 75      | LOW       | QPSK       | 21.64 | 21.61 | 21.72 | 22.30              |
|           |         | LOW       | Q16        | 21.64 | 21.70 | 21.46 | 22.30              |
|           |         | MID       | Q16        | 21.63 | 22.04 | 21.62 | 22.30              |
| 15        | 1       | HIGH      | Q16        | 21.66 | 21.68 | 21.88 | 22.30              |
|           |         | LOW       | Q16        | 21.11 | 20.90 | 21.12 | 21.80              |
|           |         | MID       | Q16        | 21.20 | 21.06 | 21.22 | 21.80              |
|           | 36      | HIGH      | Q16        | 21.29 | 21.17 | 21.30 | 21.80              |
|           |         | LOW       | Q16        | 21.24 | 21.07 | 21.09 | 21.80              |
|           |         | HIGH      | Q16        | 21.24 | 21.07 | 21.09 | 21.80              |
|           | 75      | LOW       | 64QAM      | 20.71 | 20.77 | 20.59 | 21.80              |
|           |         | MID       | 64QAM      | 20.88 | 20.90 | 20.97 | 21.80              |
|           |         | HIGH      | 64QAM      | 20.90 | 21.02 | 20.85 | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 20.00 | 19.84 | 20.29 | 20.80              |
|           |         | MID       | 64QAM      | 19.99 | 20.21 | 20.23 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.07 | 19.81 | 20.24 | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.46 | 20.26 | 20.20 | 20.80              |
|           |         | MID       | 64QAM      | 20.46 | 20.26 | 20.20 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.46 | 20.26 | 20.20 | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.46 | 20.26 | 20.20 | 20.80              |
|           |         | MID       | 64QAM      | 20.46 | 20.26 | 20.20 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.46 | 20.26 | 20.20 | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 21.54 | 21.44 | 21.48 | 22.30              |
|           |         | MID       | QPSK       | 21.59 | 21.60 | 21.69 | 22.30              |
|           |         | HIGH      | QPSK       | 21.58 | 21.56 | 21.61 | 22.30              |
|           | 50      | LOW       | QPSK       | 21.63 | 21.61 | 21.71 | 22.30              |
|           |         | MID       | QPSK       | 21.74 | 21.74 | 21.76 | 22.30              |
|           |         | HIGH      | QPSK       | 21.69 | 21.69 | 21.75 | 22.30              |
|           | 100     | LOW       | QPSK       | 21.68 | 21.65 | 21.74 | 22.30              |
|           |         | LOW       | Q16        | 21.75 | 21.74 | 21.70 | 22.30              |
|           |         | MID       | Q16        | 21.76 | 21.95 | 21.86 | 22.30              |
| 20        | 1       | HIGH      | Q16        | 21.73 | 21.88 | 21.79 | 22.30              |
|           |         | LOW       | Q16        | 21.11 | 21.13 | 21.23 | 21.80              |
|           |         | MID       | Q16        | 21.14 | 21.23 | 21.26 | 21.80              |
|           | 50      | HIGH      | Q16        | 21.21 | 21.26 | 21.22 | 21.80              |
|           |         | LOW       | Q16        | 21.20 | 21.22 | 21.24 | 21.80              |
|           |         | MID       | Q16        | 21.20 | 21.22 | 21.24 | 21.80              |
|           | 100     | LOW       | 64QAM      | 20.79 | 20.94 | 20.78 | 21.80              |
|           |         | MID       | 64QAM      | 20.92 | 21.09 | 21.18 | 21.80              |
|           |         | HIGH      | 64QAM      | 20.98 | 21.25 | 21.08 | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.02 | 19.96 | 20.19 | 20.80              |
|           |         | MID       | 64QAM      | 19.91 | 20.31 | 20.27 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.19 | 20.03 | 20.20 | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.19 | 20.03 | 20.20 | 20.80              |
|           |         | MID       | 64QAM      | 20.19 | 20.03 | 20.20 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.19 | 20.03 | 20.20 | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.46 | 20.26 | 20.32 | 20.80              |
|           |         | MID       | 64QAM      | 20.46 | 20.26 | 20.32 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.46 | 20.26 | 20.32 | 20.80              |

| LTE B4-State 5 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 19.62 | 19.52 | 19.25 | 20.30              |
|                       |         | MID       | QPSK       | 19.36 | 19.44 | 19.46 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.59 | 19.40 | 20.30              |
|                       | 3       | LOW       | QPSK       | 19.65 | 19.49 | 19.46 | 20.30              |
|                       |         | MID       | QPSK       | 19.66 | 19.73 | 19.77 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.63 | 19.73 | 19.78 | 20.30              |
|                       | 6       | LOW       | QPSK       | 19.63 | 19.54 | 19.62 | 20.30              |
|                       | 1.4     | LOW       | Q16        | 19.59 | 19.59 | 19.37 | 20.30              |
|                       |         | MID       | Q16        | 19.80 | 19.82 | 19.72 | 20.30              |
| 1.4                   | 1       | HIGH      | Q16        | 19.64 | 19.74 | 19.61 | 20.30              |
|                       |         | LOW       | Q16        | 19.41 | 19.43 | 19.57 | 20.30              |
|                       |         | MID       | Q16        | 19.60 | 19.83 | 19.61 | 20.30              |
|                       | 3       | HIGH      | Q16        | 19.68 | 19.56 | 19.62 | 20.30              |
|                       |         | LOW       | Q16        | 19.60 | 19.62 | 19.58 | 20.30              |
|                       |         | MID       | Q16        | 19.64 | 19.64 | 19.60 | 20.30              |
|                       | 6       | LOW       | Q16        | 19.62 | 19.84 | 19.53 | 20.30              |
| 1.4                   | 1       | LOW       | 64QAM      | 19.57 | 19.55 | 19.41 | 20.30              |
|                       |         | MID       | 64QAM      | 19.64 | 19.64 | 19.60 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.62 | 19.84 | 19.53 | 20.30              |
|                       | 3       | LOW       | 64QAM      | 19.41 | 19.83 | 19.53 | 20.30              |
|                       |         | MID       | 64QAM      | 19.68 | 19.65 | 19.49 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.64 | 19.54 | 19.60 | 20.30              |
|                       | 6       | LOW       | 64QAM      | 19.72 | 19.52 | 19.62 | 20.30              |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 19.38 | 19.32 | 19.52 | 20.30              |
|                       |         | MID       | QPSK       | 19.40 | 19.48 | 19.58 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.62 | 19.63 | 19.60 | 20.30              |
|                       | 8       | LOW       | QPSK       | 19.63 | 19.67 | 19.78 | 20.30              |
|                       |         | MID       | QPSK       | 19.60 | 19.79 | 19.69 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.73 | 19.45 | 19.52 | 20.30              |
|                       | 15      | LOW       | QPSK       | 19.47 | 19.76 | 19.80 | 20.30              |
| 3                     | 1       | LOW       | Q16        | 19.73 | 19.65 | 19.63 | 20.30              |
|                       |         | MID       | Q16        | 19.80 | 19.86 | 19.82 | 20.30              |
|                       |         | HIGH      | Q16        | 19.82 | 19.68 | 19.47 | 20.30              |
|                       | 8       | LOW       | Q16        | 19.45 | 19.59 | 19.61 | 20.30              |
|                       |         | MID       | Q16        | 19.44 | 19.79 | 19.73 | 20.30              |
|                       |         | HIGH      | Q16        | 19.70 | 19.56 | 19.58 | 20.30              |
|                       | 15      | LOW       | Q16        | 19.56 | 19.74 | 19.60 | 20.30              |
| 3                     | 1       | LOW       | 64QAM      | 19.57 | 19.55 | 19.65 | 20.30              |
|                       |         | MID       | 64QAM      | 19.68 | 19.62 | 19.68 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.54 | 19.76 | 19.69 | 20.30              |
|                       | 8       | LOW       | 64QAM      | 19.61 | 19.67 | 19.37 | 20.30              |
|                       |         | MID       | 64QAM      | 19.72 | 19.79 | 19.47 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.78 | 19.56 | 19.62 | 20.30              |
|                       | 15      | LOW       | 64QAM      | 19.44 | 19.46 | 19.54 | 20.30              |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.58 | 19.52 | 19.44 | 20.30              |
|                       |         | MID       | QPSK       | 19.54 | 19.54 | 19.56 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.60 | 19.41 | 19.34 | 20.30              |
|                       | 12      | LOW       | QPSK       | 19.63 | 19.41 | 19.76 | 20.30              |
|                       |         | MID       | QPSK       | 19.84 | 19.83 | 19.63 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.81 | 19.49 | 19.74 | 20.30              |
|                       | 25      | LOW       | QPSK       | 19.77 | 19.60 | 19.68 | 20.30              |
| 5                     | 1       | LOW       | Q16        | 19.75 | 19.63 | 19.43 | 20.30              |
|                       |         | MID       | Q16        | 19.62 | 20.02 | 19.68 | 20.30              |
|                       |         | HIGH      | Q16        | 19.50 | 19.72 | 19.71 | 20.30              |
|                       | 12      | LOW       | Q16        | 19.37 | 19.43 | 19.57 | 20.30              |
|                       |         | MID       | Q16        | 19.62 | 19.65 | 19.63 | 20.30              |
|                       |         | HIGH      | Q16        | 19.58 | 19.70 | 19.72 | 20.30              |
|                       | 25      | LOW       | Q16        | 19.68 | 19.54 | 19.76 | 20.30              |
| 5                     | 1       | LOW       | 64QAM      | 19.69 | 19.61 | 19.43 | 20.30              |
|                       |         | MID       | 64QAM      | 19.42 | 19.78 | 19.84 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.80 | 19.80 | 19.47 | 20.30              |
|                       | 12      | LOW       | 64QAM      | 19.47 | 19.75 | 19.41 | 20.30              |
|                       |         | MID       | 64QAM      | 19.50 | 19.65 | 19.37 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.62 | 19.34 | 19.70 | 20.30              |
|                       | 25      | LOW       | 64QAM      | 19.60 | 19.52 | 19.50 | 20.30              |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 19.38 | 19.34 | 19.42 | 20.30              |
|           |         | MID       | QPSK       | 19.36 | 19.50 | 19.54 | 20.30              |
|           |         | HIGH      | QPSK       | 19.44 | 19.47 | 19.44 | 20.30              |
|           | 25      | LOW       | QPSK       | 19.59 | 19.53 | 19.48 | 20.30              |
|           |         | MID       | QPSK       | 19.64 | 19.55 | 19.89 | 20.30              |
|           |         | HIGH      | QPSK       | 19.81 | 19.53 | 19.68 | 20.30              |
|           | 50      | LOW       | QPSK       | 19.79 | 19.64 | 19.60 | 20.30              |
|           |         | LOW       | Q16        | 19.81 | 19.81 | 19.51 | 20.30              |
|           |         | MID       | Q16        | 19.68 | 19.98 | 19.88 | 20.30              |
| 10        | 1       | MID       | Q16        | 19.52 | 20.00 | 19.47 | 20.30              |
|           |         | LOW       | Q16        | 19.61 | 19.49 | 19.67 | 20.30              |
|           |         | HIGH      | Q16        | 19.74 | 19.77 | 19.55 | 20.30              |
|           | 25      | MID       | Q16        | 19.78 | 19.60 | 19.74 | 20.30              |
|           |         | LOW       | Q16        | 19.60 | 19.78 | 19.50 | 20.30              |
|           |         | HIGH      | Q16        | 19.60 | 19.78 | 19.50 | 20.30              |
|           | 50      | LOW       | Q16        | 19.55 | 19.83 | 19.49 | 20.30              |
|           |         | MID       | Q16        | 19.36 | 19.60 | 19.80 | 20.30              |
|           |         | HIGH      | Q16        | 19.48 | 19.78 | 19.61 | 20.30              |
| 10        | 1       | LOW       | 64QAM      | 19.55 | 19.83 | 19.49 | 20.30              |
|           |         | MID       | 64QAM      | 19.36 | 19.60 | 19.80 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.48 | 19.78 | 19.61 | 20.30              |
|           | 25      | LOW       | 64QAM      | 19.55 | 19.65 | 19.45 | 20.30              |
|           |         | MID       | 64QAM      | 19.54 | 19.59 | 19.39 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.62 | 19.34 | 19.68 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.64 | 19.38 | 19.46 | 20.30              |
|           |         | LOW       | 64QAM      | 19.53 | 19.59 | 19.63 | 20.30              |
|           |         | MID       | 64QAM      | 19.62 | 19.62 | 19.64 | 20.30              |
| 15        | 1       | HIGH      | 64QAM      | 19.56 | 19.80 | 19.55 | 20.30              |
|           |         | LOW       | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
|           |         | MID       | 64QAM      | 19.72 | 19.81 | 19.30 | 20.30              |
|           | 36      | HIGH      | 64QAM      | 19.78 | 19.56 | 19.86 | 20.30              |
|           |         | LOW       | 64QAM      | 19.44 | 19.42 | 19.50 | 20.30              |
|           |         | MID       | 64QAM      | 19.53 | 19.59 | 19.63 | 20.30              |
|           | 75      | LOW       | 64QAM      | 19.62 | 19.62 | 19.64 | 20.30              |
|           |         | MID       | 64QAM      | 19.56 | 19.80 | 19.55 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
| 15        | 1       | LOW       | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
|           |         | MID       | 64QAM      | 19.72 | 19.81 | 19.30 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.78 | 19.56 | 19.86 | 20.30              |
|           | 36      | LOW       | 64QAM      | 19.44 | 19.42 | 19.50 | 20.30              |
|           |         | MID       | 64QAM      | 19.53 | 19.59 | 19.63 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.62 | 19.62 | 19.64 | 20.30              |
|           | 75      | LOW       | 64QAM      | 19.56 | 19.80 | 19.55 | 20.30              |
|           |         | MID       | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.72 | 19.81 | 19.30 | 20.30              |
| 20        | 1       | LOW       | 64QAM      | 19.69 | 19.73 | 19.55 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.57 | 19.75 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.75 | 19.51 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.78 | 19.52 | 19.80 | 20.30              |
|           | 100     | LOW       | 64QAM      | 19.64 | 19.58 | 19.64 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |
| 20        | 1       | LOW       | 64QAM      | 19.57 | 19.75 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.75 | 19.51 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.78 | 19.52 | 19.80 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.64 | 19.58 | 19.64 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |
|           | 100     | LOW       | 64QAM      | 19.69 | 19.73 | 19.55 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |

| LTE B4-State 6 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 19.62 | 19.52 | 19.25 | 20.30              |
|                       |         | MID       | QPSK       | 19.36 | 19.44 | 19.46 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.59 | 19.40 | 20.30              |
|                       | 3       | LOW       | QPSK       | 19.65 | 19.49 | 19.46 | 20.30              |
|                       |         | MID       | QPSK       | 19.66 | 19.73 | 19.77 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.63 | 19.73 | 19.78 | 20.30              |
|                       | 6       | LOW       | QPSK       | 19.63 | 19.54 | 19.62 | 20.30              |
|                       | 1.4     | LOW       | Q16        | 19.59 | 19.59 | 19.37 | 20.30              |
|                       |         | MID       | Q16        | 19.80 | 19.82 | 19.72 | 20.30              |
|                       |         | HIGH      | Q16        | 19.64 | 19.74 | 19.61 | 20.30              |
|                       |         | LOW       | Q16        | 19.41 | 19.43 | 19.57 | 20.30              |
|                       |         | MID       | Q16        | 19.60 | 19.83 | 19.61 | 20.30              |
|                       |         | HIGH      | Q16        | 19.68 | 19.56 | 19.62 | 20.30              |
| 1.4                   | 6       | LOW       | Q16        | 19.60 | 19.62 | 19.58 | 20.30              |
|                       |         | LOW       | 64QAM      | 19.57 | 19.55 | 19.41 | 20.30              |
|                       |         | MID       | 64QAM      | 19.64 | 19.64 | 19.60 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.62 | 19.84 | 19.53 | 20.30              |
|                       | 3       | LOW       | 64QAM      | 19.41 | 19.83 | 19.53 | 20.30              |
|                       |         | MID       | 64QAM      | 19.68 | 19.65 | 19.49 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.64 | 19.54 | 19.60 | 20.30              |
|                       | 6       | LOW       | 64QAM      | 19.72 | 19.52 | 19.62 | 20.30              |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 19.38 | 19.32 | 19.52 | 20.30              |
|                       |         | MID       | QPSK       | 19.40 | 19.48 | 19.58 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.62 | 19.63 | 19.60 | 20.30              |
|                       | 8       | LOW       | QPSK       | 19.63 | 19.67 | 19.78 | 20.30              |
|                       |         | MID       | QPSK       | 19.60 | 19.79 | 19.69 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.73 | 19.45 | 19.52 | 20.30              |
|                       | 15      | LOW       | QPSK       | 19.47 | 19.76 | 19.80 | 20.30              |
|                       | 3       | LOW       | Q16        | 19.73 | 19.65 | 19.63 | 20.30              |
|                       |         | MID       | Q16        | 19.80 | 19.86 | 19.82 | 20.30              |
|                       |         | HIGH      | Q16        | 19.82 | 19.68 | 19.47 | 20.30              |
|                       |         | LOW       | Q16        | 19.45 | 19.59 | 19.61 | 20.30              |
|                       |         | MID       | Q16        | 19.44 | 19.79 | 19.73 | 20.30              |
|                       |         | HIGH      | Q16        | 19.70 | 19.56 | 19.58 | 20.30              |
| 3                     | 15      | LOW       | Q16        | 19.56 | 19.74 | 19.60 | 20.30              |
|                       |         | LOW       | 64QAM      | 19.57 | 19.55 | 19.65 | 20.30              |
|                       |         | MID       | 64QAM      | 19.68 | 19.62 | 19.68 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.54 | 19.76 | 19.69 | 20.30              |
|                       | 8       | LOW       | 64QAM      | 19.61 | 19.67 | 19.37 | 20.30              |
|                       |         | MID       | 64QAM      | 19.72 | 19.79 | 19.47 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.78 | 19.56 | 19.62 | 20.30              |
|                       | 15      | LOW       | 64QAM      | 19.44 | 19.46 | 19.54 | 20.30              |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.58 | 19.52 | 19.44 | 20.30              |
|                       |         | MID       | QPSK       | 19.54 | 19.54 | 19.56 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.60 | 19.41 | 19.34 | 20.30              |
|                       | 12      | LOW       | QPSK       | 19.63 | 19.41 | 19.76 | 20.30              |
|                       |         | MID       | QPSK       | 19.84 | 19.83 | 19.63 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.81 | 19.49 | 19.74 | 20.30              |
|                       | 25      | LOW       | QPSK       | 19.77 | 19.60 | 19.68 | 20.30              |
|                       | 5       | LOW       | Q16        | 19.75 | 19.63 | 19.43 | 20.30              |
|                       |         | MID       | Q16        | 19.62 | 20.02 | 19.68 | 20.30              |
|                       |         | HIGH      | Q16        | 19.50 | 19.72 | 19.71 | 20.30              |
|                       |         | LOW       | Q16        | 19.37 | 19.43 | 19.57 | 20.30              |
|                       |         | MID       | Q16        | 19.62 | 19.65 | 19.63 | 20.30              |
|                       |         | HIGH      | Q16        | 19.58 | 19.70 | 19.72 | 20.30              |
| 5                     | 25      | LOW       | Q16        | 19.68 | 19.54 | 19.76 | 20.30              |
|                       |         | LOW       | 64QAM      | 19.69 | 19.61 | 19.43 | 20.30              |
|                       |         | MID       | 64QAM      | 19.42 | 19.78 | 19.84 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.80 | 19.80 | 19.47 | 20.30              |
|                       | 12      | LOW       | 64QAM      | 19.47 | 19.75 | 19.41 | 20.30              |
|                       |         | MID       | 64QAM      | 19.50 | 19.65 | 19.37 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.62 | 19.34 | 19.70 | 20.30              |
|                       | 25      | LOW       | 64QAM      | 19.60 | 19.52 | 19.50 | 20.30              |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 19.38 | 19.34 | 19.42 | 20.30              |
|           |         | MID       | QPSK       | 19.36 | 19.50 | 19.54 | 20.30              |
|           |         | HIGH      | QPSK       | 19.44 | 19.47 | 19.44 | 20.30              |
|           | 25      | LOW       | QPSK       | 19.59 | 19.53 | 19.48 | 20.30              |
|           |         | MID       | QPSK       | 19.64 | 19.55 | 19.89 | 20.30              |
|           |         | HIGH      | QPSK       | 19.81 | 19.53 | 19.68 | 20.30              |
|           | 50      | LOW       | QPSK       | 19.79 | 19.64 | 19.60 | 20.30              |
|           |         | LOW       | Q16        | 19.81 | 19.81 | 19.51 | 20.30              |
|           |         | MID       | Q16        | 19.68 | 19.98 | 19.88 | 20.30              |
| 10        | 1       | MID       | Q16        | 19.52 | 20.00 | 19.47 | 20.30              |
|           |         | LOW       | Q16        | 19.61 | 19.49 | 19.67 | 20.30              |
|           |         | HIGH      | Q16        | 19.74 | 19.77 | 19.55 | 20.30              |
|           | 25      | MID       | Q16        | 19.78 | 19.60 | 19.74 | 20.30              |
|           |         | LOW       | Q16        | 19.60 | 19.78 | 19.50 | 20.30              |
|           |         | HIGH      | Q16        | 19.60 | 19.78 | 19.50 | 20.30              |
|           | 50      | LOW       | Q16        | 19.55 | 19.83 | 19.49 | 20.30              |
|           |         | MID       | Q16        | 19.36 | 19.60 | 19.80 | 20.30              |
|           |         | HIGH      | Q16        | 19.48 | 19.78 | 19.61 | 20.30              |
| 10        | 1       | LOW       | 64QAM      | 19.55 | 19.83 | 19.49 | 20.30              |
|           |         | MID       | 64QAM      | 19.36 | 19.60 | 19.80 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.48 | 19.78 | 19.61 | 20.30              |
|           | 25      | LOW       | 64QAM      | 19.55 | 19.65 | 19.45 | 20.30              |
|           |         | MID       | 64QAM      | 19.54 | 19.59 | 19.39 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.62 | 19.34 | 19.68 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.64 | 19.38 | 19.46 | 20.30              |
|           |         | LOW       | 64QAM      | 19.53 | 19.59 | 19.63 | 20.30              |
|           |         | MID       | 64QAM      | 19.62 | 19.62 | 19.64 | 20.30              |
| 15        | 1       | HIGH      | 64QAM      | 19.56 | 19.80 | 19.55 | 20.30              |
|           |         | LOW       | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
|           |         | MID       | 64QAM      | 19.72 | 19.81 | 19.30 | 20.30              |
|           | 36      | HIGH      | 64QAM      | 19.78 | 19.56 | 19.86 | 20.30              |
|           |         | LOW       | 64QAM      | 19.44 | 19.42 | 19.50 | 20.30              |
|           |         | MID       | 64QAM      | 19.53 | 19.59 | 19.63 | 20.30              |
|           | 75      | LOW       | 64QAM      | 19.62 | 19.62 | 19.64 | 20.30              |
|           |         | MID       | 64QAM      | 19.56 | 19.80 | 19.55 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
| 15        | 1       | LOW       | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
|           |         | MID       | 64QAM      | 19.72 | 19.81 | 19.30 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.78 | 19.56 | 19.86 | 20.30              |
|           | 36      | LOW       | 64QAM      | 19.44 | 19.42 | 19.50 | 20.30              |
|           |         | MID       | 64QAM      | 19.53 | 19.59 | 19.63 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.62 | 19.62 | 19.64 | 20.30              |
|           | 75      | LOW       | 64QAM      | 19.56 | 19.80 | 19.55 | 20.30              |
|           |         | MID       | 64QAM      | 19.63 | 19.85 | 19.41 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.72 | 19.81 | 19.30 | 20.30              |
| 20        | 1       | LOW       | 64QAM      | 19.69 | 19.73 | 19.55 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.57 | 19.75 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.75 | 19.51 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.78 | 19.52 | 19.80 | 20.30              |
|           | 100     | LOW       | 64QAM      | 19.64 | 19.58 | 19.64 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |
| 20        | 1       | LOW       | 64QAM      | 19.57 | 19.75 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.75 | 19.51 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.78 | 19.52 | 19.80 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.64 | 19.58 | 19.64 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |
|           | 100     | LOW       | 64QAM      | 19.69 | 19.73 | 19.55 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.80 | 19.82 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.70 | 19.86 | 19.63 | 20.30              |

| LTE B4-State 1 -Ant.0 |           |           |            |            |       |       |                    |                    |
|-----------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth             | RB Size   | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                   | 1         | LOW       | QPSK       | 23.18      | 23.15 | 23.08 | 23.80              |                    |
|                       |           | MID       | QPSK       | 23.23      | 23.27 | 23.45 | 23.80              |                    |
|                       |           | HIGH      | QPSK       | 22.99      | 23.36 | 23.16 | 23.80              |                    |
|                       | 3         | LOW       | QPSK       | 23.32      | 23.21 | 23.35 | 23.80              |                    |
|                       |           | MID       | QPSK       | 23.26      | 23.48 | 23.29 | 23.80              |                    |
|                       |           | HIGH      | QPSK       | 23.43      | 23.27 | 23.24 | 23.80              |                    |
|                       | 6         | LOW       | QPSK       | 22.43      | 22.31 | 22.30 | 22.80              |                    |
|                       | 1.4       | 1         | LOW        | Q16        | 22.54 | 22.61 | 22.20              | 22.80              |
|                       |           |           | MID        | Q16        | 22.67 | 22.48 | 22.57              | 22.80              |
| HIGH                  |           |           | Q16        | 22.47      | 22.50 | 22.70 | 22.80              |                    |
| 3                     |           | LOW       | Q16        | 22.02      | 22.28 | 22.04 | 22.80              |                    |
|                       |           | MID       | Q16        | 22.33      | 22.34 | 22.12 | 22.80              |                    |
|                       |           | HIGH      | Q16        | 22.18      | 22.01 | 22.49 | 22.80              |                    |
| 6                     | LOW       | Q16       | 21.26      | 21.40      | 21.33 | 21.80 |                    |                    |
| 1.4                   | 1         | LOW       | 64QAM      | 21.48      | 21.69 | 21.06 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.52      | 21.42 | 21.42 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.44      | 21.43 | 21.55 | 21.80              |                    |
|                       | 3         | LOW       | 64QAM      | 21.08      | 21.03 | 21.27 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.27      | 21.31 | 21.41 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.34      | 21.33 | 21.38 | 21.80              |                    |
|                       | 6         | LOW       | 64QAM      | 20.41      | 20.30 | 20.39 | 20.80              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                       | 3         | 1         | LOW        | QPSK       | 23.32 | 22.92 | 23.13              | 23.80              |
| MID                   |           |           | QPSK       | 23.14      | 23.20 | 23.57 | 23.80              |                    |
| HIGH                  |           |           | QPSK       | 23.13      | 23.10 | 23.16 | 23.80              |                    |
| 8                     |           | LOW       | QPSK       | 22.14      | 22.30 | 22.46 | 22.80              |                    |
|                       |           | MID       | QPSK       | 22.42      | 22.46 | 22.27 | 22.80              |                    |
|                       |           | HIGH      | QPSK       | 22.27      | 22.33 | 22.17 | 22.80              |                    |
| 15                    |           | LOW       | QPSK       | 22.43      | 22.29 | 22.39 | 22.80              |                    |
| 3                     |           | 1         | LOW        | Q16        | 22.72 | 22.79 | 22.18              | 22.80              |
|                       |           |           | MID        | Q16        | 22.31 | 22.55 | 22.59              | 22.80              |
|                       | HIGH      |           | Q16        | 22.65      | 22.43 | 22.68 | 22.80              |                    |
|                       | 8         | LOW       | Q16        | 20.96      | 21.37 | 21.17 | 21.80              |                    |
|                       |           | MID       | Q16        | 21.42      | 21.27 | 21.38 | 21.80              |                    |
|                       |           | HIGH      | Q16        | 21.37      | 21.07 | 21.64 | 21.80              |                    |
| 15                    | LOW       | Q16       | 21.26      | 21.47      | 21.25 | 21.80 |                    |                    |
| 3                     | 1         | LOW       | 64QAM      | 21.55      | 21.47 | 21.16 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.58      | 21.75 | 21.51 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.68      | 21.66 | 21.44 | 21.80              |                    |
|                       | 8         | LOW       | 64QAM      | 20.14      | 20.11 | 20.21 | 20.80              |                    |
|                       |           | MID       | 64QAM      | 20.29      | 20.29 | 20.62 | 20.80              |                    |
|                       |           | HIGH      | 64QAM      | 20.32      | 20.33 | 20.48 | 20.80              |                    |
|                       | 15        | LOW       | 64QAM      | 20.27      | 20.55 | 20.15 | 20.80              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
|                       | 5         | 1         | LOW        | QPSK       | 23.23 | 23.11 | 23.27              | 23.80              |
| MID                   |           |           | QPSK       | 23.19      | 23.43 | 23.19 | 23.80              |                    |
| HIGH                  |           |           | QPSK       | 23.16      | 23.33 | 23.44 | 23.80              |                    |
| 12                    |           | LOW       | QPSK       | 22.10      | 22.37 | 22.19 | 22.80              |                    |
|                       |           | MID       | QPSK       | 22.26      | 22.30 | 22.40 | 22.80              |                    |
|                       |           | HIGH      | QPSK       | 22.12      | 22.09 | 22.33 | 22.80              |                    |
| 25                    |           | LOW       | QPSK       | 22.12      | 22.37 | 22.46 | 22.80              |                    |
| 5                     |           | 1         | LOW        | Q16        | 22.52 | 22.69 | 22.24              | 22.80              |
|                       |           |           | MID        | Q16        | 22.56 | 22.61 | 22.50              | 22.80              |
|                       | HIGH      |           | Q16        | 22.67      | 22.64 | 22.38 | 22.80              |                    |
|                       | 12        | LOW       | Q16        | 21.04      | 21.26 | 20.98 | 21.80              |                    |
|                       |           | MID       | Q16        | 21.50      | 21.46 | 21.31 | 21.80              |                    |
|                       |           | HIGH      | Q16        | 21.26      | 21.29 | 21.29 | 21.80              |                    |
| 25                    | LOW       | Q16       | 21.11      | 21.34      | 21.27 | 21.80 |                    |                    |
| 5                     | 1         | LOW       | 64QAM      | 21.66      | 21.60 | 21.14 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.73      | 21.77 | 21.34 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.61      | 21.38 | 21.47 | 21.80              |                    |
|                       | 12        | LOW       | 64QAM      | 19.94      | 20.13 | 20.21 | 20.80              |                    |
|                       |           | MID       | 64QAM      | 20.03      | 20.21 | 20.64 | 20.80              |                    |
|                       |           | HIGH      | 64QAM      | 20.20      | 20.23 | 20.60 | 20.80              |                    |
|                       | 25        | LOW       | 64QAM      | 20.33      | 20.41 | 20.21 | 20.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350        | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|--------------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.00 | 22.88 | 23.25        | 23.80              |
|           |         | MID       | QPSK       | 23.33 | 23.18 | 23.33        | 23.80              |
|           |         | HIGH      | QPSK       | 23.27 | 23.38 | 23.11        | 23.80              |
|           | 25      | LOW       | QPSK       | 22.07 | 22.17 | 22.37        | 22.80              |
|           |         | MID       | QPSK       | 22.31 | 22.39 | 22.54        | 22.80              |
|           |         | HIGH      | QPSK       | 22.18 | 22.38 | 22.17        | 22.80              |
|           | 50      | LOW       | QPSK       | 22.16 | 22.13 | 22.21        | 22.80              |
|           |         | LOW       | Q16        | 22.61 | 22.54 | 22.07        | 22.80              |
|           |         | MID       | Q16        | 22.40 | 22.77 | 22.54        | 22.80              |
| 10        | 1       | MID       | Q16        | 22.69 | 22.57 | 22.43        | 22.80              |
|           |         | LOW       | Q16        | 21.02 | 21.37 | 21.21        | 21.80              |
|           |         | MID       | Q16        | 21.38 | 21.46 | 21.29        | 21.80              |
|           | 25      | HIGH      | Q16        | 21.18 | 21.24 | 21.34        | 21.80              |
|           |         | LOW       | Q16        | 21.11 | 21.38 | 21.27        | 21.80              |
|           |         | LOW       | 64QAM      | 21.48 | 21.73 | 21.35        | 21.80              |
|           | 1       | MID       | 64QAM      | 21.49 | 21.42 | 21.34        | 21.80              |
|           |         | HIGH      | 64QAM      | 21.65 | 21.43 | 21.44        | 21.80              |
|           |         | LOW       | 64QAM      | 19.88 | 20.03 | 20.17        | 20.80              |
| 10        | 25      | MID       | 64QAM      | 20.29 | 20.05 | 20.72        | 20.80              |
|           |         | HIGH      | 64QAM      | 20.06 | 20.39 | 20.54        | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.43 | 20.41 | 20.09        | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325        | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.04 | 23.08 | 22.97        | 23.80              |
|           |         | MID       | QPSK       | 23.26 | 23.27 | 23.22        | 23.80              |
|           |         | HIGH      | QPSK       | 23.04 | 23.26 | 23.37        | 23.80              |
|           | 36      | LOW       | QPSK       | 22.12 | 22.34 | 22.41        | 22.80              |
|           |         | MID       | QPSK       | 22.44 | 22.26 | 22.36        | 22.80              |
|           |         | HIGH      | QPSK       | 22.12 | 22.33 | 22.44        | 22.80              |
|           | 75      | LOW       | QPSK       | 22.23 | 22.40 | 22.30        | 22.80              |
|           |         | LOW       | Q16        | 22.52 | 22.79 | 22.13        | 22.80              |
|           |         | MID       | Q16        | 22.63 | 22.48 | 22.68        | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.51 | 22.43 | 22.36        | 22.80              |
|           |         | LOW       | Q16        | 21.02 | 21.11 | 20.96        | 21.80              |
|           |         | MID       | Q16        | 21.38 | 21.19 | 21.18        | 21.80              |
|           | 36      | HIGH      | Q16        | 21.33 | 21.05 | 21.31        | 21.80              |
|           |         | LOW       | Q16        | 21.13 | 21.49 | 21.53        | 21.80              |
|           | 75      | LOW       | 64QAM      | 21.55 | 21.58 | 21.14        | 21.80              |
|           |         | MID       | 64QAM      | 21.69 | 21.47 | 21.49        | 21.80              |
|           |         | HIGH      | 64QAM      | 21.44 | 21.43 | 21.38        | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 19.90 | 19.95 | 20.35        | 20.80              |
|           |         | MID       | 64QAM      | 20.13 | 20.27 | 20.47        | 20.80              |
|           |         | HIGH      | 64QAM      | 20.08 | 20.39 | 20.30        | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.37 | 20.45 | 20.19        | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300        | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.23 | 23.13 | 23.20        | 23.80              |
|           |         | MID       | QPSK       | 23.28 | 23.34 | <b>23.45</b> | 23.80              |
|           |         | HIGH      | QPSK       | 23.25 | 23.31 | 23.37        | 23.80              |
|           | 50      | LOW       | QPSK       | 22.23 | 22.30 | 22.39        | 22.80              |
|           |         | MID       | QPSK       | 22.42 | 22.37 | <b>22.47</b> | 22.80              |
|           |         | HIGH      | QPSK       | 22.34 | 22.31 | 22.42        | 22.80              |
|           | 100     | LOW       | QPSK       | 22.32 | 22.33 | <b>22.37</b> | 22.80              |
|           |         | LOW       | Q16        | 22.70 | 22.74 | 22.20        | 22.80              |
|           |         | MID       | Q16        | 22.56 | 22.66 | 22.68        | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.58 | 22.59 | 22.61        | 22.80              |
|           |         | LOW       | Q16        | 21.19 | 21.28 | 21.17        | 21.80              |
|           |         | MID       | Q16        | 21.44 | 21.40 | 21.29        | 21.80              |
|           | 50      | HIGH      | Q16        | 21.39 | 21.18 | 21.53        | 21.80              |
|           |         | LOW       | Q16        | 21.28 | 21.38 | 21.42        | 21.80              |
|           | 100     | LOW       | 64QAM      | 21.68 | 21.71 | 21.29        | 21.80              |
|           |         | MID       | 64QAM      | 21.69 | 21.66 | 21.40        | 21.80              |
|           |         | HIGH      | 64QAM      | 21.59 | 21.62 | 21.53        | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.04 | 20.17 | 20.35        | 20.80              |
|           |         | MID       | 64QAM      | 20.23 | 20.23 | 20.64        | 20.80              |
|           |         | HIGH      | 64QAM      | 20.26 | 20.35 | 20.50        | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.33 | 20.53 | 20.29        | 20.80              |

| LTE B4-State 2 -Ant.0 |           |           |            |            |       |       |                    |                    |
|-----------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth             | RB Size   | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                   | 1         | LOW       | QPSK       | 23.18      | 23.15 | 23.08 | 23.80              |                    |
|                       |           | MID       | QPSK       | 23.23      | 23.27 | 23.45 | 23.80              |                    |
|                       |           | HIGH      | QPSK       | 22.99      | 23.36 | 23.16 | 23.80              |                    |
|                       | 3         | LOW       | QPSK       | 23.32      | 23.21 | 23.35 | 23.80              |                    |
|                       |           | MID       | QPSK       | 23.26      | 23.48 | 23.29 | 23.80              |                    |
|                       |           | HIGH      | QPSK       | 23.43      | 23.27 | 23.24 | 23.80              |                    |
|                       | 6         | LOW       | QPSK       | 22.43      | 22.31 | 22.30 | 22.80              |                    |
|                       | 1.4       | 1         | LOW        | Q16        | 22.54 | 22.61 | 22.20              | 22.80              |
|                       |           |           | MID        | Q16        | 22.67 | 22.48 | 22.57              | 22.80              |
| HIGH                  |           |           | Q16        | 22.47      | 22.50 | 22.70 | 22.80              |                    |
| 3                     |           | LOW       | Q16        | 22.02      | 22.28 | 22.04 | 22.80              |                    |
|                       |           | MID       | Q16        | 22.33      | 22.34 | 22.12 | 22.80              |                    |
|                       |           | HIGH      | Q16        | 22.18      | 22.01 | 22.49 | 22.80              |                    |
| 6                     | LOW       | Q16       | 21.26      | 21.40      | 21.33 | 21.80 |                    |                    |
| 1.4                   | 1         | LOW       | 64QAM      | 21.48      | 21.69 | 21.06 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.52      | 21.42 | 21.42 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.44      | 21.43 | 21.55 | 21.80              |                    |
|                       | 3         | LOW       | 64QAM      | 21.08      | 21.03 | 21.27 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.27      | 21.31 | 21.41 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.34      | 21.33 | 21.38 | 21.80              |                    |
|                       | 6         | LOW       | 64QAM      | 20.41      | 20.30 | 20.39 | 20.80              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                       | 3         | 1         | LOW        | QPSK       | 23.32 | 22.92 | 23.13              | 23.80              |
| MID                   |           |           | QPSK       | 23.14      | 23.20 | 23.57 | 23.80              |                    |
| HIGH                  |           |           | QPSK       | 23.13      | 23.10 | 23.16 | 23.80              |                    |
| 8                     |           | LOW       | QPSK       | 22.14      | 22.30 | 22.46 | 22.80              |                    |
|                       |           | MID       | QPSK       | 22.42      | 22.46 | 22.27 | 22.80              |                    |
|                       |           | HIGH      | QPSK       | 22.27      | 22.33 | 22.17 | 22.80              |                    |
| 15                    |           | LOW       | QPSK       | 22.43      | 22.29 | 22.39 | 22.80              |                    |
| 3                     |           | 1         | LOW        | Q16        | 22.72 | 22.79 | 22.18              | 22.80              |
|                       |           |           | MID        | Q16        | 22.31 | 22.55 | 22.59              | 22.80              |
|                       | HIGH      |           | Q16        | 22.65      | 22.43 | 22.68 | 22.80              |                    |
|                       | 8         | LOW       | Q16        | 20.96      | 21.37 | 21.17 | 21.80              |                    |
|                       |           | MID       | Q16        | 21.42      | 21.27 | 21.38 | 21.80              |                    |
|                       |           | HIGH      | Q16        | 21.37      | 21.07 | 21.64 | 21.80              |                    |
| 15                    | LOW       | Q16       | 21.26      | 21.47      | 21.25 | 21.80 |                    |                    |
| 3                     | 1         | LOW       | 64QAM      | 21.55      | 21.47 | 21.16 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.58      | 21.75 | 21.51 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.68      | 21.66 | 21.44 | 21.80              |                    |
|                       | 8         | LOW       | 64QAM      | 20.14      | 20.11 | 20.21 | 20.80              |                    |
|                       |           | MID       | 64QAM      | 20.29      | 20.29 | 20.62 | 20.80              |                    |
|                       |           | HIGH      | 64QAM      | 20.32      | 20.33 | 20.48 | 20.80              |                    |
|                       | 15        | LOW       | 64QAM      | 20.27      | 20.55 | 20.15 | 20.80              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
|                       | 5         | 1         | LOW        | QPSK       | 23.23 | 23.11 | 23.27              | 23.80              |
| MID                   |           |           | QPSK       | 23.19      | 23.43 | 23.19 | 23.80              |                    |
| HIGH                  |           |           | QPSK       | 23.16      | 23.33 | 23.44 | 23.80              |                    |
| 12                    |           | LOW       | QPSK       | 22.10      | 22.37 | 22.19 | 22.80              |                    |
|                       |           | MID       | QPSK       | 22.26      | 22.30 | 22.40 | 22.80              |                    |
|                       |           | HIGH      | QPSK       | 22.12      | 22.09 | 22.33 | 22.80              |                    |
| 25                    |           | LOW       | QPSK       | 22.12      | 22.37 | 22.46 | 22.80              |                    |
| 5                     |           | 1         | LOW        | Q16        | 22.52 | 22.69 | 22.24              | 22.80              |
|                       |           |           | MID        | Q16        | 22.56 | 22.61 | 22.50              | 22.80              |
|                       | HIGH      |           | Q16        | 22.67      | 22.64 | 22.38 | 22.80              |                    |
|                       | 12        | LOW       | Q16        | 21.04      | 21.26 | 20.98 | 21.80              |                    |
|                       |           | MID       | Q16        | 21.50      | 21.46 | 21.31 | 21.80              |                    |
|                       |           | HIGH      | Q16        | 21.26      | 21.29 | 21.29 | 21.80              |                    |
| 25                    | LOW       | Q16       | 21.11      | 21.34      | 21.27 | 21.80 |                    |                    |
| 5                     | 1         | LOW       | 64QAM      | 21.66      | 21.60 | 21.14 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.73      | 21.77 | 21.34 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.61      | 21.38 | 21.47 | 21.80              |                    |
|                       | 12        | LOW       | 64QAM      | 19.94      | 20.13 | 20.21 | 20.80              |                    |
|                       |           | MID       | 64QAM      | 20.03      | 20.21 | 20.64 | 20.80              |                    |
|                       |           | HIGH      | 64QAM      | 20.20      | 20.23 | 20.60 | 20.80              |                    |
|                       | 25        | LOW       | 64QAM      | 20.33      | 20.41 | 20.21 | 20.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350        | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|--------------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.00 | 22.88 | 23.25        | 23.80              |
|           |         | MID       | QPSK       | 23.33 | 23.18 | 23.33        | 23.80              |
|           |         | HIGH      | QPSK       | 23.27 | 23.38 | 23.11        | 23.80              |
|           | 25      | LOW       | QPSK       | 22.07 | 22.17 | 22.37        | 22.80              |
|           |         | MID       | QPSK       | 22.31 | 22.39 | 22.54        | 22.80              |
|           |         | HIGH      | QPSK       | 22.18 | 22.38 | 22.17        | 22.80              |
|           | 50      | LOW       | QPSK       | 22.16 | 22.13 | 22.21        | 22.80              |
|           |         | LOW       | Q16        | 22.61 | 22.54 | 22.07        | 22.80              |
|           |         | MID       | Q16        | 22.40 | 22.77 | 22.54        | 22.80              |
| 10        | 1       | MID       | Q16        | 22.69 | 22.57 | 22.43        | 22.80              |
|           |         | LOW       | Q16        | 21.02 | 21.37 | 21.21        | 21.80              |
|           |         | HIGH      | Q16        | 21.38 | 21.46 | 21.29        | 21.80              |
|           | 25      | MID       | Q16        | 21.18 | 21.24 | 21.34        | 21.80              |
|           |         | LOW       | Q16        | 21.11 | 21.38 | 21.27        | 21.80              |
|           |         | HIGH      | Q16        | 21.11 | 21.38 | 21.27        | 21.80              |
|           | 50      | LOW       | Q16        | 21.11 | 21.38 | 21.27        | 21.80              |
|           |         | LOW       | 64QAM      | 21.48 | 21.73 | 21.35        | 21.80              |
|           |         | MID       | 64QAM      | 21.49 | 21.42 | 21.34        | 21.80              |
| 10        | 1       | HIGH      | 64QAM      | 21.65 | 21.43 | 21.44        | 21.80              |
|           |         | LOW       | 64QAM      | 19.88 | 20.03 | 20.17        | 20.80              |
|           |         | MID       | 64QAM      | 20.29 | 20.05 | 20.72        | 20.80              |
|           | 25      | HIGH      | 64QAM      | 20.06 | 20.39 | 20.54        | 20.80              |
|           |         | LOW       | 64QAM      | 20.43 | 20.41 | 20.09        | 20.80              |
|           |         | MID       | 64QAM      | 20.43 | 20.41 | 20.09        | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.43 | 20.41 | 20.09        | 20.80              |
|           |         | MID       | 64QAM      | 20.43 | 20.41 | 20.09        | 20.80              |
|           |         | HIGH      | 64QAM      | 20.43 | 20.41 | 20.09        | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325        | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.04 | 23.08 | 22.97        | 23.80              |
|           |         | MID       | QPSK       | 23.26 | 23.27 | 23.22        | 23.80              |
|           |         | HIGH      | QPSK       | 23.04 | 23.26 | 23.37        | 23.80              |
|           | 36      | LOW       | QPSK       | 22.12 | 22.34 | 22.41        | 22.80              |
|           |         | MID       | QPSK       | 22.44 | 22.26 | 22.36        | 22.80              |
|           |         | HIGH      | QPSK       | 22.12 | 22.33 | 22.44        | 22.80              |
|           | 75      | LOW       | QPSK       | 22.23 | 22.40 | 22.30        | 22.80              |
|           |         | LOW       | Q16        | 22.52 | 22.79 | 22.13        | 22.80              |
|           |         | MID       | Q16        | 22.63 | 22.48 | 22.68        | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.51 | 22.43 | 22.36        | 22.80              |
|           |         | LOW       | Q16        | 21.02 | 21.11 | 20.96        | 21.80              |
|           |         | MID       | Q16        | 21.38 | 21.19 | 21.18        | 21.80              |
|           | 36      | HIGH      | Q16        | 21.33 | 21.05 | 21.31        | 21.80              |
|           |         | LOW       | Q16        | 21.13 | 21.49 | 21.53        | 21.80              |
|           |         | MID       | Q16        | 21.13 | 21.49 | 21.53        | 21.80              |
|           | 75      | LOW       | Q16        | 21.13 | 21.49 | 21.53        | 21.80              |
|           |         | LOW       | 64QAM      | 21.55 | 21.58 | 21.14        | 21.80              |
|           |         | MID       | 64QAM      | 21.69 | 21.47 | 21.49        | 21.80              |
| 15        | 1       | HIGH      | 64QAM      | 21.44 | 21.43 | 21.38        | 21.80              |
|           |         | LOW       | 64QAM      | 19.90 | 19.95 | 20.35        | 20.80              |
|           |         | MID       | 64QAM      | 20.13 | 20.27 | 20.47        | 20.80              |
|           | 36      | HIGH      | 64QAM      | 20.08 | 20.39 | 20.30        | 20.80              |
|           |         | LOW       | 64QAM      | 20.37 | 20.45 | 20.19        | 20.80              |
|           |         | MID       | 64QAM      | 20.37 | 20.45 | 20.19        | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.37 | 20.45 | 20.19        | 20.80              |
|           |         | MID       | 64QAM      | 20.37 | 20.45 | 20.19        | 20.80              |
|           |         | HIGH      | 64QAM      | 20.37 | 20.45 | 20.19        | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300        | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.23 | 23.13 | 23.20        | 23.80              |
|           |         | MID       | QPSK       | 23.28 | 23.34 | <b>23.45</b> | 23.80              |
|           |         | HIGH      | QPSK       | 23.25 | 23.31 | 23.37        | 23.80              |
|           | 50      | LOW       | QPSK       | 22.23 | 22.30 | 22.39        | 22.80              |
|           |         | MID       | QPSK       | 22.42 | 22.37 | <b>22.47</b> | 22.80              |
|           |         | HIGH      | QPSK       | 22.34 | 22.31 | 22.42        | 22.80              |
|           | 100     | LOW       | QPSK       | 22.32 | 22.33 | <b>22.37</b> | 22.80              |
|           |         | LOW       | Q16        | 22.70 | 22.74 | 22.20        | 22.80              |
|           |         | MID       | Q16        | 22.56 | 22.66 | 22.68        | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.58 | 22.59 | 22.61        | 22.80              |
|           |         | LOW       | Q16        | 21.19 | 21.28 | 21.17        | 21.80              |
|           |         | MID       | Q16        | 21.44 | 21.40 | 21.29        | 21.80              |
|           | 50      | HIGH      | Q16        | 21.39 | 21.18 | 21.53        | 21.80              |
|           |         | LOW       | Q16        | 21.28 | 21.38 | 21.42        | 21.80              |
|           |         | MID       | Q16        | 21.28 | 21.38 | 21.42        | 21.80              |
|           | 100     | LOW       | Q16        | 21.28 | 21.38 | 21.42        | 21.80              |
|           |         | LOW       | 64QAM      | 21.68 | 21.71 | 21.29        | 21.80              |
|           |         | MID       | 64QAM      | 21.69 | 21.66 | 21.40        | 21.80              |
| 20        | 1       | HIGH      | 64QAM      | 21.59 | 21.62 | 21.53        | 21.80              |
|           |         | LOW       | 64QAM      | 20.04 | 20.17 | 20.35        | 20.80              |
|           |         | MID       | 64QAM      | 20.23 | 20.23 | 20.64        | 20.80              |
|           | 50      | HIGH      | 64QAM      | 20.26 | 20.35 | 20.50        | 20.80              |
|           |         | LOW       | 64QAM      | 20.33 | 20.53 | 20.29        | 20.80              |
|           |         | MID       | 64QAM      | 20.33 | 20.53 | 20.29        | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.33 | 20.53 | 20.29        | 20.80              |
|           |         | MID       | 64QAM      | 20.33 | 20.53 | 20.29        | 20.80              |
|           |         | HIGH      | 64QAM      | 20.33 | 20.53 | 20.29        | 20.80              |

| LTE B4-State 3 -Ant.0 |           |           |            |            |       |       |                    |                    |
|-----------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth             | RB Size   | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                   | 1         | LOW       | QPSK       | 23.18      | 23.15 | 23.08 | 23.80              |                    |
|                       |           | MID       | QPSK       | 23.23      | 23.27 | 23.45 | 23.80              |                    |
|                       |           | HIGH      | QPSK       | 22.99      | 23.36 | 23.16 | 23.80              |                    |
|                       | 3         | LOW       | QPSK       | 23.32      | 23.21 | 23.35 | 23.80              |                    |
|                       |           | MID       | QPSK       | 23.26      | 23.48 | 23.29 | 23.80              |                    |
|                       |           | HIGH      | QPSK       | 23.43      | 23.27 | 23.24 | 23.80              |                    |
|                       | 6         | LOW       | QPSK       | 22.43      | 22.31 | 22.30 | 22.80              |                    |
|                       | 1.4       | 1         | LOW        | Q16        | 22.54 | 22.61 | 22.20              | 22.80              |
|                       |           |           | MID        | Q16        | 22.67 | 22.48 | 22.57              | 22.80              |
| HIGH                  |           |           | Q16        | 22.47      | 22.50 | 22.70 | 22.80              |                    |
| 3                     |           | LOW       | Q16        | 22.02      | 22.28 | 22.04 | 22.80              |                    |
|                       |           | MID       | Q16        | 22.33      | 22.34 | 22.12 | 22.80              |                    |
|                       |           | HIGH      | Q16        | 22.18      | 22.01 | 22.49 | 22.80              |                    |
| 6                     | LOW       | Q16       | 21.26      | 21.40      | 21.33 | 21.80 |                    |                    |
| 1.4                   | 1         | LOW       | 64QAM      | 21.48      | 21.69 | 21.06 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.52      | 21.42 | 21.42 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.44      | 21.43 | 21.55 | 21.80              |                    |
|                       | 3         | LOW       | 64QAM      | 21.08      | 21.03 | 21.27 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.27      | 21.31 | 21.41 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.34      | 21.33 | 21.38 | 21.80              |                    |
|                       | 6         | LOW       | 64QAM      | 20.41      | 20.30 | 20.39 | 20.80              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                       | 3         | 1         | LOW        | QPSK       | 23.32 | 22.92 | 23.13              | 23.80              |
| MID                   |           |           | QPSK       | 23.14      | 23.20 | 23.57 | 23.80              |                    |
| HIGH                  |           |           | QPSK       | 23.13      | 23.10 | 23.16 | 23.80              |                    |
| 8                     |           | LOW       | QPSK       | 22.14      | 22.30 | 22.46 | 22.80              |                    |
|                       |           | MID       | QPSK       | 22.42      | 22.46 | 22.27 | 22.80              |                    |
|                       |           | HIGH      | QPSK       | 22.27      | 22.33 | 22.17 | 22.80              |                    |
| 15                    |           | LOW       | QPSK       | 22.43      | 22.29 | 22.39 | 22.80              |                    |
| 3                     |           | 1         | LOW        | Q16        | 22.72 | 22.79 | 22.18              | 22.80              |
|                       |           |           | MID        | Q16        | 22.31 | 22.55 | 22.59              | 22.80              |
|                       | HIGH      |           | Q16        | 22.65      | 22.43 | 22.68 | 22.80              |                    |
|                       | 8         | LOW       | Q16        | 20.96      | 21.37 | 21.17 | 21.80              |                    |
|                       |           | MID       | Q16        | 21.42      | 21.27 | 21.38 | 21.80              |                    |
|                       |           | HIGH      | Q16        | 21.37      | 21.07 | 21.64 | 21.80              |                    |
| 15                    | LOW       | Q16       | 21.26      | 21.47      | 21.25 | 21.80 |                    |                    |
| 3                     | 1         | LOW       | 64QAM      | 21.55      | 21.47 | 21.16 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.58      | 21.75 | 21.51 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.68      | 21.66 | 21.44 | 21.80              |                    |
|                       | 8         | LOW       | 64QAM      | 20.14      | 20.11 | 20.21 | 20.80              |                    |
|                       |           | MID       | 64QAM      | 20.29      | 20.29 | 20.62 | 20.80              |                    |
|                       |           | HIGH      | 64QAM      | 20.32      | 20.33 | 20.48 | 20.80              |                    |
|                       | 15        | LOW       | 64QAM      | 20.27      | 20.55 | 20.15 | 20.80              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
|                       | 5         | 1         | LOW        | QPSK       | 23.23 | 23.11 | 23.27              | 23.80              |
| MID                   |           |           | QPSK       | 23.19      | 23.43 | 23.19 | 23.80              |                    |
| HIGH                  |           |           | QPSK       | 23.16      | 23.33 | 23.44 | 23.80              |                    |
| 12                    |           | LOW       | QPSK       | 22.10      | 22.37 | 22.19 | 22.80              |                    |
|                       |           | MID       | QPSK       | 22.26      | 22.30 | 22.40 | 22.80              |                    |
|                       |           | HIGH      | QPSK       | 22.12      | 22.09 | 22.33 | 22.80              |                    |
| 25                    |           | LOW       | QPSK       | 22.12      | 22.37 | 22.46 | 22.80              |                    |
| 5                     |           | 1         | LOW        | Q16        | 22.52 | 22.69 | 22.24              | 22.80              |
|                       |           |           | MID        | Q16        | 22.56 | 22.61 | 22.50              | 22.80              |
|                       | HIGH      |           | Q16        | 22.67      | 22.64 | 22.38 | 22.80              |                    |
|                       | 12        | LOW       | Q16        | 21.04      | 21.26 | 20.98 | 21.80              |                    |
|                       |           | MID       | Q16        | 21.50      | 21.46 | 21.31 | 21.80              |                    |
|                       |           | HIGH      | Q16        | 21.26      | 21.29 | 21.29 | 21.80              |                    |
| 25                    | LOW       | Q16       | 21.11      | 21.34      | 21.27 | 21.80 |                    |                    |
| 5                     | 1         | LOW       | 64QAM      | 21.66      | 21.60 | 21.14 | 21.80              |                    |
|                       |           | MID       | 64QAM      | 21.73      | 21.77 | 21.34 | 21.80              |                    |
|                       |           | HIGH      | 64QAM      | 21.61      | 21.38 | 21.47 | 21.80              |                    |
|                       | 12        | LOW       | 64QAM      | 19.94      | 20.13 | 20.21 | 20.80              |                    |
|                       |           | MID       | 64QAM      | 20.03      | 20.21 | 20.64 | 20.80              |                    |
|                       |           | HIGH      | 64QAM      | 20.20      | 20.23 | 20.60 | 20.80              |                    |
|                       | 25        | LOW       | 64QAM      | 20.33      | 20.41 | 20.21 | 20.80              |                    |

| Bandwidth (kHz) | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10              | 1       | LOW       | QPSK       | 23.00 | 22.88 | 23.25 | 23.80              |
|                 |         | MID       | QPSK       | 23.33 | 23.18 | 23.33 | 23.80              |
|                 |         | HIGH      | QPSK       | 23.27 | 23.38 | 23.11 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.07 | 22.17 | 22.37 | 22.80              |
|                 |         | MID       | QPSK       | 22.31 | 22.39 | 22.54 | 22.80              |
|                 |         | HIGH      | QPSK       | 22.18 | 22.38 | 22.17 | 22.80              |
|                 | 50      | LOW       | QPSK       | 22.16 | 22.13 | 22.21 | 22.80              |
|                 |         | LOW       | Q16        | 22.61 | 22.54 | 22.07 | 22.80              |
|                 |         | MID       | Q16        | 22.40 | 22.77 | 22.54 | 22.80              |
| 10              | 1       | HIGH      | Q16        | 22.69 | 22.57 | 22.43 | 22.80              |
|                 |         | LOW       | Q16        | 21.02 | 21.37 | 21.21 | 21.80              |
|                 |         | MID       | Q16        | 21.38 | 21.46 | 21.29 | 21.80              |
|                 | 25      | HIGH      | Q16        | 21.18 | 21.24 | 21.34 | 21.80              |
|                 |         | LOW       | Q16        | 21.11 | 21.38 | 21.27 | 21.80              |
|                 |         | LOW       | 64QAM      | 21.48 | 21.73 | 21.35 | 21.80              |
|                 | 1       | MID       | 64QAM      | 21.49 | 21.42 | 21.34 | 21.80              |
|                 |         | HIGH      | 64QAM      | 21.65 | 21.43 | 21.44 | 21.80              |
|                 |         | LOW       | 64QAM      | 19.88 | 20.03 | 20.17 | 20.80              |
| 10              | 25      | MID       | 64QAM      | 20.29 | 20.05 | 20.72 | 20.80              |
|                 |         | HIGH      | 64QAM      | 20.06 | 20.39 | 20.54 | 20.80              |
|                 |         | LOW       | 64QAM      | 20.43 | 20.41 | 20.09 | 20.80              |
|                 | 50      | LOW       | 64QAM      | 20.43 | 20.41 | 20.09 | 20.80              |

| Bandwidth (kHz) | RB Size | RB offset | Modulation | 20025 | 20175 | 20325 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 23.04 | 23.08 | 22.97 | 23.80              |
|                 |         | MID       | QPSK       | 23.26 | 23.27 | 23.22 | 23.80              |
|                 |         | HIGH      | QPSK       | 23.04 | 23.26 | 23.37 | 23.80              |
|                 | 36      | LOW       | QPSK       | 22.12 | 22.34 | 22.41 | 22.80              |
|                 |         | MID       | QPSK       | 22.44 | 22.26 | 22.36 | 22.80              |
|                 |         | HIGH      | QPSK       | 22.12 | 22.33 | 22.44 | 22.80              |
|                 | 75      | LOW       | QPSK       | 22.23 | 22.40 | 22.30 | 22.80              |
|                 |         | LOW       | Q16        | 22.52 | 22.79 | 22.13 | 22.80              |
|                 |         | MID       | Q16        | 22.63 | 22.48 | 22.68 | 22.80              |
| 15              | 1       | HIGH      | Q16        | 22.51 | 22.43 | 22.36 | 22.80              |
|                 |         | LOW       | Q16        | 21.02 | 21.11 | 20.96 | 21.80              |
|                 |         | MID       | Q16        | 21.38 | 21.19 | 21.18 | 21.80              |
|                 | 36      | HIGH      | Q16        | 21.33 | 21.05 | 21.31 | 21.80              |
|                 |         | LOW       | Q16        | 21.13 | 21.49 | 21.53 | 21.80              |
|                 |         | LOW       | 64QAM      | 21.55 | 21.58 | 21.14 | 21.80              |
|                 | 1       | MID       | 64QAM      | 21.69 | 21.47 | 21.49 | 21.80              |
|                 |         | HIGH      | 64QAM      | 21.44 | 21.43 | 21.38 | 21.80              |
|                 |         | LOW       | 64QAM      | 19.90 | 19.95 | 20.35 | 20.80              |
| 15              | 36      | MID       | 64QAM      | 20.13 | 20.27 | 20.47 | 20.80              |
|                 |         | HIGH      | 64QAM      | 20.08 | 20.39 | 20.30 | 20.80              |
|                 |         | LOW       | 64QAM      | 20.37 | 20.45 | 20.19 | 20.80              |
|                 | 75      | LOW       | 64QAM      | 20.37 | 20.45 | 20.19 | 20.80              |

| Bandwidth (kHz) | RB Size | RB offset | Modulation | 20050 | 20175 | 20300 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 20              | 1       | LOW       | QPSK       | 23.23 | 23.13 | 23.20 | 23.80              |
|                 |         | MID       | QPSK       | 23.28 | 23.34 | 23.45 | 23.80              |
|                 |         | HIGH      | QPSK       | 23.25 | 23.31 | 23.37 | 23.80              |
|                 | 50      | LOW       | QPSK       | 22.23 | 22.30 | 22.39 | 22.80              |
|                 |         | MID       | QPSK       | 22.42 | 22.37 | 22.47 | 22.80              |
|                 |         | HIGH      | QPSK       | 22.34 | 22.31 | 22.42 | 22.80              |
|                 | 100     | LOW       | QPSK       | 22.32 | 22.33 | 22.37 | 22.80              |
|                 |         | LOW       | Q16        | 22.70 | 22.74 | 22.20 | 22.80              |
|                 |         | MID       | Q16        | 22.56 | 22.66 | 22.68 | 22.80              |
| 20              | 1       | HIGH      | Q16        | 22.58 | 22.59 | 22.61 | 22.80              |
|                 |         | LOW       | Q16        | 21.19 | 21.28 | 21.17 | 21.80              |
|                 |         | MID       | Q16        | 21.44 | 21.40 | 21.29 | 21.80              |
|                 | 50      | HIGH      | Q16        | 21.39 | 21.18 | 21.53 | 21.80              |
|                 |         | LOW       | Q16        | 21.28 | 21.38 | 21.42 | 21.80              |
|                 |         | LOW       | 64QAM      | 21.68 | 21.71 | 21.29 | 21.80              |
|                 | 1       | MID       | 64QAM      | 21.69 | 21.66 | 21.40 | 21.80              |
|                 |         | HIGH      | 64QAM      | 21.59 | 21.62 | 21.53 | 21.80              |
|                 |         | LOW       | 64QAM      | 20.04 | 20.17 | 20.35 | 20.80              |
| 20              | 50      | MID       | 64QAM      | 20.23 | 20.23 | 20.64 | 20.80              |
|                 |         | HIGH      | 64QAM      | 20.26 | 20.35 | 20.50 | 20.80              |
|                 |         | LOW       | 64QAM      | 20.33 | 20.53 | 20.29 | 20.80              |

| LTE B4-State 4 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 21.61 | 21.45 | 21.31 | 22.30              |
|                       |         | MID       | QPSK       | 21.52 | 21.69 | 21.58 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.64 | 21.43 | 21.79 | 22.30              |
|                       | 3       | LOW       | QPSK       | 21.42 | 21.55 | 21.29 | 22.30              |
|                       |         | MID       | QPSK       | 21.69 | 21.67 | 21.51 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.72 | 21.61 | 21.46 | 22.30              |
|                       | 6       | LOW       | QPSK       | 21.79 | 21.61 | 21.83 | 22.30              |
|                       | 1.4     | LOW       | Q16        | 21.90 | 21.73 | 21.60 | 22.30              |
|                       |         | MID       | Q16        | 21.91 | 22.00 | 21.83 | 22.30              |
|                       |         | HIGH      | Q16        | 21.66 | 21.77 | 21.75 | 22.30              |
| 1.4                   | 1       | LOW       | Q16        | 21.99 | 22.30 | 22.21 | 22.30              |
|                       |         | MID       | Q16        | 22.20 | 22.30 | 22.19 | 22.30              |
|                       |         | HIGH      | Q16        | 22.28 | 22.17 | 22.03 | 22.30              |
|                       | 3       | LOW       | Q16        | 21.26 | 21.37 | 21.13 | 21.80              |
|                       |         | MID       | 64QAM      | 21.42 | 21.60 | 21.10 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.60 | 21.75 | 21.22 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 21.33 | 21.60 | 21.40 | 21.80              |
|                       |         | MID       | 64QAM      | 20.84 | 20.75 | 21.27 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.35 | 20.95 | 21.23 | 21.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.06 | 21.39 | 21.34 | 21.80              |
|                       |         | MID       | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
|                       |         | HIGH      | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
|                       | 3       | LOW       | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
|                       |         | MID       | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
|                       |         | HIGH      | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
|                       | 6       | LOW       | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
|                       |         | MID       | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
|                       |         | HIGH      | 64QAM      | 19.99 | 20.47 | 20.25 | 20.80              |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 21.59 | 21.51 | 21.51 | 22.30              |
|                       |         | MID       | QPSK       | 21.74 | 21.46 | 21.84 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.47 | 21.67 | 21.57 | 22.30              |
|                       | 8       | LOW       | QPSK       | 21.47 | 21.60 | 21.71 | 22.30              |
|                       |         | MID       | QPSK       | 21.88 | 21.69 | 21.78 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.60 | 21.50 | 21.87 | 22.30              |
|                       | 15      | LOW       | QPSK       | 21.62 | 21.61 | 21.79 | 22.30              |
|                       |         | MID       | Q16        | 21.95 | 21.82 | 21.64 | 22.30              |
|                       |         | HIGH      | Q16        | 21.77 | 22.02 | 21.81 | 22.30              |
| 3                     | 1       | LOW       | Q16        | 21.61 | 21.95 | 21.97 | 22.30              |
|                       |         | MID       | Q16        | 21.01 | 21.20 | 21.34 | 21.80              |
|                       |         | HIGH      | Q16        | 21.13 | 21.24 | 21.15 | 21.80              |
|                       | 8       | LOW       | Q16        | 21.26 | 21.02 | 21.14 | 21.80              |
|                       |         | MID       | Q16        | 21.05 | 21.42 | 21.38 | 21.80              |
|                       |         | HIGH      | Q16        | 21.05 | 21.42 | 21.38 | 21.80              |
|                       | 15      | LOW       | Q16        | 21.05 | 21.42 | 21.38 | 21.80              |
|                       |         | MID       | 64QAM      | 21.59 | 21.68 | 21.23 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.71 | 21.72 | 21.20 | 21.80              |
| 3                     | 1       | LOW       | 64QAM      | 21.28 | 21.52 | 21.27 | 21.80              |
|                       |         | MID       | 64QAM      | 19.90 | 19.85 | 20.17 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.27 | 19.99 | 20.37 | 20.80              |
|                       | 8       | LOW       | 64QAM      | 20.10 | 20.45 | 20.44 | 20.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.45 | 20.44 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.10 | 20.45 | 20.44 | 20.80              |
|                       | 15      | LOW       | 64QAM      | 19.97 | 20.37 | 20.21 | 20.80              |
|                       |         | MID       | 64QAM      | 19.97 | 20.37 | 20.21 | 20.80              |
|                       |         | HIGH      | 64QAM      | 19.97 | 20.37 | 20.21 | 20.80              |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 21.46 | 21.51 | 21.59 | 22.30              |
|                       |         | MID       | QPSK       | 21.69 | 21.74 | 21.86 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.60 | 21.65 | 21.53 | 22.30              |
|                       | 12      | LOW       | QPSK       | 21.45 | 21.69 | 21.69 | 22.30              |
|                       |         | MID       | QPSK       | 21.90 | 21.78 | 21.72 | 22.30              |
|                       |         | HIGH      | QPSK       | 21.64 | 21.70 | 21.85 | 22.30              |
|                       | 25      | LOW       | QPSK       | 21.75 | 21.61 | 21.66 | 22.30              |
|                       |         | MID       | Q16        | 21.71 | 21.64 | 21.64 | 22.30              |
|                       |         | HIGH      | Q16        | 21.71 | 21.91 | 21.85 | 22.30              |
| 5                     | 1       | LOW       | Q16        | 21.92 | 21.93 | 21.86 | 22.30              |
|                       |         | MID       | Q16        | 20.91 | 21.18 | 21.21 | 21.80              |
|                       |         | HIGH      | Q16        | 21.26 | 21.13 | 21.30 | 21.80              |
|                       | 12      | LOW       | Q16        | 21.21 | 21.17 | 21.42 | 21.80              |
|                       |         | MID       | Q16        | 21.13 | 21.25 | 21.36 | 21.80              |
|                       |         | HIGH      | Q16        | 21.13 | 21.25 | 21.36 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.13 | 21.25 | 21.36 | 21.80              |
|                       |         | MID       | 64QAM      | 21.42 | 21.64 | 21.04 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.31 | 21.58 | 21.08 | 21.80              |
| 5                     | 1       | LOW       | 64QAM      | 19.80 | 19.79 | 20.39 | 20.80              |
|                       |         | MID       | 64QAM      | 20.13 | 20.01 | 20.49 | 20.80              |
|                       |         | HIGH      | 64QAM      | 19.88 | 20.51 | 20.30 | 20.80              |
|                       | 12      | LOW       | 64QAM      | 19.88 | 20.51 | 20.30 | 20.80              |
|                       |         | MID       | 64QAM      | 19.88 | 20.51 | 20.30 | 20.80              |
|                       |         | HIGH      | 64QAM      | 19.88 | 20.51 | 20.30 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.19 | 20.35 | 20.05 | 20.80              |
|                       |         | MID       | 64QAM      | 20.19 | 20.35 | 20.05 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.19 | 20.35 | 20.05 | 20.80              |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 21.44 | 21.45 | 21.57 | 22.30              |
|           |         | MID       | QPSK       | 21.43 | 21.59 | 21.62 | 22.30              |
|           |         | HIGH      | QPSK       | 21.70 | 21.69 | 21.75 | 22.30              |
|           | 25      | LOW       | QPSK       | 21.52 | 21.62 | 21.93 | 22.30              |
|           |         | MID       | QPSK       | 21.90 | 21.87 | 21.76 | 22.30              |
|           |         | HIGH      | QPSK       | 21.55 | 21.50 | 21.71 | 22.30              |
|           | 50      | LOW       | QPSK       | 21.55 | 21.72 | 21.77 | 22.30              |
|           |         | LOW       | Q16        | 21.93 | 21.84 | 21.73 | 22.30              |
|           |         | MID       | Q16        | 21.60 | 21.89 | 21.78 | 22.30              |
| 10        | 1       | MID       | Q16        | 21.85 | 21.84 | 21.77 | 22.30              |
|           |         | HIGH      | Q16        | 20.91 | 21.14 | 21.32 | 21.80              |
|           |         | LOW       | Q16        | 21.35 | 21.15 | 21.25 | 21.80              |
|           | 25      | MID       | Q16        | 21.15 | 21.29 | 21.25 | 21.80              |
|           |         | HIGH      | Q16        | 21.18 | 21.12 | 21.32 | 21.80              |
|           |         | LOW       | Q16        | 21.65 | 21.51 | 20.95 | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.60 | 21.79 | 21.37 | 21.80              |
|           |         | MID       | 64QAM      | 21.20 | 21.62 | 21.29 | 21.80              |
|           |         | HIGH      | 64QAM      | 19.66 | 19.75 | 20.35 | 20.80              |
| 10        | 1       | LOW       | 64QAM      | 20.25 | 19.97 | 20.41 | 20.80              |
|           |         | MID       | 64QAM      | 19.96 | 20.41 | 20.16 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.09 | 20.23 | 20.11 | 20.80              |
|           | 25      | LOW       | 64QAM      | 21.59 | 21.29 | 21.31 | 22.30              |
|           |         | MID       | 64QAM      | 21.58 | 21.56 | 21.79 | 22.30              |
|           |         | HIGH      | 64QAM      | 21.66 | 21.41 | 21.72 | 22.30              |
|           | 36      | LOW       | 64QAM      | 21.74 | 21.64 | 21.80 | 22.30              |
|           |         | MID       | 64QAM      | 21.59 | 21.56 | 21.68 | 22.30              |
|           |         | HIGH      | 64QAM      | 21.77 | 21.83 | 21.85 | 22.30              |
| 15        | 1       | LOW       | QPSK       | 21.79 | 21.48 | 21.64 | 22.30              |
|           |         | MID       | Q16        | 21.82 | 21.67 | 21.71 | 22.30              |
|           |         | HIGH      | Q16        | 21.71 | 21.91 | 21.89 | 22.30              |
|           | 36      | LOW       | Q16        | 21.85 | 21.91 | 21.69 | 22.30              |
|           |         | MID       | Q16        | 21.10 | 21.30 | 21.28 | 21.80              |
|           |         | HIGH      | Q16        | 21.24 | 21.24 | 21.32 | 21.80              |
|           | 75      | LOW       | Q16        | 21.09 | 21.10 | 21.40 | 21.80              |
|           |         | MID       | Q16        | 21.03 | 21.16 | 21.32 | 21.80              |
|           |         | HIGH      | Q16        | 21.48 | 21.42 | 20.97 | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 21.51 | 21.51 | 21.27 | 21.80              |
|           |         | MID       | 64QAM      | 21.43 | 21.49 | 21.14 | 21.80              |
|           |         | HIGH      | 64QAM      | 19.86 | 19.79 | 20.13 | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.11 | 20.03 | 20.35 | 20.80              |
|           |         | MID       | 64QAM      | 20.08 | 20.23 | 20.42 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.07 | 20.37 | 20.03 | 20.80              |
|           | 75      | LOW       | 64QAM      | 21.61 | 21.51 | 21.53 | 22.30              |
|           |         | MID       | QPSK       | 21.67 | 21.65 | 21.75 | 22.30              |
|           |         | HIGH      | QPSK       | 21.66 | 21.65 | 21.68 | 22.30              |
| 20        | 1       | LOW       | QPSK       | 21.67 | 21.71 | 21.82 | 22.30              |
|           |         | MID       | QPSK       | 21.81 | 21.76 | 21.85 | 22.30              |
|           |         | HIGH      | QPSK       | 21.75 | 21.74 | 21.78 | 22.30              |
|           | 50      | LOW       | QPSK       | 21.77 | 21.72 | 21.81 | 22.30              |
|           |         | MID       | Q16        | 21.86 | 21.84 | 21.75 | 22.30              |
|           |         | HIGH      | Q16        | 21.84 | 22.04 | 21.96 | 22.30              |
|           | 100     | LOW       | Q16        | 21.81 | 21.95 | 21.86 | 22.30              |
|           |         | MID       | Q16        | 21.14 | 21.22 | 21.32 | 21.80              |
|           |         | HIGH      | Q16        | 21.24 | 21.30 | 21.36 | 21.80              |
| 20        | 1       | LOW       | Q16        | 21.32 | 21.25 | 21.38 | 21.80              |
|           |         | MID       | Q16        | 21.24 | 21.31 | 21.32 | 21.80              |
|           |         | HIGH      | Q16        | 21.59 | 21.64 | 21.12 | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.62 | 21.68 | 21.31 | 21.80              |
|           |         | MID       | 64QAM      | 21.37 | 21.58 | 21.29 | 21.80              |
|           |         | HIGH      | 64QAM      | 19.86 | 19.95 | 20.31 | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.25 | 20.03 | 20.45 | 20.80              |
|           |         | MID       | 64QAM      | 20.04 | 20.41 | 20.38 | 20.80              |
|           |         | HIGH      | 64QAM      | 20.19 | 20.45 | 20.19 | 20.80              |

| LTE B4-State 5 -Ant.0 |         |           |            |       |       |       |                    |       |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |       |
| 1.4                   | 1       | LOW       | QPSK       | 19.44 | 19.46 | 19.52 | 20.30              |       |
|                       |         | MID       | QPSK       | 19.75 | 19.65 | 19.60 | 20.30              |       |
|                       |         | HIGH      | QPSK       | 19.60 | 19.67 | 19.73 | 20.30              |       |
|                       | 3       | LOW       | QPSK       | 19.73 | 19.72 | 19.80 | 20.30              |       |
|                       |         | MID       | QPSK       | 19.85 | 19.70 | 19.73 | 20.30              |       |
|                       |         | HIGH      | QPSK       | 19.55 | 19.69 | 19.65 | 20.30              |       |
|                       | 6       | LOW       | QPSK       | 19.69 | 19.62 | 19.92 | 20.30              |       |
|                       | 1.4     | 1         | LOW        | Q16   | 19.86 | 19.92 | 19.76              | 20.30 |
|                       |         |           | MID        | Q16   | 19.80 | 19.91 | 19.83              | 20.30 |
| HIGH                  |         |           | Q16        | 19.91 | 19.91 | 19.56 | 20.30              |       |
| 3                     |         | LOW       | Q16        | 19.63 | 19.53 | 19.91 | 20.30              |       |
|                       | MID     | Q16       | 19.77      | 19.68 | 19.89 | 20.30 |                    |       |
|                       | HIGH    | Q16       | 19.80      | 19.67 | 19.84 | 20.30 |                    |       |
| 6                     | LOW     | Q16       | 19.76      | 19.79 | 19.77 | 20.30 |                    |       |
| 1.4                   | 1       | LOW       | 64QAM      | 19.56 | 19.82 | 19.42 | 20.30              |       |
|                       |         | MID       | 64QAM      | 19.90 | 19.83 | 19.89 | 20.30              |       |
|                       |         | HIGH      | 64QAM      | 19.65 | 19.69 | 19.66 | 20.30              |       |
|                       | 3       | LOW       | 64QAM      | 19.53 | 19.45 | 19.85 | 20.30              |       |
|                       |         | MID       | 64QAM      | 19.83 | 19.64 | 19.63 | 20.30              |       |
|                       |         | HIGH      | 64QAM      | 19.72 | 19.59 | 19.78 | 20.30              |       |
|                       | 6       | LOW       | 64QAM      | 19.78 | 19.63 | 19.69 | 20.30              |       |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |       |
| 3                     | 1       | LOW       | QPSK       | 19.54 | 19.50 | 19.40 | 20.30              |       |
|                       |         | MID       | QPSK       | 19.55 | 19.51 | 19.80 | 20.30              |       |
|                       |         | HIGH      | QPSK       | 19.50 | 19.55 | 19.47 | 20.30              |       |
|                       | 8       | LOW       | QPSK       | 19.53 | 19.72 | 19.54 | 20.30              |       |
|                       |         | MID       | QPSK       | 19.81 | 19.80 | 19.89 | 20.30              |       |
|                       |         | HIGH      | QPSK       | 19.61 | 19.51 | 19.71 | 20.30              |       |
|                       | 15      | LOW       | QPSK       | 19.75 | 19.78 | 19.74 | 20.30              |       |
| 3                     | 1       | LOW       | Q16        | 19.92 | 19.90 | 19.68 | 20.30              |       |
|                       |         | MID       | Q16        | 19.88 | 19.83 | 19.81 | 20.30              |       |
|                       |         | HIGH      | Q16        | 19.73 | 20.03 | 19.66 | 20.30              |       |
|                       | 8       | LOW       | Q16        | 19.51 | 19.55 | 19.79 | 20.30              |       |
|                       |         | MID       | Q16        | 19.75 | 19.68 | 19.81 | 20.30              |       |
|                       |         | HIGH      | Q16        | 19.92 | 19.51 | 19.80 | 20.30              |       |
|                       | 15      | LOW       | Q16        | 19.66 | 19.65 | 19.89 | 20.30              |       |
| 3                     | 1       | LOW       | 64QAM      | 19.64 | 19.62 | 19.34 | 20.30              |       |
|                       |         | MID       | 64QAM      | 19.94 | 19.75 | 20.01 | 20.30              |       |
|                       |         | HIGH      | 64QAM      | 19.51 | 19.63 | 19.44 | 20.30              |       |
|                       | 8       | LOW       | 64QAM      | 19.63 | 19.55 | 19.75 | 20.30              |       |
|                       |         | MID       | 64QAM      | 19.79 | 19.36 | 19.61 | 20.30              |       |
|                       |         | HIGH      | 64QAM      | 19.44 | 19.45 | 19.82 | 20.30              |       |
|                       | 15      | LOW       | 64QAM      | 19.90 | 19.59 | 19.65 | 20.30              |       |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |       |
| 5                     | 1       | LOW       | QPSK       | 19.62 | 19.42 | 19.48 | 20.30              |       |
|                       |         | MID       | QPSK       | 19.51 | 19.75 | 19.54 | 20.30              |       |
|                       |         | HIGH      | QPSK       | 19.68 | 19.55 | 19.73 | 20.30              |       |
|                       | 12      | LOW       | QPSK       | 19.57 | 19.54 | 19.64 | 20.30              |       |
|                       |         | MID       | QPSK       | 19.73 | 19.76 | 19.73 | 20.30              |       |
|                       |         | HIGH      | QPSK       | 19.57 | 19.73 | 19.45 | 20.30              |       |
|                       | 25      | LOW       | QPSK       | 19.69 | 19.62 | 19.68 | 20.30              |       |
| 5                     | 1       | LOW       | Q16        | 19.92 | 19.68 | 19.54 | 20.30              |       |
|                       |         | MID       | Q16        | 19.70 | 20.03 | 19.87 | 20.30              |       |
|                       |         | HIGH      | Q16        | 19.77 | 19.95 | 19.80 | 20.30              |       |
|                       | 12      | LOW       | Q16        | 19.51 | 19.77 | 19.89 | 20.30              |       |
|                       |         | MID       | Q16        | 19.73 | 19.84 | 19.65 | 20.30              |       |
|                       |         | HIGH      | Q16        | 19.70 | 19.71 | 19.94 | 20.30              |       |
|                       | 25      | LOW       | Q16        | 19.68 | 19.63 | 19.79 | 20.30              |       |
| 5                     | 1       | LOW       | 64QAM      | 19.68 | 19.84 | 19.36 | 20.30              |       |
|                       |         | MID       | 64QAM      | 19.78 | 19.89 | 19.85 | 20.30              |       |
|                       |         | HIGH      | 64QAM      | 19.57 | 19.59 | 19.44 | 20.30              |       |
|                       | 12      | LOW       | 64QAM      | 19.41 | 19.43 | 19.75 | 20.30              |       |
|                       |         | MID       | 64QAM      | 19.83 | 19.62 | 19.41 | 20.30              |       |
|                       |         | HIGH      | 64QAM      | 19.62 | 19.57 | 19.76 | 20.30              |       |
|                       | 25      | LOW       | 64QAM      | 19.88 | 19.43 | 19.61 | 20.30              |       |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 19.70 | 19.54 | 19.48 | 20.30              |
|           |         | MID       | QPSK       | 19.53 | 19.69 | 19.80 | 20.30              |
|           |         | HIGH      | QPSK       | 19.72 | 19.55 | 19.49 | 20.30              |
|           | 25      | LOW       | QPSK       | 19.59 | 19.52 | 19.68 | 20.30              |
|           |         | MID       | QPSK       | 19.65 | 19.80 | 19.59 | 20.30              |
|           |         | HIGH      | QPSK       | 19.65 | 19.61 | 19.55 | 20.30              |
|           | 50      | LOW       | QPSK       | 19.79 | 19.48 | 19.70 | 20.30              |
|           |         | LOW       | Q16        | 19.94 | 19.88 | 19.74 | 20.30              |
|           |         | MID       | Q16        | 19.64 | 20.09 | 19.93 | 20.30              |
| 10        | 1       | MID       | Q16        | 19.87 | 19.87 | 19.66 | 20.30              |
|           |         | HIGH      | Q16        | 19.39 | 19.73 | 19.75 | 20.30              |
|           |         | LOW       | Q16        | 19.69 | 19.78 | 19.81 | 20.30              |
|           | 25      | MID       | Q16        | 19.60 | 19.51 | 19.62 | 20.30              |
|           |         | HIGH      | Q16        | 19.58 | 19.63 | 19.83 | 20.30              |
|           |         | LOW       | Q16        | 19.58 | 19.63 | 19.83 | 20.30              |
|           | 50      | LOW       | Q16        | 19.64 | 19.62 | 19.52 | 20.30              |
|           |         | MID       | Q16        | 19.98 | 19.59 | 19.83 | 20.30              |
|           |         | HIGH      | Q16        | 19.73 | 19.73 | 19.68 | 20.30              |
| 10        | 1       | LOW       | 64QAM      | 19.69 | 19.41 | 19.91 | 20.30              |
|           |         | MID       | 64QAM      | 19.91 | 19.50 | 19.43 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.44 | 19.51 | 19.82 | 20.30              |
|           | 25      | LOW       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 19.70 | 19.42 | 19.58 | 20.30              |
|           |         | MID       | QPSK       | 19.57 | 19.51 | 19.82 | 20.30              |
|           |         | HIGH      | QPSK       | 19.44 | 19.59 | 19.73 | 20.30              |
|           | 36      | LOW       | QPSK       | 19.55 | 19.50 | 19.60 | 20.30              |
|           |         | MID       | QPSK       | 19.57 | 19.60 | 19.81 | 20.30              |
|           |         | HIGH      | QPSK       | 19.65 | 19.53 | 19.47 | 20.30              |
|           | 75      | LOW       | QPSK       | 19.83 | 19.50 | 19.78 | 20.30              |
|           |         | LOW       | Q16        | 19.74 | 19.72 | 19.46 | 20.30              |
|           |         | MID       | Q16        | 19.78 | 19.97 | 19.79 | 20.30              |
| 15        | 1       | HIGH      | Q16        | 19.67 | 19.85 | 19.74 | 20.30              |
|           |         | LOW       | Q16        | 19.41 | 19.49 | 19.69 | 20.30              |
|           |         | MID       | Q16        | 19.59 | 19.70 | 19.87 | 20.30              |
|           | 36      | MID       | Q16        | 19.59 | 19.70 | 19.87 | 20.30              |
|           |         | HIGH      | Q16        | 19.64 | 19.69 | 19.78 | 20.30              |
|           |         | LOW       | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
|           | 75      | LOW       | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
|           |         | MID       | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
|           |         | HIGH      | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
| 15        | 1       | LOW       | 64QAM      | 19.64 | 19.70 | 19.48 | 20.30              |
|           |         | MID       | 64QAM      | 19.86 | 19.71 | 20.03 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.67 | 19.75 | 19.42 | 20.30              |
|           | 36      | LOW       | 64QAM      | 19.69 | 19.45 | 19.95 | 20.30              |
|           |         | MID       | 64QAM      | 19.61 | 19.56 | 19.51 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.54 | 19.53 | 19.50 | 20.30              |
|           | 75      | LOW       | 64QAM      | 19.58 | 19.37 | 19.73 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.37 | 19.73 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.58 | 19.37 | 19.73 | 20.30              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 19.60 | 19.50 | 19.50 | 20.30              |
|           |         | MID       | QPSK       | 19.67 | 19.65 | 19.72 | 20.30              |
|           |         | HIGH      | QPSK       | 19.62 | 19.61 | 19.63 | 20.30              |
|           | 50      | LOW       | QPSK       | 19.65 | 19.68 | 19.76 | 20.30              |
|           |         | MID       | QPSK       | 19.77 | 19.74 | 19.79 | 20.30              |
|           |         | HIGH      | QPSK       | 19.73 | 19.73 | 19.63 | 20.30              |
|           | 100     | LOW       | QPSK       | 19.79 | 19.70 | 19.82 | 20.30              |
|           |         | LOW       | Q16        | 19.84 | 19.84 | 19.66 | 20.30              |
|           |         | MID       | Q16        | 19.84 | 20.01 | 19.89 | 20.30              |
| 20        | 1       | HIGH      | Q16        | 19.81 | 19.93 | 19.76 | 20.30              |
|           |         | LOW       | Q16        | 19.59 | 19.69 | 19.81 | 20.30              |
|           |         | MID       | Q16        | 19.75 | 19.78 | 19.81 | 20.30              |
|           | 50      | HIGH      | Q16        | 19.82 | 19.73 | 19.84 | 20.30              |
|           |         | LOW       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           |         | MID       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           | 100     | LOW       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           |         | MID       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           |         | HIGH      | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
| 20        | 1       | LOW       | 64QAM      | 19.72 | 19.80 | 19.52 | 20.30              |
|           |         | MID       | 64QAM      | 19.92 | 19.79 | 19.97 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.69 | 19.71 | 19.60 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.63 | 19.59 | 19.85 | 20.30              |
|           |         | MID       | 64QAM      | 19.83 | 19.58 | 19.63 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.66 | 19.61 | 19.72 | 20.30              |
|           | 100     | LOW       | 64QAM      | 19.80 | 19.53 | 19.81 | 20.30              |
|           |         | MID       | 64QAM      | 19.80 | 19.53 | 19.81 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.80 | 19.53 | 19.81 | 20.30              |

| LTE B4-State 6 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 19957 | 20175 | 20393 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 19.44 | 19.46 | 19.52 | 20.30              |
|                       |         | MID       | QPSK       | 19.75 | 19.65 | 19.60 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.60 | 19.67 | 19.73 | 20.30              |
|                       | 3       | LOW       | QPSK       | 19.73 | 19.72 | 19.80 | 20.30              |
|                       |         | MID       | QPSK       | 19.85 | 19.70 | 19.73 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.55 | 19.69 | 19.65 | 20.30              |
|                       | 6       | LOW       | QPSK       | 19.69 | 19.62 | 19.92 | 20.30              |
|                       | 1.4     | LOW       | Q16        | 19.86 | 19.92 | 19.76 | 20.30              |
|                       |         | MID       | Q16        | 19.80 | 19.91 | 19.83 | 20.30              |
|                       |         | HIGH      | Q16        | 19.91 | 19.91 | 19.56 | 20.30              |
|                       |         | LOW       | Q16        | 19.63 | 19.53 | 19.91 | 20.30              |
|                       |         | MID       | Q16        | 19.77 | 19.68 | 19.89 | 20.30              |
|                       |         | HIGH      | Q16        | 19.80 | 19.67 | 19.84 | 20.30              |
| 1.4                   | 1       | LOW       | Q16        | 19.76 | 19.79 | 19.77 | 20.30              |
|                       |         | MID       | 64QAM      | 19.56 | 19.82 | 19.42 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.90 | 19.83 | 19.89 | 20.30              |
|                       | 3       | LOW       | 64QAM      | 19.65 | 19.69 | 19.66 | 20.30              |
|                       |         | MID       | 64QAM      | 19.53 | 19.45 | 19.85 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.83 | 19.64 | 19.63 | 20.30              |
|                       | 6       | LOW       | 64QAM      | 19.72 | 19.59 | 19.78 | 20.30              |
|                       |         | MID       | 64QAM      | 19.80 | 19.63 | 19.69 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.78 | 19.63 | 19.69 | 20.30              |
| Bandwidth             | RB Size | RB offset | Modulation | 19965 | 20175 | 20385 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 19.54 | 19.50 | 19.40 | 20.30              |
|                       |         | MID       | QPSK       | 19.55 | 19.51 | 19.80 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.50 | 19.55 | 19.47 | 20.30              |
|                       | 8       | LOW       | QPSK       | 19.53 | 19.72 | 19.54 | 20.30              |
|                       |         | MID       | QPSK       | 19.81 | 19.80 | 19.89 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.61 | 19.51 | 19.71 | 20.30              |
|                       | 15      | LOW       | QPSK       | 19.75 | 19.78 | 19.74 | 20.30              |
|                       |         | MID       | Q16        | 19.92 | 19.90 | 19.68 | 20.30              |
|                       |         | HIGH      | Q16        | 19.88 | 19.83 | 19.81 | 20.30              |
| 3                     | 1       | MID       | Q16        | 19.73 | 20.03 | 19.66 | 20.30              |
|                       |         | LOW       | Q16        | 19.51 | 19.55 | 19.79 | 20.30              |
|                       |         | HIGH      | Q16        | 19.75 | 19.68 | 19.81 | 20.30              |
|                       | 8       | LOW       | Q16        | 19.92 | 19.51 | 19.80 | 20.30              |
|                       |         | MID       | Q16        | 19.66 | 19.65 | 19.89 | 20.30              |
|                       |         | HIGH      | Q16        | 19.66 | 19.65 | 19.89 | 20.30              |
|                       | 15      | LOW       | 64QAM      | 19.64 | 19.62 | 19.34 | 20.30              |
|                       |         | MID       | 64QAM      | 19.94 | 19.75 | 20.01 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.51 | 19.63 | 19.44 | 20.30              |
| 3                     | 1       | LOW       | 64QAM      | 19.63 | 19.55 | 19.75 | 20.30              |
|                       |         | MID       | 64QAM      | 19.79 | 19.36 | 19.61 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.44 | 19.45 | 19.82 | 20.30              |
|                       | 8       | LOW       | 64QAM      | 19.90 | 19.59 | 19.65 | 20.30              |
|                       |         | MID       | 64QAM      | 19.90 | 19.59 | 19.65 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.90 | 19.59 | 19.65 | 20.30              |
|                       | 15      | LOW       | 64QAM      | 19.90 | 19.59 | 19.65 | 20.30              |
|                       |         | MID       | 64QAM      | 19.90 | 19.59 | 19.65 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.90 | 19.59 | 19.65 | 20.30              |
| Bandwidth             | RB Size | RB offset | Modulation | 19975 | 20175 | 20375 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.62 | 19.42 | 19.48 | 20.30              |
|                       |         | MID       | QPSK       | 19.51 | 19.75 | 19.54 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.68 | 19.55 | 19.73 | 20.30              |
|                       | 12      | LOW       | QPSK       | 19.57 | 19.54 | 19.64 | 20.30              |
|                       |         | MID       | QPSK       | 19.73 | 19.76 | 19.73 | 20.30              |
|                       |         | HIGH      | QPSK       | 19.57 | 19.73 | 19.45 | 20.30              |
|                       | 25      | LOW       | QPSK       | 19.69 | 19.62 | 19.68 | 20.30              |
|                       |         | MID       | Q16        | 19.92 | 19.68 | 19.54 | 20.30              |
|                       |         | HIGH      | Q16        | 19.70 | 20.03 | 19.67 | 20.30              |
| 5                     | 1       | LOW       | Q16        | 19.77 | 19.95 | 19.80 | 20.30              |
|                       |         | MID       | Q16        | 19.51 | 19.77 | 19.89 | 20.30              |
|                       |         | HIGH      | Q16        | 19.73 | 19.84 | 19.65 | 20.30              |
|                       | 12      | LOW       | Q16        | 19.70 | 19.71 | 19.94 | 20.30              |
|                       |         | MID       | Q16        | 19.68 | 19.63 | 19.79 | 20.30              |
|                       |         | HIGH      | Q16        | 19.68 | 19.63 | 19.79 | 20.30              |
|                       | 25      | LOW       | 64QAM      | 19.68 | 19.84 | 19.36 | 20.30              |
|                       |         | MID       | 64QAM      | 19.78 | 19.89 | 19.85 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.57 | 19.59 | 19.44 | 20.30              |
| 5                     | 1       | LOW       | 64QAM      | 19.41 | 19.43 | 19.75 | 20.30              |
|                       |         | MID       | 64QAM      | 19.83 | 19.62 | 19.41 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.62 | 19.57 | 19.76 | 20.30              |
|                       | 12      | LOW       | 64QAM      | 19.88 | 19.43 | 19.61 | 20.30              |
|                       |         | MID       | 64QAM      | 19.88 | 19.43 | 19.61 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.88 | 19.43 | 19.61 | 20.30              |
|                       | 25      | LOW       | 64QAM      | 19.88 | 19.43 | 19.61 | 20.30              |
|                       |         | MID       | 64QAM      | 19.88 | 19.43 | 19.61 | 20.30              |
|                       |         | HIGH      | 64QAM      | 19.88 | 19.43 | 19.61 | 20.30              |

| Bandwidth | RB Size | RB offset | Modulation | 20000 | 20175 | 20350 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|-------|-------|-------|--------------------|
| 10        | 1       | LOW       | QPSK       | 19.70 | 19.54 | 19.48 | 20.30              |
|           |         | MID       | QPSK       | 19.53 | 19.69 | 19.80 | 20.30              |
|           |         | HIGH      | QPSK       | 19.72 | 19.55 | 19.49 | 20.30              |
|           | 25      | LOW       | QPSK       | 19.59 | 19.52 | 19.68 | 20.30              |
|           |         | MID       | QPSK       | 19.65 | 19.80 | 19.59 | 20.30              |
|           |         | HIGH      | QPSK       | 19.65 | 19.61 | 19.55 | 20.30              |
|           | 50      | LOW       | QPSK       | 19.79 | 19.48 | 19.70 | 20.30              |
|           |         | LOW       | Q16        | 19.94 | 19.88 | 19.74 | 20.30              |
|           |         | MID       | Q16        | 19.64 | 20.09 | 19.93 | 20.30              |
| 10        | 1       | MID       | Q16        | 19.87 | 19.87 | 19.66 | 20.30              |
|           |         | HIGH      | Q16        | 19.39 | 19.73 | 19.75 | 20.30              |
|           |         | LOW       | Q16        | 19.69 | 19.78 | 19.81 | 20.30              |
|           | 25      | MID       | Q16        | 19.60 | 19.51 | 19.62 | 20.30              |
|           |         | HIGH      | Q16        | 19.58 | 19.63 | 19.83 | 20.30              |
|           |         | LOW       | Q16        | 19.58 | 19.63 | 19.83 | 20.30              |
|           | 50      | LOW       | Q16        | 19.64 | 19.62 | 19.52 | 20.30              |
|           |         | MID       | Q16        | 19.98 | 19.59 | 19.83 | 20.30              |
|           |         | HIGH      | Q16        | 19.73 | 19.73 | 19.68 | 20.30              |
| 10        | 1       | LOW       | 64QAM      | 19.69 | 19.41 | 19.91 | 20.30              |
|           |         | MID       | 64QAM      | 19.91 | 19.50 | 19.43 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.44 | 19.51 | 19.82 | 20.30              |
|           | 25      | LOW       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | MID       | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.68 | 19.55 | 19.59 | 20.30              |
| Bandwidth | RB Size | RB offset | Modulation | 20025 | 20175 | 20325 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 19.70 | 19.42 | 19.58 | 20.30              |
|           |         | MID       | QPSK       | 19.57 | 19.51 | 19.82 | 20.30              |
|           |         | HIGH      | QPSK       | 19.44 | 19.59 | 19.73 | 20.30              |
|           | 36      | LOW       | QPSK       | 19.55 | 19.50 | 19.60 | 20.30              |
|           |         | MID       | QPSK       | 19.57 | 19.60 | 19.81 | 20.30              |
|           |         | HIGH      | QPSK       | 19.65 | 19.53 | 19.47 | 20.30              |
|           | 75      | LOW       | QPSK       | 19.83 | 19.50 | 19.78 | 20.30              |
|           |         | LOW       | Q16        | 19.74 | 19.72 | 19.46 | 20.30              |
|           |         | MID       | Q16        | 19.78 | 19.97 | 19.79 | 20.30              |
| 15        | 1       | HIGH      | Q16        | 19.67 | 19.85 | 19.74 | 20.30              |
|           |         | LOW       | Q16        | 19.41 | 19.49 | 19.69 | 20.30              |
|           |         | MID       | Q16        | 19.59 | 19.70 | 19.87 | 20.30              |
|           | 36      | HIGH      | Q16        | 19.64 | 19.69 | 19.78 | 20.30              |
|           |         | LOW       | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
|           |         | MID       | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
|           | 75      | LOW       | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
|           |         | MID       | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
|           |         | HIGH      | Q16        | 19.54 | 19.75 | 19.83 | 20.30              |
| 15        | 1       | LOW       | 64QAM      | 19.64 | 19.70 | 19.48 | 20.30              |
|           |         | MID       | 64QAM      | 19.86 | 19.71 | 20.03 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.67 | 19.75 | 19.42 | 20.30              |
|           | 36      | LOW       | 64QAM      | 19.69 | 19.45 | 19.95 | 20.30              |
|           |         | MID       | 64QAM      | 19.61 | 19.56 | 19.51 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.54 | 19.53 | 19.50 | 20.30              |
|           | 75      | LOW       | 64QAM      | 19.58 | 19.37 | 19.73 | 20.30              |
|           |         | MID       | 64QAM      | 19.58 | 19.37 | 19.73 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.58 | 19.37 | 19.73 | 20.30              |
| Bandwidth | RB Size | RB offset | Modulation | 20050 | 20175 | 20300 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 19.60 | 19.50 | 19.50 | 20.30              |
|           |         | MID       | QPSK       | 19.67 | 19.65 | 19.72 | 20.30              |
|           |         | HIGH      | QPSK       | 19.62 | 19.61 | 19.63 | 20.30              |
|           | 50      | LOW       | QPSK       | 19.65 | 19.68 | 19.76 | 20.30              |
|           |         | MID       | QPSK       | 19.77 | 19.74 | 19.79 | 20.30              |
|           |         | HIGH      | QPSK       | 19.73 | 19.73 | 19.63 | 20.30              |
|           | 100     | LOW       | QPSK       | 19.79 | 19.70 | 19.82 | 20.30              |
|           |         | LOW       | Q16        | 19.84 | 19.84 | 19.66 | 20.30              |
|           |         | MID       | Q16        | 19.84 | 20.01 | 19.89 | 20.30              |
| 20        | 1       | HIGH      | Q16        | 19.81 | 19.93 | 19.76 | 20.30              |
|           |         | LOW       | Q16        | 19.59 | 19.69 | 19.81 | 20.30              |
|           |         | MID       | Q16        | 19.75 | 19.78 | 19.81 | 20.30              |
|           | 50      | HIGH      | Q16        | 19.82 | 19.73 | 19.84 | 20.30              |
|           |         | LOW       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           |         | MID       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           | 100     | LOW       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           |         | MID       | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
|           |         | HIGH      | Q16        | 19.76 | 19.75 | 19.79 | 20.30              |
| 20        | 1       | LOW       | 64QAM      | 19.72 | 19.80 | 19.52 | 20.30              |
|           |         | MID       | 64QAM      | 19.92 | 19.79 | 19.97 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.69 | 19.71 | 19.60 | 20.30              |
|           | 50      | LOW       | 64QAM      | 19.63 | 19.59 | 19.85 | 20.30              |
|           |         | MID       | 64QAM      | 19.83 | 19.58 | 19.63 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.66 | 19.61 | 19.72 | 20.30              |
|           | 100     | LOW       | 64QAM      | 19.80 | 19.53 | 19.81 | 20.30              |
|           |         | MID       | 64QAM      | 19.80 | 19.53 | 19.81 | 20.30              |
|           |         | HIGH      | 64QAM      | 19.80 | 19.53 | 19.81 | 20.30              |

### 8.3.3 LTE Band5 Output Power

BL-SZ2220432-701

| LTE B5-State 1 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 21.39 | 21.26 | 21.18 | 22.80              |
|                       |         | MID       | QPSK       | 21.71 | 21.53 | 21.36 | 22.80              |
|                       |         | HIGH      | QPSK       | 21.61 | 21.75 | 21.58 | 22.80              |
|                       | 3       | LOW       | QPSK       | 22.46 | 22.58 | 22.62 | 22.80              |
|                       |         | MID       | QPSK       | 22.62 | 22.44 | 22.33 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.59 | 22.52 | 22.31 | 22.80              |
|                       | 6       | LOW       | QPSK       | 21.41 | 21.70 | 21.56 | 22.80              |
| 1.4                   | 1       | LOW       | Q16        | 21.38 | 21.45 | 21.51 | 22.80              |
|                       |         | MID       | Q16        | 21.23 | 21.70 | 21.32 | 22.80              |
|                       |         | HIGH      | Q16        | 21.27 | 21.94 | 21.37 | 22.80              |
|                       | 3       | LOW       | Q16        | 22.64 | 22.55 | 22.13 | 22.80              |
|                       |         | MID       | Q16        | 22.50 | 22.59 | 22.52 | 22.80              |
|                       |         | HIGH      | Q16        | 22.74 | 22.39 | 22.42 | 22.80              |
|                       | 6       | LOW       | Q16        | 21.52 | 21.38 | 21.55 | 22.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.63 | 21.34 | 21.42 | 22.80              |
|                       |         | MID       | 64QAM      | 21.42 | 21.99 | 21.46 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.15 | 21.46 | 21.56 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.60 | 21.56 | 21.42 | 22.80              |
|                       |         | MID       | 64QAM      | 21.77 | 21.37 | 21.56 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.51 | 21.51 | 21.71 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.73 | 20.64 | 20.18 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 21.49 | 21.26 | 21.18 | 22.80              |
|                       |         | MID       | QPSK       | 21.47 | 21.70 | 21.49 | 22.80              |
|                       |         | HIGH      | QPSK       | 21.76 | 21.53 | 21.60 | 22.80              |
|                       | 8       | LOW       | QPSK       | 21.72 | 21.36 | 21.31 | 22.80              |
|                       |         | MID       | QPSK       | 21.67 | 21.35 | 21.26 | 22.80              |
|                       |         | HIGH      | QPSK       | 21.66 | 21.65 | 21.33 | 22.80              |
|                       | 15      | LOW       | QPSK       | 21.41 | 21.53 | 21.32 | 22.80              |
| 3                     | 1       | LOW       | Q16        | 21.29 | 21.56 | 21.34 | 22.80              |
|                       |         | MID       | Q16        | 21.34 | 21.66 | 21.65 | 22.80              |
|                       |         | HIGH      | Q16        | 21.23 | 21.98 | 21.50 | 22.80              |
|                       | 8       | LOW       | Q16        | 21.79 | 21.57 | 21.36 | 22.80              |
|                       |         | MID       | Q16        | 21.46 | 21.68 | 21.46 | 22.80              |
|                       |         | HIGH      | Q16        | 21.66 | 21.32 | 21.33 | 22.80              |
|                       | 15      | LOW       | Q16        | 21.65 | 21.34 | 21.42 | 22.80              |
| 3                     | 1       | LOW       | 64QAM      | 21.53 | 21.54 | 21.38 | 22.80              |
|                       |         | MID       | 64QAM      | 21.44 | 21.88 | 21.56 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.04 | 21.50 | 21.50 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.47 | 20.50 | 20.10 | 21.80              |
|                       |         | MID       | 64QAM      | 20.79 | 20.48 | 20.64 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.67 | 20.65 | 20.81 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.79 | 20.51 | 20.22 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 21.41      | 21.52 | 21.20 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.66      | 21.60 | 21.38 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.54      | 21.59 | 21.37 | 22.80              |                    |
|                 | 12              | LOW       | QPSK       | 21.46      | 21.64 | 21.47 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.36      | 21.59 | 21.52 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.66      | 21.48 | 21.42 | 22.80              |                    |
|                 | 25              | LOW       | QPSK       | 21.60      | 21.40 | 21.60 | 22.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 21.51 | 21.60 | 21.62              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.34 | 21.75 | 21.58              | 22.80              |
| HIGH            |                 |           | Q16        | 21.29      | 21.79 | 21.37 | 22.80              |                    |
| 12              |                 | LOW       | Q16        | 21.82      | 21.48 | 21.45 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.55      | 21.42 | 21.28 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.57      | 21.52 | 21.49 | 22.80              |                    |
| 25              | LOW             | Q16       | 21.59      | 21.55      | 21.40 | 22.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 21.33      | 21.34 | 21.42 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.23      | 21.77 | 21.74 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.10      | 21.59 | 21.31 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.43      | 20.56 | 20.20 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.71      | 20.58 | 20.52 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.65      | 20.39 | 20.56 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.71      | 20.66 | 20.32 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 21.43 | 21.41 | 21.37              | 22.80              |
| MID             |                 |           | QPSK       | 21.62      | 21.64 | 21.49 | 22.80              |                    |
| HIGH            |                 |           | QPSK       | 21.65      | 21.68 | 21.56 | 22.80              |                    |
| 25              |                 | LOW       | QPSK       | 21.63      | 21.60 | 21.53 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.58      | 21.57 | 21.50 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.55      | 21.65 | 21.44 | 22.80              |                    |
| 50              |                 | LOW       | QPSK       | 21.56      | 21.64 | 21.56 | 22.80              |                    |
| 10              | 1               | LOW       | Q16        | 21.51      | 21.60 | 21.51 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.38      | 21.88 | 21.56 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.23      | 21.94 | 21.48 | 22.80              |                    |
|                 | 25              | LOW       | Q16        | 21.75      | 21.72 | 21.34 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.61      | 21.57 | 21.52 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.70      | 21.56 | 21.55 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.61      | 21.53 | 21.44 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.57 | 21.45 | 21.42              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.38 | 21.95 | 21.65              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.23      | 21.70 | 21.50 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.64      | 20.52 | 20.32 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.81      | 20.58 | 20.54 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.65      | 20.55 | 20.75 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.73      | 20.68 | 20.38 | 21.80              |                    |

| LTE B5-State 2 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 20.23 | 20.45 | 20.01 | 21.80              |
|                       |         | MID       | QPSK       | 20.33 | 20.39 | 20.07 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.54 | 20.66 | 20.64 | 21.80              |
|                       | 3       | LOW       | QPSK       | 20.17 | 20.35 | 20.51 | 21.80              |
|                       |         | MID       | QPSK       | 20.33 | 20.45 | 20.39 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.27 | 20.47 | 20.60 | 21.80              |
|                       | 6       | LOW       | QPSK       | 20.31 | 20.40 | 20.23 | 21.80              |
|                       | 1.4     | LOW       | Q16        | 20.22 | 20.18 | 20.27 | 21.80              |
|                       |         | MID       | Q16        | 20.24 | 20.42 | 20.74 | 21.80              |
|                       |         | HIGH      | Q16        | 19.93 | 20.66 | 20.02 | 21.80              |
|                       |         | LOW       | Q16        | 20.78 | 20.75 | 20.20 | 21.80              |
|                       |         | MID       | Q16        | 20.10 | 20.62 | 20.43 | 21.80              |
|                       |         | HIGH      | Q16        | 20.21 | 20.26 | 20.07 | 21.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 20.18 | 20.26 | 20.23 | 21.80              |
|                       |         | MID       | 64QAM      | 20.26 | 20.26 | 20.60 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.34 | 20.48 | 20.02 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 20.96 | 20.73 | 20.08 | 21.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.60 | 20.27 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.34 | 20.02 | 20.31 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 20.59 | 20.61 | 20.26 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 20.15 | 20.45 | 20.07 | 21.80              |
|                       |         | MID       | QPSK       | 20.23 | 20.43 | 20.33 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.46 | 20.58 | 20.58 | 21.80              |
|                       | 8       | LOW       | QPSK       | 20.27 | 20.49 | 20.45 | 21.80              |
|                       |         | MID       | QPSK       | 20.21 | 20.65 | 20.55 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.34 | 20.54 | 20.62 | 21.80              |
|                       | 15      | LOW       | QPSK       | 20.27 | 20.44 | 20.47 | 21.80              |
|                       | 3       | LOW       | Q16        | 20.16 | 20.34 | 20.05 | 21.80              |
|                       |         | MID       | Q16        | 20.16 | 20.42 | 20.54 | 21.80              |
|                       |         | HIGH      | Q16        | 19.89 | 20.58 | 20.12 | 21.80              |
|                       |         | LOW       | Q16        | 20.53 | 20.69 | 20.16 | 21.80              |
|                       |         | MID       | Q16        | 20.30 | 20.54 | 20.51 | 21.80              |
|                       |         | HIGH      | Q16        | 20.13 | 20.00 | 20.25 | 21.80              |
| 3                     | 1       | LOW       | Q16        | 20.77 | 20.52 | 20.16 | 21.80              |
|                       |         | LOW       | 64QAM      | 19.98 | 20.20 | 20.23 | 21.80              |
|                       |         | MID       | 64QAM      | 20.30 | 20.30 | 20.49 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.11 | 20.54 | 19.96 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.76 | 20.52 | 20.06 | 21.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.44 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.01 | 20.00 | 20.09 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.47 | 20.44 | 20.14 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 20.17      | 20.57 | 20.27 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.27      | 20.41 | 20.23 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.50      | 20.41 | 20.64 | 21.80              |                    |
|                 | 12              | LOW       | QPSK       | 20.21      | 20.39 | 20.21 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.45      | 20.63 | 20.55 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.48      | 20.45 | 20.60 | 21.80              |                    |
|                 | 25              | LOW       | QPSK       | 20.35      | 20.54 | 20.45 | 21.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 20.28 | 20.26 | 20.33              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.26 | 20.26 | 20.51              | 21.80              |
| HIGH            |                 |           | Q16        | 20.11      | 20.56 | 20.06 | 21.80              |                    |
| 12              |                 | LOW       | Q16        | 20.59      | 20.73 | 20.36 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.34      | 20.48 | 20.61 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.11      | 20.24 | 20.09 | 21.80              |                    |
| 25              | LOW             | Q16       | 20.50      | 20.46      | 20.36 | 21.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 20.18      | 20.28 | 20.19 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.18      | 20.32 | 20.64 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.93      | 20.46 | 20.24 | 21.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.71      | 20.58 | 20.22 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.32      | 20.44 | 20.37 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.97      | 19.84 | 20.19 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.38      | 20.46 | 20.20 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 20.35 | 20.59 | 20.19              | 21.80              |
| MID             |                 |           | QPSK       | 20.35      | 20.53 | 20.27 | 21.80              |                    |
| HIGH            |                 |           | QPSK       | 20.58      | 20.64 | 20.56 | 21.80              |                    |
| 25              |                 | LOW       | QPSK       | 20.39      | 20.53 | 20.41 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.39      | 20.55 | 20.47 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.50      | 20.64 | 20.54 | 21.80              |                    |
| 50              |                 | LOW       | QPSK       | 20.33      | 20.46 | 20.41 | 21.80              |                    |
| 10              | 1               | LOW       | Q16        | 20.34      | 20.26 | 20.23 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.16      | 20.46 | 20.68 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.05      | 20.66 | 20.12 | 21.80              |                    |
|                 | 25              | LOW       | Q16        | 20.76      | 20.65 | 20.28 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.30      | 20.60 | 20.53 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.11      | 20.18 | 20.23 | 21.80              |                    |
|                 | 50              | LOW       | Q16        | 20.67      | 20.69 | 20.28 | 21.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 20.20 | 20.32 | 20.29              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.26 | 20.30 | 20.70              | 21.80              |
| HIGH            |                 |           | 64QAM      | 20.01      | 20.62 | 19.96 | 21.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.86      | 20.75 | 20.26 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.30      | 20.58 | 20.37 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.01      | 20.00 | 20.21 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.57      | 20.65 | 20.26 | 21.80              |                    |

| LTE B5-State 3 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 20.23 | 20.45 | 20.01 | 21.80              |
|                       |         | MID       | QPSK       | 20.33 | 20.39 | 20.07 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.54 | 20.66 | 20.64 | 21.80              |
|                       | 3       | LOW       | QPSK       | 20.17 | 20.35 | 20.51 | 21.80              |
|                       |         | MID       | QPSK       | 20.33 | 20.45 | 20.39 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.27 | 20.47 | 20.60 | 21.80              |
|                       | 6       | LOW       | QPSK       | 20.31 | 20.40 | 20.23 | 21.80              |
|                       | 1.4     | LOW       | Q16        | 20.22 | 20.18 | 20.27 | 21.80              |
|                       |         | MID       | Q16        | 20.24 | 20.42 | 20.74 | 21.80              |
|                       |         | HIGH      | Q16        | 19.93 | 20.66 | 20.02 | 21.80              |
|                       |         | LOW       | Q16        | 20.78 | 20.75 | 20.20 | 21.80              |
|                       |         | MID       | Q16        | 20.10 | 20.62 | 20.43 | 21.80              |
|                       |         | HIGH      | Q16        | 20.21 | 20.26 | 20.07 | 21.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 20.18 | 20.26 | 20.23 | 21.80              |
|                       |         | MID       | 64QAM      | 20.26 | 20.26 | 20.60 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.34 | 20.48 | 20.02 | 21.80              |
|                       | 3       | LOW       | 64QAM      | 20.96 | 20.73 | 20.08 | 21.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.60 | 20.27 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.34 | 20.02 | 20.31 | 21.80              |
|                       | 6       | LOW       | 64QAM      | 20.59 | 20.61 | 20.26 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 20.15 | 20.45 | 20.07 | 21.80              |
|                       |         | MID       | QPSK       | 20.23 | 20.43 | 20.33 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.46 | 20.58 | 20.58 | 21.80              |
|                       | 8       | LOW       | QPSK       | 20.27 | 20.49 | 20.45 | 21.80              |
|                       |         | MID       | QPSK       | 20.21 | 20.65 | 20.55 | 21.80              |
|                       |         | HIGH      | QPSK       | 20.34 | 20.54 | 20.62 | 21.80              |
|                       | 15      | LOW       | QPSK       | 20.27 | 20.44 | 20.47 | 21.80              |
|                       | 3       | LOW       | Q16        | 20.16 | 20.34 | 20.05 | 21.80              |
|                       |         | MID       | Q16        | 20.16 | 20.42 | 20.54 | 21.80              |
|                       |         | HIGH      | Q16        | 19.89 | 20.58 | 20.12 | 21.80              |
|                       |         | LOW       | Q16        | 20.53 | 20.69 | 20.16 | 21.80              |
|                       |         | MID       | Q16        | 20.30 | 20.54 | 20.51 | 21.80              |
|                       |         | HIGH      | Q16        | 20.13 | 20.00 | 20.25 | 21.80              |
| 3                     | 1       | LOW       | Q16        | 20.77 | 20.52 | 20.16 | 21.80              |
|                       |         | LOW       | 64QAM      | 19.98 | 20.20 | 20.23 | 21.80              |
|                       |         | MID       | 64QAM      | 20.30 | 20.30 | 20.49 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.11 | 20.54 | 19.96 | 21.80              |
|                       | 8       | LOW       | 64QAM      | 20.76 | 20.52 | 20.06 | 21.80              |
|                       |         | MID       | 64QAM      | 20.10 | 20.44 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.01 | 20.00 | 20.09 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.47 | 20.44 | 20.14 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 20.17 | 20.57 | 20.27 | 21.80              |
|                 |         | MID       | QPSK       | 20.27 | 20.41 | 20.23 | 21.80              |
|                 |         | HIGH      | QPSK       | 20.50 | 20.41 | 20.64 | 21.80              |
|                 | 12      | LOW       | QPSK       | 20.21 | 20.39 | 20.21 | 21.80              |
|                 |         | MID       | QPSK       | 20.45 | 20.63 | 20.55 | 21.80              |
|                 |         | HIGH      | QPSK       | 20.48 | 20.45 | 20.60 | 21.80              |
|                 | 25      | LOW       | QPSK       | 20.35 | 20.54 | 20.45 | 21.80              |
| 5               | 1       | LOW       | Q16        | 20.28 | 20.26 | 20.33 | 21.80              |
|                 |         | MID       | Q16        | 20.26 | 20.26 | 20.51 | 21.80              |
|                 |         | HIGH      | Q16        | 20.11 | 20.56 | 20.06 | 21.80              |
|                 | 12      | LOW       | Q16        | 20.59 | 20.73 | 20.36 | 21.80              |
|                 |         | MID       | Q16        | 20.34 | 20.48 | 20.61 | 21.80              |
|                 |         | HIGH      | Q16        | 20.11 | 20.24 | 20.09 | 21.80              |
|                 | 25      | LOW       | Q16        | 20.50 | 20.46 | 20.36 | 21.80              |
| 5               | 1       | LOW       | 64QAM      | 20.18 | 20.28 | 20.19 | 21.80              |
|                 |         | MID       | 64QAM      | 20.18 | 20.32 | 20.64 | 21.80              |
|                 |         | HIGH      | 64QAM      | 19.93 | 20.46 | 20.24 | 21.80              |
|                 | 12      | LOW       | 64QAM      | 20.71 | 20.58 | 20.22 | 21.80              |
|                 |         | MID       | 64QAM      | 20.32 | 20.44 | 20.37 | 21.80              |
|                 |         | HIGH      | 64QAM      | 19.97 | 19.84 | 20.19 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.38 | 20.46 | 20.20 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 20.35 | 20.59 | 20.19 | 21.80              |
|                 |         | MID       | QPSK       | 20.35 | 20.53 | 20.27 | 21.80              |
|                 |         | HIGH      | QPSK       | 20.58 | 20.64 | 20.56 | 21.80              |
|                 | 25      | LOW       | QPSK       | 20.39 | 20.53 | 20.41 | 21.80              |
|                 |         | MID       | QPSK       | 20.39 | 20.55 | 20.47 | 21.80              |
|                 |         | HIGH      | QPSK       | 20.50 | 20.64 | 20.54 | 21.80              |
|                 | 50      | LOW       | QPSK       | 20.33 | 20.46 | 20.41 | 21.80              |
| 10              | 1       | LOW       | Q16        | 20.34 | 20.26 | 20.23 | 21.80              |
|                 |         | MID       | Q16        | 20.16 | 20.46 | 20.68 | 21.80              |
|                 |         | HIGH      | Q16        | 20.05 | 20.66 | 20.12 | 21.80              |
|                 | 25      | LOW       | Q16        | 20.76 | 20.65 | 20.28 | 21.80              |
|                 |         | MID       | Q16        | 20.30 | 20.60 | 20.53 | 21.80              |
|                 |         | HIGH      | Q16        | 20.11 | 20.18 | 20.23 | 21.80              |
|                 | 50      | LOW       | Q16        | 20.67 | 20.69 | 20.28 | 21.80              |
| 10              | 1       | LOW       | 64QAM      | 20.20 | 20.32 | 20.29 | 21.80              |
|                 |         | MID       | 64QAM      | 20.26 | 20.30 | 20.70 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.01 | 20.62 | 19.96 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.86 | 20.75 | 20.26 | 21.80              |
|                 |         | MID       | 64QAM      | 20.30 | 20.58 | 20.37 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.01 | 20.00 | 20.21 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.57 | 20.65 | 20.26 | 21.80              |

| LTE B5-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.31 | 23.47 | 23.31 | 24.80              |
|                       |         | MID       | QPSK       | 23.63 | 23.55 | 23.48 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.52 | 23.51 | 23.35 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.45 | 23.35 | 23.48 | 24.80              |
|                       |         | MID       | QPSK       | 23.56 | 23.59 | 23.32 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.55 | 23.65 | 23.37 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.61 | 22.39 | 22.65 | 23.80              |
| 1.4                   | 1       | LOW       | Q16        | 22.29 | 22.72 | 22.64 | 23.80              |
|                       |         | MID       | Q16        | 22.22 | 23.08 | 22.56 | 23.80              |
|                       |         | HIGH      | Q16        | 22.27 | 22.85 | 22.54 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.62 | 22.57 | 22.49 | 23.80              |
|                       |         | MID       | Q16        | 22.44 | 22.74 | 22.64 | 23.80              |
|                       |         | HIGH      | Q16        | 22.68 | 22.49 | 22.33 | 23.80              |
|                       | 6       | LOW       | Q16        | 21.35 | 21.60 | 21.53 | 22.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.50 | 21.94 | 21.74 | 22.80              |
|                       |         | MID       | 64QAM      | 21.37 | 22.20 | 21.68 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.57 | 21.91 | 21.37 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.51 | 21.52 | 21.26 | 22.80              |
|                       |         | MID       | 64QAM      | 21.61 | 21.77 | 21.28 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.74 | 21.36 | 21.65 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.59 | 20.61 | 20.38 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.34 | 23.54 | 23.59 | 24.80              |
|                       |         | MID       | QPSK       | 23.39 | 23.51 | 23.62 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.73 | 23.44 | 23.35 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.56 | 22.53 | 22.44 | 23.80              |
|                       |         | MID       | QPSK       | 22.56 | 22.39 | 22.28 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.46 | 22.40 | 22.51 | 23.80              |
| 3                     | 15      | LOW       | QPSK       | 22.31 | 22.64 | 22.56 | 23.80              |
|                       | 1       | LOW       | Q16        | 22.17 | 22.88 | 22.62 | 23.80              |
|                       |         | MID       | Q16        | 22.37 | 23.01 | 22.69 | 23.80              |
|                       |         | HIGH      | Q16        | 22.38 | 23.19 | 22.36 | 23.80              |
|                       | 8       | LOW       | Q16        | 21.64 | 21.81 | 21.41 | 22.80              |
|                       |         | MID       | Q16        | 21.68 | 21.74 | 21.47 | 22.80              |
|                       |         | HIGH      | Q16        | 21.70 | 21.82 | 21.51 | 22.80              |
|                       | 15      | LOW       | Q16        | 21.42 | 21.62 | 21.31 | 22.80              |
| 3                     | 1       | LOW       | 64QAM      | 21.50 | 21.96 | 21.74 | 22.80              |
|                       |         | MID       | 64QAM      | 21.42 | 22.23 | 21.60 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.59 | 22.00 | 21.59 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.64 | 20.64 | 20.32 | 21.80              |
|                       |         | MID       | 64QAM      | 20.77 | 20.56 | 20.34 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.78 | 20.45 | 20.63 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.71 | 20.63 | 20.48 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.52      | 23.61 | 23.34 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.32      | 23.36 | 23.48 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.52      | 23.56 | 23.54 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.70      | 22.71 | 22.53 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.42      | 22.62 | 22.52 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.41      | 22.65 | 22.53 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.49      | 22.64 | 22.31 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.38 | 22.88 | 22.55              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.19 | 22.89 | 22.49              | 23.80              |
| HIGH            |                 |           | Q16        | 22.43      | 23.03 | 22.59 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.60      | 21.63 | 21.43 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.65      | 21.48 | 21.43 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.65      | 21.60 | 21.42 | 22.80              |                    |
| 25              | LOW             | Q16       | 21.51      | 21.47      | 21.42 | 22.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 21.50      | 21.94 | 21.58 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.44      | 22.12 | 21.64 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.66      | 22.15 | 21.31 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.55      | 20.33 | 20.38 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.77      | 20.67 | 20.32 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 20.63 | 20.42 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.77      | 20.74 | 20.62 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.50 | 23.54 | 23.50              | 24.80              |
| MID             |                 |           | QPSK       | 23.58      | 23.60 | 23.55 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.61      | 23.63 | 23.59 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.63      | 22.60 | 22.53 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.58      | 22.57 | 22.50 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.55      | 22.65 | 22.44 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.56      | 22.64 | 22.56 | 23.80              |                    |
| 10              | 1               | LOW       | Q16        | 22.42      | 22.93 | 22.55 | 23.80              |                    |
|                 |                 | MID       | Q16        | 22.44      | 23.01 | 22.58 | 23.80              |                    |
|                 |                 | HIGH      | Q16        | 22.47      | 23.10 | 22.54 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.64      | 21.70 | 21.58 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.59      | 21.63 | 21.58 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.59      | 21.71 | 21.55 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.57      | 21.62 | 21.55 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.41 | 22.03 | 21.67              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.61 | 22.16 | 21.66              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.68      | 22.04 | 21.48 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.74      | 20.56 | 20.44 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.71      | 20.75 | 20.46 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.80      | 20.59 | 20.65 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.69      | 20.78 | 20.54 | 21.80              |                    |

| LTE B5-State 5 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.31 | 23.47 | 23.31 | 24.80              |
|                       |         | MID       | QPSK       | 23.63 | 23.55 | 23.48 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.52 | 23.51 | 23.35 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.45 | 23.35 | 23.48 | 24.80              |
|                       |         | MID       | QPSK       | 23.56 | 23.59 | 23.32 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.55 | 23.65 | 23.37 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.61 | 22.39 | 22.65 | 23.80              |
| 1.4                   | 1       | LOW       | Q16        | 22.29 | 22.72 | 22.64 | 23.80              |
|                       |         | MID       | Q16        | 22.22 | 23.08 | 22.56 | 23.80              |
|                       |         | HIGH      | Q16        | 22.27 | 22.85 | 22.54 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.62 | 22.57 | 22.49 | 23.80              |
|                       |         | MID       | Q16        | 22.44 | 22.74 | 22.64 | 23.80              |
|                       |         | HIGH      | Q16        | 22.68 | 22.49 | 22.33 | 23.80              |
|                       | 6       | LOW       | Q16        | 21.35 | 21.60 | 21.53 | 22.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.50 | 21.94 | 21.74 | 22.80              |
|                       |         | MID       | 64QAM      | 21.37 | 22.20 | 21.68 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.57 | 21.91 | 21.37 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.51 | 21.52 | 21.26 | 22.80              |
|                       |         | MID       | 64QAM      | 21.61 | 21.77 | 21.28 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.74 | 21.36 | 21.65 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.59 | 20.61 | 20.38 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.34 | 23.54 | 23.59 | 24.80              |
|                       |         | MID       | QPSK       | 23.39 | 23.51 | 23.62 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.73 | 23.44 | 23.35 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.56 | 22.53 | 22.44 | 23.80              |
|                       |         | MID       | QPSK       | 22.56 | 22.39 | 22.28 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.46 | 22.40 | 22.51 | 23.80              |
|                       | 15      | LOW       | QPSK       | 22.31 | 22.64 | 22.56 | 23.80              |
| 3                     | 1       | LOW       | Q16        | 22.17 | 22.88 | 22.62 | 23.80              |
|                       |         | MID       | Q16        | 22.37 | 23.01 | 22.69 | 23.80              |
|                       |         | HIGH      | Q16        | 22.38 | 23.19 | 22.36 | 23.80              |
|                       | 8       | LOW       | Q16        | 21.64 | 21.81 | 21.41 | 22.80              |
|                       |         | MID       | Q16        | 21.68 | 21.74 | 21.47 | 22.80              |
|                       |         | HIGH      | Q16        | 21.70 | 21.82 | 21.51 | 22.80              |
|                       | 15      | LOW       | Q16        | 21.42 | 21.62 | 21.31 | 22.80              |
| 3                     | 1       | LOW       | 64QAM      | 21.50 | 21.96 | 21.74 | 22.80              |
|                       |         | MID       | 64QAM      | 21.42 | 22.23 | 21.60 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.59 | 22.00 | 21.59 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.64 | 20.64 | 20.32 | 21.80              |
|                       |         | MID       | 64QAM      | 20.77 | 20.56 | 20.34 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.78 | 20.45 | 20.63 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.71 | 20.63 | 20.48 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.52      | 23.61 | 23.34 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.32      | 23.36 | 23.48 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.52      | 23.56 | 23.54 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.70      | 22.71 | 22.53 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.42      | 22.62 | 22.52 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.41      | 22.65 | 22.53 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.49      | 22.64 | 22.31 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.38 | 22.88 | 22.55              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.19 | 22.89 | 22.49              | 23.80              |
| HIGH            |                 |           | Q16        | 22.43      | 23.03 | 22.59 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.60      | 21.63 | 21.43 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.65      | 21.48 | 21.43 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.65      | 21.60 | 21.42 | 22.80              |                    |
| 25              | LOW             | Q16       | 21.51      | 21.47      | 21.42 | 22.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 21.50      | 21.94 | 21.58 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.44      | 22.12 | 21.64 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.66      | 22.15 | 21.31 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.55      | 20.33 | 20.38 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.77      | 20.67 | 20.32 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 20.63 | 20.42 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.77      | 20.74 | 20.62 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.50 | 23.54 | 23.50              | 24.80              |
| MID             |                 |           | QPSK       | 23.58      | 23.60 | 23.55 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.61      | 23.63 | 23.59 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.63      | 22.60 | 22.53 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.58      | 22.57 | 22.50 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.55      | 22.65 | 22.44 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.56      | 22.64 | 22.56 | 23.80              |                    |
| 10              | 1               | LOW       | Q16        | 22.42      | 22.93 | 22.55 | 23.80              |                    |
|                 |                 | MID       | Q16        | 22.44      | 23.01 | 22.58 | 23.80              |                    |
|                 |                 | HIGH      | Q16        | 22.47      | 23.10 | 22.54 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.64      | 21.70 | 21.58 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.59      | 21.63 | 21.58 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.59      | 21.71 | 21.55 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.57      | 21.62 | 21.55 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.41 | 22.03 | 21.67              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.61 | 22.16 | 21.66              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.68      | 22.04 | 21.48 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.74      | 20.56 | 20.44 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.71      | 20.75 | 20.46 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.80      | 20.59 | 20.65 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.69      | 20.78 | 20.54 | 21.80              |                    |

| LTE B5-State 6 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.31 | 23.47 | 23.31 | 24.80              |
|                       |         | MID       | QPSK       | 23.63 | 23.55 | 23.48 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.52 | 23.51 | 23.35 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.45 | 23.35 | 23.48 | 24.80              |
|                       |         | MID       | QPSK       | 23.56 | 23.59 | 23.32 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.55 | 23.65 | 23.37 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.61 | 22.39 | 22.65 | 23.80              |
|                       | 1.4     | LOW       | Q16        | 22.29 | 22.72 | 22.64 | 23.80              |
|                       |         | MID       | Q16        | 22.22 | 23.08 | 22.56 | 23.80              |
|                       |         | HIGH      | Q16        | 22.27 | 22.85 | 22.54 | 23.80              |
|                       |         | LOW       | Q16        | 22.62 | 22.57 | 22.49 | 23.80              |
|                       |         | MID       | Q16        | 22.44 | 22.74 | 22.64 | 23.80              |
|                       |         | HIGH      | Q16        | 22.68 | 22.49 | 22.33 | 23.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.50 | 21.94 | 21.74 | 22.80              |
|                       |         | MID       | 64QAM      | 21.37 | 22.20 | 21.68 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.57 | 21.91 | 21.37 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.51 | 21.52 | 21.26 | 22.80              |
|                       |         | MID       | 64QAM      | 21.61 | 21.77 | 21.28 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.74 | 21.36 | 21.65 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.59 | 20.61 | 20.38 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.34 | 23.54 | 23.59 | 24.80              |
|                       |         | MID       | QPSK       | 23.39 | 23.51 | 23.62 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.73 | 23.44 | 23.35 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.56 | 22.53 | 22.44 | 23.80              |
|                       |         | MID       | QPSK       | 22.56 | 22.39 | 22.28 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.46 | 22.40 | 22.51 | 23.80              |
| 3                     | 15      | LOW       | QPSK       | 22.31 | 22.64 | 22.56 | 23.80              |
|                       | 1       | LOW       | Q16        | 22.17 | 22.88 | 22.62 | 23.80              |
|                       |         | MID       | Q16        | 22.37 | 23.01 | 22.69 | 23.80              |
|                       |         | HIGH      | Q16        | 22.38 | 23.19 | 22.36 | 23.80              |
|                       | 8       | LOW       | Q16        | 21.64 | 21.81 | 21.41 | 22.80              |
|                       |         | MID       | Q16        | 21.68 | 21.74 | 21.47 | 22.80              |
|                       |         | HIGH      | Q16        | 21.70 | 21.82 | 21.51 | 22.80              |
|                       | 15      | LOW       | Q16        | 21.42 | 21.62 | 21.31 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.50 | 21.96 | 21.74 | 22.80              |
|                       |         | MID       | 64QAM      | 21.42 | 22.23 | 21.60 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.59 | 22.00 | 21.59 | 22.80              |
|                       |         | LOW       | 64QAM      | 20.64 | 20.64 | 20.32 | 21.80              |
|                       |         | MID       | 64QAM      | 20.77 | 20.56 | 20.34 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.78 | 20.45 | 20.63 | 21.80              |
| 3                     | 15      | LOW       | 64QAM      | 20.71 | 20.63 | 20.48 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.52      | 23.61 | 23.34 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.32      | 23.36 | 23.48 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.52      | 23.56 | 23.54 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.70      | 22.71 | 22.53 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.42      | 22.62 | 22.52 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.41      | 22.65 | 22.53 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.49      | 22.64 | 22.31 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.38 | 22.88 | 22.55              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.19 | 22.89 | 22.49              | 23.80              |
| HIGH            |                 |           | Q16        | 22.43      | 23.03 | 22.59 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.60      | 21.63 | 21.43 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.65      | 21.48 | 21.43 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.65      | 21.60 | 21.42 | 22.80              |                    |
| 25              | LOW             | Q16       | 21.51      | 21.47      | 21.42 | 22.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 21.50      | 21.94 | 21.58 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.44      | 22.12 | 21.64 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.66      | 22.15 | 21.31 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.55      | 20.33 | 20.38 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.77      | 20.67 | 20.32 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 20.63 | 20.42 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.77      | 20.74 | 20.62 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.50 | 23.54 | 23.50              | 24.80              |
| MID             |                 |           | QPSK       | 23.58      | 23.60 | 23.55 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.61      | 23.63 | 23.59 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.63      | 22.60 | 22.53 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.58      | 22.57 | 22.50 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.55      | 22.65 | 22.44 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.56      | 22.64 | 22.56 | 23.80              |                    |
| 10              | 1               | LOW       | Q16        | 22.42      | 22.93 | 22.55 | 23.80              |                    |
|                 |                 | MID       | Q16        | 22.44      | 23.01 | 22.58 | 23.80              |                    |
|                 |                 | HIGH      | Q16        | 22.47      | 23.10 | 22.54 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.64      | 21.70 | 21.58 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.59      | 21.63 | 21.58 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.59      | 21.71 | 21.55 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.57      | 21.62 | 21.55 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.41 | 22.03 | 21.67              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.61 | 22.16 | 21.66              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.68      | 22.04 | 21.48 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.74      | 20.56 | 20.44 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.71      | 20.75 | 20.46 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.80      | 20.59 | 20.65 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.69      | 20.78 | 20.54 | 21.80              |                    |

| LTE B5-State 1 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                        | 1       | LOW       | QPSK       | 17.93 | 17.82 | 17.74 | 19.30              |
|                            |         | MID       | QPSK       | 17.96 | 18.07 | 17.65 | 19.30              |
|                            |         | HIGH      | QPSK       | 18.09 | 18.05 | 17.97 | 19.30              |
|                            | 3       | LOW       | QPSK       | 17.89 | 18.10 | 18.08 | 19.30              |
|                            |         | MID       | QPSK       | 17.99 | 17.82 | 17.96 | 19.30              |
|                            |         | HIGH      | QPSK       | 17.99 | 18.13 | 18.13 | 19.30              |
|                            | 6       | LOW       | QPSK       | 18.06 | 18.13 | 17.93 | 19.30              |
|                            | 1.4     | LOW       | Q16        | 17.91 | 17.87 | 17.63 | 19.30              |
|                            |         | MID       | Q16        | 17.75 | 18.29 | 17.77 | 19.30              |
|                            |         | HIGH      | Q16        | 17.47 | 18.20 | 17.78 | 19.30              |
|                            |         | LOW       | Q16        | 17.98 | 17.86 | 17.82 | 19.30              |
|                            |         | MID       | Q16        | 18.11 | 17.85 | 17.84 | 19.30              |
|                            |         | HIGH      | Q16        | 17.88 | 17.88 | 17.83 | 19.30              |
| 1.4                        | 1       | LOW       | 64QAM      | 18.02 | 17.86 | 17.81 | 19.30              |
|                            |         | MID       | 64QAM      | 17.59 | 18.49 | 18.07 | 19.30              |
|                            |         | HIGH      | 64QAM      | 17.55 | 18.06 | 17.89 | 19.30              |
|                            | 3       | LOW       | 64QAM      | 18.20 | 17.82 | 17.75 | 19.30              |
|                            |         | MID       | 64QAM      | 18.21 | 17.93 | 17.82 | 19.30              |
|                            |         | HIGH      | 64QAM      | 18.04 | 17.89 | 18.10 | 19.30              |
|                            | 6       | LOW       | 64QAM      | 18.12 | 17.94 | 17.75 | 19.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                          | 1       | LOW       | QPSK       | 17.93 | 17.76 | 17.72 | 19.30              |
|                            |         | MID       | QPSK       | 17.94 | 17.90 | 17.79 | 19.30              |
|                            |         | HIGH      | QPSK       | 17.95 | 18.27 | 18.22 | 19.30              |
|                            | 8       | LOW       | QPSK       | 18.03 | 17.90 | 18.19 | 19.30              |
|                            |         | MID       | QPSK       | 17.92 | 17.89 | 18.05 | 19.30              |
|                            |         | HIGH      | QPSK       | 18.04 | 18.07 | 18.27 | 19.30              |
|                            | 15      | LOW       | QPSK       | 18.04 | 17.95 | 17.91 | 19.30              |
|                            | 3       | LOW       | Q16        | 18.03 | 18.03 | 17.77 | 19.30              |
|                            |         | MID       | Q16        | 17.70 | 18.29 | 17.77 | 19.30              |
|                            |         | HIGH      | Q16        | 17.48 | 18.42 | 17.78 | 19.30              |
|                            |         | LOW       | Q16        | 18.20 | 17.89 | 17.55 | 19.30              |
|                            |         | MID       | Q16        | 17.93 | 17.94 | 17.70 | 19.30              |
|                            |         | HIGH      | Q16        | 18.13 | 18.00 | 18.05 | 19.30              |
| 3                          | 1       | LOW       | Q16        | 17.78 | 17.90 | 17.60 | 19.30              |
|                            |         | LOW       | 64QAM      | 17.91 | 17.83 | 17.86 | 19.30              |
|                            |         | MID       | 64QAM      | 17.61 | 18.51 | 18.09 | 19.30              |
|                            |         | HIGH      | 64QAM      | 17.67 | 17.95 | 17.80 | 19.30              |
|                            | 8       | LOW       | 64QAM      | 18.03 | 18.07 | 17.75 | 19.30              |
|                            |         | MID       | 64QAM      | 18.38 | 18.08 | 17.88 | 19.30              |
|                            |         | HIGH      | 64QAM      | 18.03 | 17.92 | 18.28 | 19.30              |
|                            | 15      | LOW       | 64QAM      | 18.16 | 18.03 | 17.82 | 19.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 17.78 | 17.83 | 17.74 | 19.30              |
|                 |         | MID       | QPSK       | 18.07 | 18.03 | 17.74 | 19.30              |
|                 |         | HIGH      | QPSK       | 18.18 | 18.32 | 18.06 | 19.30              |
|                 | 12      | LOW       | QPSK       | 18.14 | 17.92 | 18.16 | 19.30              |
|                 |         | MID       | QPSK       | 18.02 | 18.02 | 17.89 | 19.30              |
|                 |         | HIGH      | QPSK       | 18.08 | 18.24 | 18.22 | 19.30              |
|                 | 25      | LOW       | QPSK       | 17.93 | 17.96 | 17.86 | 19.30              |
|                 |         | LOW       | Q16        | 17.94 | 17.83 | 17.69 | 19.30              |
|                 |         | MID       | Q16        | 17.70 | 18.33 | 17.97 | 19.30              |
| 5               | 1       | HIGH      | Q16        | 17.43 | 18.29 | 17.84 | 19.30              |
|                 |         | LOW       | Q16        | 18.21 | 17.89 | 17.61 | 19.30              |
|                 |         | MID       | Q16        | 18.09 | 17.98 | 17.73 | 19.30              |
|                 | 12      | HIGH      | Q16        | 18.11 | 18.04 | 18.03 | 19.30              |
|                 |         | LOW       | Q16        | 18.00 | 18.01 | 17.82 | 19.30              |
|                 |         | LOW       | 64QAM      | 17.96 | 17.83 | 17.84 | 19.30              |
|                 | 1       | MID       | 64QAM      | 17.57 | 18.45 | 18.00 | 19.30              |
|                 |         | HIGH      | 64QAM      | 17.66 | 18.09 | 17.70 | 19.30              |
|                 |         | LOW       | 64QAM      | 18.01 | 17.95 | 17.86 | 19.30              |
| 5               | 12      | MID       | 64QAM      | 18.32 | 18.09 | 17.91 | 19.30              |
|                 |         | HIGH      | 64QAM      | 17.81 | 17.80 | 18.28 | 19.30              |
|                 | 25      | LOW       | 64QAM      | 17.96 | 17.91 | 17.75 | 19.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 17.89 | 17.78 | 17.67 | 19.30              |
|                 |         | MID       | QPSK       | 17.98 | 18.03 | 17.83 | 19.30              |
|                 |         | HIGH      | QPSK       | 18.11 | 18.25 | 18.13 | 19.30              |
|                 | 25      | LOW       | QPSK       | 18.07 | 18.10 | 18.12 | 19.30              |
|                 |         | MID       | QPSK       | 17.97 | 18.00 | 18.05 | 19.30              |
|                 |         | HIGH      | QPSK       | 18.17 | 18.22 | 18.18 | 19.30              |
| 10              | 50      | LOW       | QPSK       | 18.04 | 18.09 | 17.86 | 19.30              |
|                 |         | LOW       | Q16        | 18.05 | 17.94 | 17.81 | 19.30              |
|                 |         | MID       | Q16        | 17.88 | 18.40 | 17.95 | 19.30              |
|                 | 1       | HIGH      | Q16        | 17.59 | 18.33 | 17.89 | 19.30              |
|                 |         | LOW       | Q16        | 18.16 | 18.02 | 17.73 | 19.30              |
|                 |         | MID       | Q16        | 18.04 | 18.05 | 17.84 | 19.30              |
|                 | 25      | HIGH      | Q16        | 18.04 | 17.95 | 18.01 | 19.30              |
|                 |         | LOW       | Q16        | 17.91 | 18.03 | 17.78 | 19.30              |
|                 |         | LOW       | 64QAM      | 17.98 | 17.79 | 17.88 | 19.30              |
| 10              | 1       | MID       | 64QAM      | 17.75 | 18.47 | 18.20 | 19.30              |
|                 |         | HIGH      | 64QAM      | 17.71 | 18.02 | 17.82 | 19.30              |
|                 | 25      | LOW       | 64QAM      | 18.16 | 18.02 | 17.82 | 19.30              |
|                 |         | MID       | 64QAM      | 18.38 | 18.13 | 17.95 | 19.30              |
|                 |         | HIGH      | 64QAM      | 17.99 | 17.94 | 18.23 | 19.30              |
|                 | 50      | LOW       | 64QAM      | 18.16 | 17.98 | 17.86 | 19.30              |

| LTE B5-State 2 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                        | 1       | LOW       | QPSK       | 16.46 | 16.47 | 16.24 | 17.80              |
|                            |         | MID       | QPSK       | 16.57 | 16.71 | 16.57 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.64 | 16.40 | 16.34 | 17.80              |
|                            | 3       | LOW       | QPSK       | 16.55 | 16.52 | 16.40 | 17.80              |
|                            |         | MID       | QPSK       | 16.68 | 16.73 | 16.44 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.52 | 16.58 | 16.15 | 17.80              |
|                            | 6       | LOW       | QPSK       | 16.48 | 16.50 | 16.46 | 17.80              |
|                            | 1.4     | LOW       | Q16        | 16.30 | 16.51 | 16.64 | 17.80              |
|                            |         | MID       | Q16        | 16.12 | 16.73 | 16.39 | 17.80              |
|                            |         | HIGH      | Q16        | 16.20 | 16.84 | 16.50 | 17.80              |
|                            | 3       | LOW       | Q16        | 16.62 | 16.64 | 16.05 | 17.80              |
|                            |         | MID       | Q16        | 16.60 | 16.29 | 16.49 | 17.80              |
|                            |         | HIGH      | Q16        | 16.63 | 16.42 | 16.37 | 17.80              |
|                            | 6       | LOW       | Q16        | 16.43 | 16.23 | 16.33 | 17.80              |
| 1.4                        | 1       | LOW       | 64QAM      | 16.36 | 16.37 | 16.26 | 17.80              |
|                            |         | MID       | 64QAM      | 16.45 | 16.87 | 16.55 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.03 | 16.63 | 16.32 | 17.80              |
|                            | 3       | LOW       | 64QAM      | 16.67 | 16.38 | 16.19 | 17.80              |
|                            |         | MID       | 64QAM      | 16.77 | 16.53 | 16.32 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.63 | 16.62 | 16.65 | 17.80              |
|                            | 6       | LOW       | 64QAM      | 16.48 | 16.53 | 16.17 | 17.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                          | 1       | LOW       | QPSK       | 16.48 | 16.29 | 16.40 | 17.80              |
|                            |         | MID       | QPSK       | 16.55 | 16.56 | 16.42 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.50 | 16.58 | 16.41 | 17.80              |
|                            | 8       | LOW       | QPSK       | 16.63 | 16.34 | 16.37 | 17.80              |
|                            |         | MID       | QPSK       | 16.58 | 16.60 | 16.48 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.60 | 16.58 | 16.16 | 17.80              |
|                            | 15      | LOW       | QPSK       | 16.66 | 16.42 | 16.41 | 17.80              |
|                            | 3       | LOW       | Q16        | 16.54 | 16.61 | 16.41 | 17.80              |
|                            |         | MID       | Q16        | 16.23 | 16.70 | 16.61 | 17.80              |
|                            |         | HIGH      | Q16        | 16.25 | 16.84 | 16.32 | 17.80              |
|                            | 8       | LOW       | Q16        | 16.54 | 16.57 | 16.03 | 17.80              |
|                            |         | MID       | Q16        | 16.53 | 16.26 | 16.49 | 17.80              |
|                            |         | HIGH      | Q16        | 16.51 | 16.57 | 16.47 | 17.80              |
|                            | 15      | LOW       | Q16        | 16.53 | 16.25 | 16.44 | 17.80              |
| 3                          | 1       | LOW       | 64QAM      | 16.37 | 16.22 | 16.24 | 17.80              |
|                            |         | MID       | 64QAM      | 16.38 | 16.80 | 16.78 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.07 | 16.62 | 16.31 | 17.80              |
|                            | 8       | LOW       | 64QAM      | 16.76 | 16.28 | 16.25 | 17.80              |
|                            |         | MID       | 64QAM      | 16.74 | 16.48 | 16.31 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.68 | 16.45 | 16.63 | 17.80              |
|                            | 15      | LOW       | 64QAM      | 16.45 | 16.72 | 16.36 | 17.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |       |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| 5               | 1       | LOW       | QPSK       | 16.38 | 16.44 | 16.32 | 17.80              |       |
|                 |         | MID       | QPSK       | 16.55 | 16.54 | 16.55 | 17.80              |       |
|                 |         | HIGH      | QPSK       | 16.64 | 16.41 | 16.49 | 17.80              |       |
|                 | 12      | LOW       | QPSK       | 16.45 | 16.50 | 16.26 | 17.80              |       |
|                 |         | MID       | QPSK       | 16.74 | 16.60 | 16.61 | 17.80              |       |
|                 |         | HIGH      | QPSK       | 16.35 | 16.48 | 16.16 | 17.80              |       |
|                 | 25      | LOW       | QPSK       | 16.48 | 16.44 | 16.46 | 17.80              |       |
|                 | 5       | 1         | LOW        | Q16   | 16.49 | 16.61 | 16.53              | 17.80 |
|                 |         |           | MID        | Q16   | 16.25 | 16.60 | 16.36              | 17.80 |
| HIGH            |         |           | Q16        | 16.23 | 16.91 | 16.41 | 17.80              |       |
| 12              |         | LOW       | Q16        | 16.64 | 16.57 | 16.22 | 17.80              |       |
|                 |         | MID       | Q16        | 16.61 | 16.35 | 16.37 | 17.80              |       |
|                 |         | HIGH      | Q16        | 16.51 | 16.46 | 16.39 | 17.80              |       |
| 25              | LOW     | Q16       | 16.33      | 16.21 | 16.30 | 17.80 |                    |       |
| 5               | 1       | LOW       | 64QAM      | 16.24 | 16.24 | 16.11 | 17.80              |       |
|                 |         | MID       | 64QAM      | 16.33 | 16.97 | 16.78 | 17.80              |       |
|                 |         | HIGH      | 64QAM      | 16.13 | 16.72 | 16.47 | 17.80              |       |
|                 | 12      | LOW       | 64QAM      | 16.76 | 16.22 | 16.09 | 17.80              |       |
|                 |         | MID       | 64QAM      | 16.52 | 16.48 | 16.50 | 17.80              |       |
|                 |         | HIGH      | 64QAM      | 16.66 | 16.68 | 16.55 | 17.80              |       |
|                 | 25      | LOW       | 64QAM      | 16.51 | 16.52 | 16.20 | 17.80              |       |
|                 | 10      | 1         | LOW        | QPSK  | 16.41 | 16.44 | 16.42              | 17.80 |
|                 |         |           | MID        | QPSK  | 16.65 | 16.64 | 16.57              | 17.80 |
| HIGH            |         |           | QPSK       | 16.62 | 16.53 | 16.49 | 17.80              |       |
| 25              |         | LOW       | QPSK       | 16.55 | 16.52 | 16.42 | 17.80              |       |
|                 |         | MID       | QPSK       | 16.71 | 16.68 | 16.61 | 17.80              |       |
|                 |         | HIGH      | QPSK       | 16.52 | 16.63 | 16.31 | 17.80              |       |
| 50              |         | LOW       | QPSK       | 16.63 | 16.52 | 16.54 | 17.80              |       |
| 10              |         | 1         | LOW        | Q16   | 16.46 | 16.53 | 16.56              | 17.80 |
|                 |         |           | MID        | Q16   | 16.23 | 16.73 | 16.54              | 17.80 |
|                 | HIGH    |           | Q16        | 16.17 | 16.89 | 16.48 | 17.80              |       |
|                 | 25      | LOW       | Q16        | 16.57 | 16.62 | 16.16 | 17.80              |       |
|                 |         | MID       | Q16        | 16.68 | 16.42 | 16.47 | 17.80              |       |
|                 |         | HIGH      | Q16        | 16.68 | 16.54 | 16.47 | 17.80              |       |
|                 | 50      | LOW       | Q16        | 16.51 | 16.36 | 16.41 | 17.80              |       |
|                 | 10      | 1         | LOW        | 64QAM | 16.39 | 16.35 | 16.26              | 17.80 |
|                 |         |           | MID        | 64QAM | 16.40 | 16.97 | 16.73              | 17.80 |
| HIGH            |         |           | 64QAM      | 16.05 | 16.75 | 16.42 | 17.80              |       |
| 25              |         | LOW       | 64QAM      | 16.69 | 16.35 | 16.25 | 17.80              |       |
|                 |         | MID       | 64QAM      | 16.69 | 16.63 | 16.42 | 17.80              |       |
|                 |         | HIGH      | 64QAM      | 16.73 | 16.60 | 16.73 | 17.80              |       |
| 50              |         | LOW       | 64QAM      | 16.58 | 16.70 | 16.33 | 17.80              |       |

| LTE B5-State 3 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                        | 1       | LOW       | QPSK       | 16.46 | 16.47 | 16.24 | 17.80              |
|                            |         | MID       | QPSK       | 16.57 | 16.71 | 16.57 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.64 | 16.40 | 16.34 | 17.80              |
|                            | 3       | LOW       | QPSK       | 16.55 | 16.52 | 16.40 | 17.80              |
|                            |         | MID       | QPSK       | 16.68 | 16.73 | 16.44 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.52 | 16.58 | 16.15 | 17.80              |
|                            | 6       | LOW       | QPSK       | 16.48 | 16.50 | 16.46 | 17.80              |
|                            | 1.4     | LOW       | Q16        | 16.30 | 16.51 | 16.64 | 17.80              |
|                            |         | MID       | Q16        | 16.12 | 16.73 | 16.39 | 17.80              |
|                            |         | HIGH      | Q16        | 16.20 | 16.84 | 16.50 | 17.80              |
|                            | 3       | LOW       | Q16        | 16.62 | 16.64 | 16.05 | 17.80              |
|                            |         | MID       | Q16        | 16.60 | 16.29 | 16.49 | 17.80              |
|                            |         | HIGH      | Q16        | 16.63 | 16.42 | 16.37 | 17.80              |
|                            | 6       | LOW       | Q16        | 16.43 | 16.23 | 16.33 | 17.80              |
| 1.4                        | 1       | LOW       | 64QAM      | 16.36 | 16.37 | 16.26 | 17.80              |
|                            |         | MID       | 64QAM      | 16.45 | 16.87 | 16.55 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.03 | 16.63 | 16.32 | 17.80              |
|                            | 3       | LOW       | 64QAM      | 16.67 | 16.38 | 16.19 | 17.80              |
|                            |         | MID       | 64QAM      | 16.77 | 16.53 | 16.32 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.63 | 16.62 | 16.65 | 17.80              |
|                            | 6       | LOW       | 64QAM      | 16.48 | 16.53 | 16.17 | 17.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                          | 1       | LOW       | QPSK       | 16.48 | 16.29 | 16.40 | 17.80              |
|                            |         | MID       | QPSK       | 16.55 | 16.56 | 16.42 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.50 | 16.58 | 16.41 | 17.80              |
|                            | 8       | LOW       | QPSK       | 16.63 | 16.34 | 16.37 | 17.80              |
|                            |         | MID       | QPSK       | 16.58 | 16.60 | 16.48 | 17.80              |
|                            |         | HIGH      | QPSK       | 16.60 | 16.58 | 16.16 | 17.80              |
|                            | 15      | LOW       | QPSK       | 16.66 | 16.42 | 16.41 | 17.80              |
|                            | 3       | LOW       | Q16        | 16.54 | 16.61 | 16.41 | 17.80              |
|                            |         | MID       | Q16        | 16.23 | 16.70 | 16.61 | 17.80              |
|                            |         | HIGH      | Q16        | 16.25 | 16.84 | 16.32 | 17.80              |
|                            | 8       | LOW       | Q16        | 16.54 | 16.57 | 16.03 | 17.80              |
|                            |         | MID       | Q16        | 16.53 | 16.26 | 16.49 | 17.80              |
|                            |         | HIGH      | Q16        | 16.51 | 16.57 | 16.47 | 17.80              |
|                            | 15      | LOW       | Q16        | 16.53 | 16.25 | 16.44 | 17.80              |
| 3                          | 1       | LOW       | 64QAM      | 16.37 | 16.22 | 16.24 | 17.80              |
|                            |         | MID       | 64QAM      | 16.38 | 16.80 | 16.78 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.07 | 16.62 | 16.31 | 17.80              |
|                            | 8       | LOW       | 64QAM      | 16.76 | 16.28 | 16.25 | 17.80              |
|                            |         | MID       | 64QAM      | 16.74 | 16.48 | 16.31 | 17.80              |
|                            |         | HIGH      | 64QAM      | 16.68 | 16.45 | 16.63 | 17.80              |
|                            | 15      | LOW       | 64QAM      | 16.45 | 16.72 | 16.36 | 17.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |       |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| 5               | 1       | LOW       | QPSK       | 16.38 | 16.44 | 16.32 | 17.80              |       |
|                 |         | MID       | QPSK       | 16.55 | 16.54 | 16.55 | 17.80              |       |
|                 |         | HIGH      | QPSK       | 16.64 | 16.41 | 16.49 | 17.80              |       |
|                 | 12      | LOW       | QPSK       | 16.45 | 16.50 | 16.26 | 17.80              |       |
|                 |         | MID       | QPSK       | 16.74 | 16.60 | 16.61 | 17.80              |       |
|                 |         | HIGH      | QPSK       | 16.35 | 16.48 | 16.16 | 17.80              |       |
|                 | 25      | LOW       | QPSK       | 16.48 | 16.44 | 16.46 | 17.80              |       |
|                 |         | LOW       | Q16        | 16.49 | 16.61 | 16.53 | 17.80              |       |
| 5               | 1       | MID       | Q16        | 16.25 | 16.60 | 16.36 | 17.80              |       |
|                 |         | HIGH      | Q16        | 16.23 | 16.91 | 16.41 | 17.80              |       |
|                 |         | LOW       | Q16        | 16.64 | 16.57 | 16.22 | 17.80              |       |
|                 | 12      | MID       | Q16        | 16.61 | 16.35 | 16.37 | 17.80              |       |
|                 |         | HIGH      | Q16        | 16.51 | 16.46 | 16.39 | 17.80              |       |
|                 |         | LOW       | Q16        | 16.33 | 16.21 | 16.30 | 17.80              |       |
|                 | 5       | 1         | LOW        | 64QAM | 16.24 | 16.24 | 16.11              | 17.80 |
|                 |         |           | MID        | 64QAM | 16.33 | 16.97 | 16.78              | 17.80 |
| HIGH            |         |           | 64QAM      | 16.13 | 16.72 | 16.47 | 17.80              |       |
| 12              |         | LOW       | 64QAM      | 16.76 | 16.22 | 16.09 | 17.80              |       |
|                 |         | MID       | 64QAM      | 16.52 | 16.48 | 16.50 | 17.80              |       |
|                 |         | HIGH      | 64QAM      | 16.66 | 16.68 | 16.55 | 17.80              |       |
| 25              |         | LOW       | 64QAM      | 16.51 | 16.52 | 16.20 | 17.80              |       |
|                 |         | LOW       | Q16        | 16.41 | 16.44 | 16.42 | 17.80              |       |
| 10              | 1       | MID       | QPSK       | 16.65 | 16.64 | 16.57 | 17.80              |       |
|                 |         | HIGH      | QPSK       | 16.62 | 16.53 | 16.49 | 17.80              |       |
|                 |         | LOW       | QPSK       | 16.55 | 16.52 | 16.42 | 17.80              |       |
|                 | 25      | MID       | QPSK       | 16.71 | 16.68 | 16.61 | 17.80              |       |
|                 |         | HIGH      | QPSK       | 16.52 | 16.63 | 16.31 | 17.80              |       |
|                 |         | LOW       | QPSK       | 16.63 | 16.52 | 16.54 | 17.80              |       |
|                 | 10      | 1         | LOW        | Q16   | 16.46 | 16.53 | 16.56              | 17.80 |
|                 |         |           | MID        | Q16   | 16.23 | 16.73 | 16.54              | 17.80 |
| HIGH            |         |           | Q16        | 16.17 | 16.89 | 16.48 | 17.80              |       |
| 25              |         | LOW       | Q16        | 16.57 | 16.62 | 16.16 | 17.80              |       |
|                 |         | MID       | Q16        | 16.68 | 16.42 | 16.47 | 17.80              |       |
|                 |         | HIGH      | Q16        | 16.68 | 16.54 | 16.47 | 17.80              |       |
| 50              |         | LOW       | Q16        | 16.51 | 16.36 | 16.41 | 17.80              |       |
|                 |         | LOW       | 64QAM      | 16.39 | 16.35 | 16.26 | 17.80              |       |
| 10              | 1       | MID       | 64QAM      | 16.40 | 16.97 | 16.73 | 17.80              |       |
|                 |         | HIGH      | 64QAM      | 16.05 | 16.75 | 16.42 | 17.80              |       |
|                 |         | LOW       | 64QAM      | 16.69 | 16.35 | 16.25 | 17.80              |       |
|                 | 25      | MID       | 64QAM      | 16.69 | 16.63 | 16.42 | 17.80              |       |
|                 |         | HIGH      | 64QAM      | 16.73 | 16.60 | 16.73 | 17.80              |       |
|                 |         | LOW       | 64QAM      | 16.58 | 16.70 | 16.33 | 17.80              |       |

| LTE B5-State 4 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                        | 1       | LOW       | QPSK       | 20.23 | 20.45 | 20.01 | 21.80              |
|                            |         | MID       | QPSK       | 20.33 | 20.39 | 20.07 | 21.80              |
|                            |         | HIGH      | QPSK       | 20.54 | 20.66 | 20.64 | 21.80              |
|                            | 3       | LOW       | QPSK       | 20.17 | 20.35 | 20.51 | 21.80              |
|                            |         | MID       | QPSK       | 20.33 | 20.45 | 20.39 | 21.80              |
|                            |         | HIGH      | QPSK       | 20.27 | 20.47 | 20.60 | 21.80              |
|                            | 6       | LOW       | QPSK       | 20.31 | 20.40 | 20.23 | 21.80              |
|                            | 1.4     | LOW       | Q16        | 20.22 | 20.18 | 20.27 | 21.80              |
|                            |         | MID       | Q16        | 20.24 | 20.42 | 20.74 | 21.80              |
|                            |         | HIGH      | Q16        | 19.93 | 20.66 | 20.02 | 21.80              |
|                            |         | LOW       | Q16        | 20.78 | 20.75 | 20.20 | 21.80              |
|                            |         | MID       | Q16        | 20.10 | 20.62 | 20.43 | 21.80              |
|                            |         | HIGH      | Q16        | 20.21 | 20.26 | 20.07 | 21.80              |
| 1.4                        | 1       | LOW       | 64QAM      | 20.18 | 20.26 | 20.23 | 21.80              |
|                            |         | MID       | 64QAM      | 20.26 | 20.26 | 20.60 | 21.80              |
|                            |         | HIGH      | 64QAM      | 20.34 | 20.48 | 20.02 | 21.80              |
|                            | 3       | LOW       | 64QAM      | 20.96 | 20.73 | 20.08 | 21.80              |
|                            |         | MID       | 64QAM      | 20.10 | 20.60 | 20.27 | 21.80              |
|                            |         | HIGH      | 64QAM      | 20.34 | 20.02 | 20.31 | 21.80              |
|                            | 6       | LOW       | 64QAM      | 20.59 | 20.61 | 20.26 | 21.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                          | 1       | LOW       | QPSK       | 20.15 | 20.45 | 20.07 | 21.80              |
|                            |         | MID       | QPSK       | 20.23 | 20.43 | 20.33 | 21.80              |
|                            |         | HIGH      | QPSK       | 20.46 | 20.58 | 20.58 | 21.80              |
|                            | 8       | LOW       | QPSK       | 20.27 | 20.49 | 20.45 | 21.80              |
|                            |         | MID       | QPSK       | 20.21 | 20.65 | 20.55 | 21.80              |
|                            |         | HIGH      | QPSK       | 20.34 | 20.54 | 20.62 | 21.80              |
| 3                          | 15      | LOW       | QPSK       | 20.27 | 20.44 | 20.47 | 21.80              |
|                            | 1       | LOW       | Q16        | 20.16 | 20.34 | 20.05 | 21.80              |
|                            |         | MID       | Q16        | 20.16 | 20.42 | 20.54 | 21.80              |
|                            |         | HIGH      | Q16        | 19.89 | 20.58 | 20.12 | 21.80              |
|                            | 8       | LOW       | Q16        | 20.53 | 20.69 | 20.16 | 21.80              |
|                            |         | MID       | Q16        | 20.30 | 20.54 | 20.51 | 21.80              |
|                            |         | HIGH      | Q16        | 20.13 | 20.00 | 20.25 | 21.80              |
|                            | 15      | LOW       | Q16        | 20.77 | 20.52 | 20.16 | 21.80              |
|                            | 3       | LOW       | 64QAM      | 19.98 | 20.20 | 20.23 | 21.80              |
|                            |         | MID       | 64QAM      | 20.30 | 20.30 | 20.49 | 21.80              |
|                            |         | HIGH      | 64QAM      | 20.11 | 20.54 | 19.96 | 21.80              |
|                            |         | LOW       | 64QAM      | 20.76 | 20.52 | 20.06 | 21.80              |
|                            |         | MID       | 64QAM      | 20.10 | 20.44 | 20.47 | 21.80              |
|                            |         | HIGH      | 64QAM      | 20.01 | 20.00 | 20.09 | 21.80              |
| 3                          | 15      | LOW       | 64QAM      | 20.47 | 20.44 | 20.14 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 20.17      | 20.57 | 20.27 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.27      | 20.41 | 20.23 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.50      | 20.41 | 20.64 | 21.80              |                    |
|                 | 12              | LOW       | QPSK       | 20.21      | 20.39 | 20.21 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.45      | 20.63 | 20.55 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.48      | 20.45 | 20.60 | 21.80              |                    |
|                 | 25              | LOW       | QPSK       | 20.35      | 20.54 | 20.45 | 21.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 20.28 | 20.26 | 20.33              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.26 | 20.26 | 20.51              | 21.80              |
| HIGH            |                 |           | Q16        | 20.11      | 20.56 | 20.06 | 21.80              |                    |
| 12              |                 | LOW       | Q16        | 20.59      | 20.73 | 20.36 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.34      | 20.48 | 20.61 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.11      | 20.24 | 20.09 | 21.80              |                    |
| 25              |                 | LOW       | Q16        | 20.50      | 20.46 | 20.36 | 21.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 20.18 | 20.28 | 20.19              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.18 | 20.32 | 20.64              | 21.80              |
|                 | HIGH            |           | 64QAM      | 19.93      | 20.46 | 20.24 | 21.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.71      | 20.58 | 20.22 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.32      | 20.44 | 20.37 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.97      | 19.84 | 20.19 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.38      | 20.46 | 20.20 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 20.35 | 20.59 | 20.19              | 21.80              |
| MID             |                 |           | QPSK       | 20.35      | 20.53 | 20.27 | 21.80              |                    |
| HIGH            |                 |           | QPSK       | 20.58      | 20.64 | 20.56 | 21.80              |                    |
| 25              |                 | LOW       | QPSK       | 20.39      | 20.53 | 20.41 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.39      | 20.55 | 20.47 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.50      | 20.64 | 20.54 | 21.80              |                    |
| 50              |                 | LOW       | QPSK       | 20.33      | 20.46 | 20.41 | 21.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 20.34 | 20.26 | 20.23              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.16 | 20.46 | 20.68              | 21.80              |
|                 | HIGH            |           | Q16        | 20.05      | 20.66 | 20.12 | 21.80              |                    |
|                 | 25              | LOW       | Q16        | 20.76      | 20.65 | 20.28 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.30      | 20.60 | 20.53 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.11      | 20.18 | 20.23 | 21.80              |                    |
|                 | 50              | LOW       | Q16        | 20.67      | 20.69 | 20.28 | 21.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 20.20 | 20.32 | 20.29              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.26 | 20.30 | 20.70              | 21.80              |
| HIGH            |                 |           | 64QAM      | 20.01      | 20.62 | 19.96 | 21.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.86      | 20.75 | 20.26 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.30      | 20.58 | 20.37 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.01      | 20.00 | 20.21 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.57      | 20.65 | 20.26 | 21.80              |                    |

| LTE B5-State 5 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                        | 1       | LOW       | QPSK       | 18.93 | 18.95 | 18.82 | 20.30              |
|                            |         | MID       | QPSK       | 18.85 | 19.06 | 19.04 | 20.30              |
|                            |         | HIGH      | QPSK       | 19.10 | 19.15 | 19.11 | 20.30              |
|                            | 3       | LOW       | QPSK       | 18.95 | 19.14 | 18.70 | 20.30              |
|                            |         | MID       | QPSK       | 19.12 | 19.00 | 18.90 | 20.30              |
|                            |         | HIGH      | QPSK       | 18.65 | 18.98 | 18.58 | 20.30              |
|                            | 6       | LOW       | QPSK       | 18.87 | 19.01 | 18.79 | 20.30              |
|                            | 1.4     | LOW       | Q16        | 19.05 | 18.99 | 18.86 | 20.30              |
|                            |         | MID       | Q16        | 18.94 | 19.32 | 19.18 | 20.30              |
|                            |         | HIGH      | Q16        | 18.84 | 19.60 | 18.81 | 20.30              |
|                            | 3       | LOW       | Q16        | 19.37 | 19.20 | 18.84 | 20.30              |
|                            |         | MID       | Q16        | 18.96 | 19.09 | 19.06 | 20.30              |
|                            |         | HIGH      | Q16        | 19.08 | 19.12 | 18.96 | 20.30              |
|                            | 6       | LOW       | Q16        | 19.27 | 18.65 | 19.12 | 20.30              |
| 1.4                        | 1       | LOW       | 64QAM      | 19.05 | 18.88 | 19.08 | 20.30              |
|                            |         | MID       | 64QAM      | 18.59 | 19.47 | 18.86 | 20.30              |
|                            |         | HIGH      | 64QAM      | 18.50 | 19.20 | 18.92 | 20.30              |
|                            | 3       | LOW       | 64QAM      | 19.12 | 18.81 | 18.65 | 20.30              |
|                            |         | MID       | 64QAM      | 19.25 | 18.72 | 19.06 | 20.30              |
|                            |         | HIGH      | 64QAM      | 19.09 | 18.99 | 18.94 | 20.30              |
|                            | 6       | LOW       | 64QAM      | 19.06 | 19.11 | 18.78 | 20.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                          | 1       | LOW       | QPSK       | 18.72 | 18.88 | 18.87 | 20.30              |
|                            |         | MID       | QPSK       | 18.87 | 19.02 | 18.87 | 20.30              |
|                            |         | HIGH      | QPSK       | 19.16 | 19.26 | 18.92 | 20.30              |
|                            | 8       | LOW       | QPSK       | 18.84 | 18.95 | 18.68 | 20.30              |
|                            |         | MID       | QPSK       | 19.08 | 19.17 | 18.90 | 20.30              |
|                            |         | HIGH      | QPSK       | 18.88 | 19.08 | 18.85 | 20.30              |
|                            | 15      | LOW       | QPSK       | 18.85 | 19.22 | 18.92 | 20.30              |
|                            | 3       | LOW       | Q16        | 18.99 | 19.06 | 18.90 | 20.30              |
|                            |         | MID       | Q16        | 18.90 | 19.07 | 19.12 | 20.30              |
|                            |         | HIGH      | Q16        | 18.64 | 19.52 | 18.98 | 20.30              |
|                            | 8       | LOW       | Q16        | 19.25 | 19.06 | 18.93 | 20.30              |
|                            |         | MID       | Q16        | 18.87 | 19.07 | 19.10 | 20.30              |
|                            |         | HIGH      | Q16        | 19.04 | 19.06 | 19.03 | 20.30              |
|                            | 15      | LOW       | Q16        | 19.11 | 18.67 | 18.89 | 20.30              |
| 3                          | 1       | LOW       | 64QAM      | 18.90 | 18.71 | 19.04 | 20.30              |
|                            |         | MID       | 64QAM      | 18.71 | 19.51 | 18.96 | 20.30              |
|                            |         | HIGH      | 64QAM      | 18.43 | 19.04 | 18.94 | 20.30              |
|                            | 8       | LOW       | 64QAM      | 18.93 | 18.93 | 18.94 | 20.30              |
|                            |         | MID       | 64QAM      | 19.37 | 18.85 | 18.89 | 20.30              |
|                            |         | HIGH      | 64QAM      | 19.17 | 18.92 | 19.23 | 20.30              |
|                            | 15      | LOW       | 64QAM      | 19.35 | 19.09 | 18.56 | 20.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 18.85      | 18.97 | 18.82 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 18.96      | 19.10 | 18.95 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.99      | 19.36 | 18.90 | 20.30              |                    |
|                 | 12              | LOW       | QPSK       | 18.95      | 19.02 | 18.59 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 18.95      | 19.21 | 18.82 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.90      | 18.91 | 18.71 | 20.30              |                    |
|                 | 25              | LOW       | QPSK       | 18.81      | 19.16 | 18.91 | 20.30              |                    |
|                 | 5               | 1         | LOW        | Q16        | 18.95 | 19.16 | 18.86              | 20.30              |
|                 |                 |           | MID        | Q16        | 18.96 | 19.16 | 19.24              | 20.30              |
| HIGH            |                 |           | Q16        | 18.83      | 19.34 | 19.00 | 20.30              |                    |
| 12              |                 | LOW       | Q16        | 19.18      | 19.03 | 18.90 | 20.30              |                    |
|                 |                 | MID       | Q16        | 18.83      | 19.27 | 19.08 | 20.30              |                    |
|                 |                 | HIGH      | Q16        | 19.12      | 19.00 | 19.05 | 20.30              |                    |
| 25              | LOW             | Q16       | 19.13      | 18.82      | 18.85 | 20.30 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 19.11      | 18.69 | 18.91 | 20.30              |                    |
|                 |                 | MID       | 64QAM      | 18.80      | 19.51 | 18.81 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.33      | 18.91 | 18.81 | 20.30              |                    |
|                 | 12              | LOW       | 64QAM      | 19.14      | 18.76 | 18.67 | 20.30              |                    |
|                 |                 | MID       | 64QAM      | 19.20      | 18.89 | 18.91 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.88      | 18.69 | 19.21 | 20.30              |                    |
|                 | 25              | LOW       | 64QAM      | 19.31      | 18.91 | 18.62 | 20.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 18.85 | 18.99 | 18.78              | 20.30              |
| MID             |                 |           | QPSK       | 19.02      | 19.04 | 19.08 | 20.30              |                    |
| HIGH            |                 |           | QPSK       | 19.14      | 19.28 | 19.11 | 20.30              |                    |
| 25              |                 | LOW       | QPSK       | 19.05      | 19.06 | 18.74 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.08      | 19.17 | 18.84 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.84      | 19.04 | 18.77 | 20.30              |                    |
| 50              |                 | LOW       | QPSK       | 18.96      | 19.20 | 19.00 | 20.30              |                    |
| 10              | 1               | LOW       | Q16        | 19.03      | 19.16 | 18.84 | 20.30              |                    |
|                 |                 | MID       | Q16        | 18.88      | 19.24 | 19.16 | 20.30              |                    |
|                 |                 | HIGH      | Q16        | 18.75      | 19.52 | 18.96 | 20.30              |                    |
|                 | 25              | LOW       | Q16        | 19.35      | 19.18 | 18.84 | 20.30              |                    |
|                 |                 | MID       | Q16        | 18.98      | 19.17 | 19.08 | 20.30              |                    |
|                 |                 | HIGH      | Q16        | 19.10      | 19.08 | 19.09 | 20.30              |                    |
|                 | 50              | LOW       | Q16        | 19.21      | 18.84 | 19.02 | 20.30              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 19.05 | 18.82 | 19.00              | 20.30              |
|                 |                 |           | MID        | 64QAM      | 18.80 | 19.49 | 18.94              | 20.30              |
| HIGH            |                 |           | 64QAM      | 18.52      | 19.12 | 18.96 | 20.30              |                    |
| 25              |                 | LOW       | 64QAM      | 19.04      | 18.87 | 18.86 | 20.30              |                    |
|                 |                 | MID       | 64QAM      | 19.41      | 18.91 | 19.00 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.07      | 18.90 | 19.27 | 20.30              |                    |
| 50              |                 | LOW       | 64QAM      | 19.27      | 19.01 | 18.69 | 20.30              |                    |

| LTE B5-State 6 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                        | 1       | LOW       | QPSK       | 18.93 | 18.95 | 18.82 | 20.30              |
|                            |         | MID       | QPSK       | 18.85 | 19.06 | 19.04 | 20.30              |
|                            |         | HIGH      | QPSK       | 19.10 | 19.15 | 19.11 | 20.30              |
|                            | 3       | LOW       | QPSK       | 18.95 | 19.14 | 18.70 | 20.30              |
|                            |         | MID       | QPSK       | 19.12 | 19.00 | 18.90 | 20.30              |
|                            |         | HIGH      | QPSK       | 18.65 | 18.98 | 18.58 | 20.30              |
|                            | 6       | LOW       | QPSK       | 18.87 | 19.01 | 18.79 | 20.30              |
|                            | 1.4     | LOW       | Q16        | 19.05 | 18.99 | 18.86 | 20.30              |
|                            |         | MID       | Q16        | 18.94 | 19.32 | 19.18 | 20.30              |
|                            |         | HIGH      | Q16        | 18.84 | 19.60 | 18.81 | 20.30              |
|                            |         | LOW       | Q16        | 19.37 | 19.20 | 18.84 | 20.30              |
|                            |         | MID       | Q16        | 18.96 | 19.09 | 19.06 | 20.30              |
|                            |         | HIGH      | Q16        | 19.08 | 19.12 | 18.96 | 20.30              |
| 1.4                        | 1       | LOW       | 64QAM      | 19.05 | 18.88 | 19.08 | 20.30              |
|                            |         | MID       | 64QAM      | 18.59 | 19.47 | 18.86 | 20.30              |
|                            |         | HIGH      | 64QAM      | 18.50 | 19.20 | 18.92 | 20.30              |
|                            | 3       | LOW       | 64QAM      | 19.12 | 18.81 | 18.65 | 20.30              |
|                            |         | MID       | 64QAM      | 19.25 | 18.72 | 19.06 | 20.30              |
|                            |         | HIGH      | 64QAM      | 19.09 | 18.99 | 18.94 | 20.30              |
|                            | 6       | LOW       | 64QAM      | 19.06 | 19.11 | 18.78 | 20.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                          | 1       | LOW       | QPSK       | 18.72 | 18.88 | 18.87 | 20.30              |
|                            |         | MID       | QPSK       | 18.87 | 19.02 | 18.87 | 20.30              |
|                            |         | HIGH      | QPSK       | 19.16 | 19.26 | 18.92 | 20.30              |
|                            | 8       | LOW       | QPSK       | 18.84 | 18.95 | 18.68 | 20.30              |
|                            |         | MID       | QPSK       | 19.08 | 19.17 | 18.90 | 20.30              |
|                            |         | HIGH      | QPSK       | 18.88 | 19.08 | 18.85 | 20.30              |
| 3                          | 15      | LOW       | QPSK       | 18.85 | 19.22 | 18.92 | 20.30              |
|                            | 1       | LOW       | Q16        | 18.99 | 19.06 | 18.90 | 20.30              |
|                            |         | MID       | Q16        | 18.90 | 19.07 | 19.12 | 20.30              |
|                            |         | HIGH      | Q16        | 18.64 | 19.52 | 18.98 | 20.30              |
|                            | 8       | LOW       | Q16        | 19.25 | 19.06 | 18.93 | 20.30              |
|                            |         | MID       | Q16        | 18.87 | 19.07 | 19.10 | 20.30              |
|                            |         | HIGH      | Q16        | 19.04 | 19.06 | 19.03 | 20.30              |
|                            | 15      | LOW       | Q16        | 19.11 | 18.67 | 18.89 | 20.30              |
|                            | 3       | LOW       | 64QAM      | 18.90 | 18.71 | 19.04 | 20.30              |
|                            |         | MID       | 64QAM      | 18.71 | 19.51 | 18.96 | 20.30              |
|                            |         | HIGH      | 64QAM      | 18.43 | 19.04 | 18.94 | 20.30              |
|                            |         | LOW       | 64QAM      | 18.93 | 18.93 | 18.94 | 20.30              |
|                            |         | MID       | 64QAM      | 19.37 | 18.85 | 18.89 | 20.30              |
|                            |         | HIGH      | 64QAM      | 19.17 | 18.92 | 19.23 | 20.30              |
| 3                          | 15      | LOW       | 64QAM      | 19.35 | 19.09 | 18.56 | 20.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 18.85      | 18.97 | 18.82 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 18.96      | 19.10 | 18.95 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.99      | 19.36 | 18.90 | 20.30              |                    |
|                 | 12              | LOW       | QPSK       | 18.95      | 19.02 | 18.59 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 18.95      | 19.21 | 18.82 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.90      | 18.91 | 18.71 | 20.30              |                    |
|                 | 25              | LOW       | QPSK       | 18.81      | 19.16 | 18.91 | 20.30              |                    |
|                 | 5               | 1         | LOW        | Q16        | 18.95 | 19.16 | 18.86              | 20.30              |
|                 |                 |           | MID        | Q16        | 18.96 | 19.16 | 19.24              | 20.30              |
| HIGH            |                 |           | Q16        | 18.83      | 19.34 | 19.00 | 20.30              |                    |
| 12              |                 | LOW       | Q16        | 19.18      | 19.03 | 18.90 | 20.30              |                    |
|                 |                 | MID       | Q16        | 18.83      | 19.27 | 19.08 | 20.30              |                    |
|                 |                 | HIGH      | Q16        | 19.12      | 19.00 | 19.05 | 20.30              |                    |
| 25              | LOW             | Q16       | 19.13      | 18.82      | 18.85 | 20.30 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 19.11      | 18.69 | 18.91 | 20.30              |                    |
|                 |                 | MID       | 64QAM      | 18.80      | 19.51 | 18.81 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.33      | 18.91 | 18.81 | 20.30              |                    |
|                 | 12              | LOW       | 64QAM      | 19.14      | 18.76 | 18.67 | 20.30              |                    |
|                 |                 | MID       | 64QAM      | 19.20      | 18.89 | 18.91 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.88      | 18.69 | 19.21 | 20.30              |                    |
|                 | 25              | LOW       | 64QAM      | 19.31      | 18.91 | 18.62 | 20.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 18.85 | 18.99 | 18.78              | 20.30              |
| MID             |                 |           | QPSK       | 19.02      | 19.04 | 19.08 | 20.30              |                    |
| HIGH            |                 |           | QPSK       | 19.14      | 19.28 | 19.11 | 20.30              |                    |
| 25              |                 | LOW       | QPSK       | 19.05      | 19.06 | 18.74 | 20.30              |                    |
|                 |                 | MID       | QPSK       | 19.08      | 19.17 | 18.84 | 20.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.84      | 19.04 | 18.77 | 20.30              |                    |
| 50              |                 | LOW       | QPSK       | 18.96      | 19.20 | 19.00 | 20.30              |                    |
| 10              | 1               | LOW       | Q16        | 19.03      | 19.16 | 18.84 | 20.30              |                    |
|                 |                 | MID       | Q16        | 18.88      | 19.24 | 19.16 | 20.30              |                    |
|                 |                 | HIGH      | Q16        | 18.75      | 19.52 | 18.96 | 20.30              |                    |
|                 | 25              | LOW       | Q16        | 19.35      | 19.18 | 18.84 | 20.30              |                    |
|                 |                 | MID       | Q16        | 18.98      | 19.17 | 19.08 | 20.30              |                    |
|                 |                 | HIGH      | Q16        | 19.10      | 19.08 | 19.09 | 20.30              |                    |
|                 | 50              | LOW       | Q16        | 19.21      | 18.84 | 19.02 | 20.30              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 19.05 | 18.82 | 19.00              | 20.30              |
|                 |                 |           | MID        | 64QAM      | 18.80 | 19.49 | 18.94              | 20.30              |
| HIGH            |                 |           | 64QAM      | 18.52      | 19.12 | 18.96 | 20.30              |                    |
| 25              |                 | LOW       | 64QAM      | 19.04      | 18.87 | 18.86 | 20.30              |                    |
|                 |                 | MID       | 64QAM      | 19.41      | 18.91 | 19.00 | 20.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.07      | 18.90 | 19.27 | 20.30              |                    |
| 50              |                 | LOW       | 64QAM      | 19.27      | 19.01 | 18.69 | 20.30              |                    |

| LTE B5-State 1 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.59 | 23.63 | 23.74 | 24.80              |
|                       |         | MID       | QPSK       | 23.60 | 23.74 | 23.60 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.88 | 23.98 | 23.74 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.81 | 23.74 | 23.54 | 24.80              |
|                       |         | MID       | QPSK       | 23.81 | 23.67 | 23.45 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.50 | 23.76 | 23.40 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.57 | 22.68 | 22.52 | 23.80              |
|                       | 1.4     | LOW       | Q16        | 22.66 | 23.13 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.45 | 23.08 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.52 | 23.20 | 22.76 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.73 | 22.88 | 22.84 | 23.80              |
|                       |         | MID       | Q16        | 22.71 | 22.72 | 22.76 | 23.80              |
|                       |         | HIGH      | Q16        | 22.80 | 22.91 | 22.48 | 23.80              |
|                       | 6       | LOW       | Q16        | 21.65 | 21.89 | 21.69 | 22.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.64 | 22.25 | 21.62 | 22.80              |
|                       |         | MID       | 64QAM      | 21.49 | 22.28 | 21.77 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.47 | 22.48 | 21.69 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.89 | 21.57 | 21.79 | 22.80              |
|                       |         | MID       | 64QAM      | 21.90 | 22.02 | 21.64 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.56 | 22.14 | 21.70 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.74 | 20.76 | 20.91 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.71 | 23.55 | 23.55 | 24.80              |
|                       |         | MID       | QPSK       | 23.75 | 23.81 | 23.81 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.66 | 23.79 | 23.48 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.76 | 22.58 | 22.54 | 23.80              |
|                       |         | MID       | QPSK       | 22.51 | 22.76 | 22.59 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.70 | 22.83 | 22.54 | 23.80              |
| 3                     | 15      | LOW       | QPSK       | 22.85 | 22.59 | 22.81 | 23.80              |
|                       | 1       | LOW       | Q16        | 22.70 | 23.04 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.41 | 23.06 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.75 | 23.29 | 22.73 | 23.80              |
|                       | 8       | LOW       | Q16        | 21.69 | 21.97 | 21.60 | 22.80              |
|                       |         | MID       | Q16        | 21.61 | 21.94 | 21.54 | 22.80              |
|                       |         | HIGH      | Q16        | 21.89 | 21.76 | 21.48 | 22.80              |
|                       | 15      | LOW       | Q16        | 21.74 | 21.86 | 21.84 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.57 | 22.03 | 21.51 | 22.80              |
|                       |         | MID       | 64QAM      | 21.57 | 22.12 | 22.01 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.58 | 22.42 | 21.83 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.77 | 20.78 | 20.86 | 21.80              |
|                       |         | MID       | 64QAM      | 20.65 | 21.06 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.70 | 21.08 | 20.48 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.68 | 20.76 | 20.87 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.80 | 23.72 | 23.69 | 24.80              |
|                 |         | MID       | QPSK       | 23.70 | 23.67 | 23.58 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.95 | 23.69 | 23.55 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.65 | 22.58 | 22.63 | 23.80              |
|                 |         | MID       | QPSK       | 22.83 | 22.85 | 22.66 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.73 | 22.67 | 22.51 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.83 | 22.73 | 22.54 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.54 | 23.04 | 22.63 | 23.80              |
|                 |         | MID       | Q16        | 22.38 | 23.32 | 22.57 | 23.80              |
|                 |         | HIGH      | Q16        | 22.48 | 23.24 | 22.80 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.71 | 21.81 | 21.87 | 22.80              |
|                 |         | MID       | Q16        | 21.67 | 21.81 | 21.85 | 22.80              |
|                 |         | HIGH      | Q16        | 21.69 | 21.93 | 21.63 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.85 | 21.91 | 21.77 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.38 | 22.07 | 21.44 | 22.80              |
|                 |         | MID       | 64QAM      | 21.49 | 22.08 | 21.92 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.65 | 22.33 | 21.67 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.56 | 20.74 | 20.71 | 21.80              |
|                 |         | MID       | 64QAM      | 20.82 | 21.04 | 20.74 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.78 | 20.85 | 20.60 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.74 | 20.54 | 20.93 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.73 | 23.72 | 23.67 | 24.80              |
|                 |         | MID       | QPSK       | 23.77 | 23.79 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.83 | 23.86 | 23.67 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.81 | 22.83 | 22.68 | 23.80              |
|                 |         | MID       | QPSK       | 22.76 | 22.78 | 22.68 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.75 | 22.85 | 22.65 | 23.80              |
|                 | 50      | LOW       | QPSK       | 22.78 | 22.82 | 22.70 | 23.80              |
| 10              | 1       | LOW       | Q16        | 22.61 | 23.11 | 22.74 | 23.80              |
|                 |         | MID       | Q16        | 22.61 | 23.20 | 22.75 | 23.80              |
|                 |         | HIGH      | Q16        | 22.68 | 23.22 | 22.71 | 23.80              |
|                 | 25      | LOW       | Q16        | 21.82 | 21.88 | 21.80 | 22.80              |
|                 |         | MID       | Q16        | 21.78 | 21.85 | 21.76 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.89 | 21.72 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.76 | 21.82 | 21.73 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.53 | 22.14 | 21.66 | 22.80              |
|                 |         | MID       | 64QAM      | 21.66 | 22.28 | 21.90 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.69 | 22.44 | 21.76 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.79 | 20.80 | 20.92 | 21.80              |
|                 |         | MID       | 64QAM      | 20.86 | 21.06 | 20.64 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.68 | 21.08 | 20.60 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.64 | 20.68 | 20.87 | 21.80              |

| LTE B5-State 2 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.59 | 23.63 | 23.74 | 24.80              |
|                       |         | MID       | QPSK       | 23.60 | 23.74 | 23.60 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.88 | 23.98 | 23.74 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.81 | 23.74 | 23.54 | 24.80              |
|                       |         | MID       | QPSK       | 23.81 | 23.67 | 23.45 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.50 | 23.76 | 23.40 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.57 | 22.68 | 22.52 | 23.80              |
|                       | 1.4     | LOW       | Q16        | 22.66 | 23.13 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.45 | 23.08 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.52 | 23.20 | 22.76 | 23.80              |
|                       |         | LOW       | Q16        | 22.73 | 22.88 | 22.84 | 23.80              |
|                       |         | MID       | Q16        | 22.71 | 22.72 | 22.76 | 23.80              |
|                       |         | HIGH      | Q16        | 22.80 | 22.91 | 22.48 | 23.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.64 | 22.25 | 21.62 | 22.80              |
|                       |         | MID       | 64QAM      | 21.49 | 22.28 | 21.77 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.47 | 22.48 | 21.69 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.89 | 21.57 | 21.79 | 22.80              |
|                       |         | MID       | 64QAM      | 21.90 | 22.02 | 21.64 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.56 | 22.14 | 21.70 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.74 | 20.76 | 20.91 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.71 | 23.55 | 23.55 | 24.80              |
|                       |         | MID       | QPSK       | 23.75 | 23.81 | 23.81 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.66 | 23.79 | 23.48 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.76 | 22.58 | 22.54 | 23.80              |
|                       |         | MID       | QPSK       | 22.51 | 22.76 | 22.59 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.70 | 22.83 | 22.54 | 23.80              |
|                       | 15      | LOW       | QPSK       | 22.85 | 22.59 | 22.81 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.70 | 23.04 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.41 | 23.06 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.75 | 23.29 | 22.73 | 23.80              |
|                       |         | LOW       | Q16        | 21.69 | 21.97 | 21.60 | 22.80              |
|                       |         | MID       | Q16        | 21.61 | 21.94 | 21.54 | 22.80              |
|                       |         | HIGH      | Q16        | 21.89 | 21.76 | 21.48 | 22.80              |
| 3                     | 1       | LOW       | Q16        | 21.74 | 21.86 | 21.84 | 22.80              |
|                       |         | LOW       | 64QAM      | 21.57 | 22.03 | 21.51 | 22.80              |
|                       |         | MID       | 64QAM      | 21.57 | 22.12 | 22.01 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.58 | 22.42 | 21.83 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.77 | 20.78 | 20.86 | 21.80              |
|                       |         | MID       | 64QAM      | 20.65 | 21.06 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.70 | 21.08 | 20.48 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.68 | 20.76 | 20.87 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.80      | 23.72 | 23.69 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.70      | 23.67 | 23.58 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.95      | 23.69 | 23.55 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.65      | 22.58 | 22.63 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.83      | 22.85 | 22.66 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.73      | 22.67 | 22.51 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.83      | 22.73 | 22.54 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.54 | 23.04 | 22.63              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.38 | 23.32 | 22.57              | 23.80              |
| HIGH            |                 |           | Q16        | 22.48      | 23.24 | 22.80 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.71      | 21.81 | 21.87 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.67      | 21.81 | 21.85 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.69      | 21.93 | 21.63 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.85      | 21.91 | 21.77 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.38 | 22.07 | 21.44              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.49 | 22.08 | 21.92              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.65      | 22.33 | 21.67 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.56      | 20.74 | 20.71 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 21.04 | 20.74 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.78      | 20.85 | 20.60 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.74      | 20.54 | 20.93 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.73 | 23.72 | 23.67              | 24.80              |
| MID             |                 |           | QPSK       | 23.77      | 23.79 | 23.72 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.83      | 23.86 | 23.67 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.81      | 22.83 | 22.68 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.76      | 22.78 | 22.68 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.75      | 22.85 | 22.65 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.78      | 22.82 | 22.70 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.61 | 23.11 | 22.74              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.61 | 23.20 | 22.75              | 23.80              |
|                 | HIGH            |           | Q16        | 22.68      | 23.22 | 22.71 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.82      | 21.88 | 21.80 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.78      | 21.85 | 21.76 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.78      | 21.89 | 21.72 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.76      | 21.82 | 21.73 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.53 | 22.14 | 21.66              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.66 | 22.28 | 21.90              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.69      | 22.44 | 21.76 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.79      | 20.80 | 20.92 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.86      | 21.06 | 20.64 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.68      | 21.08 | 20.60 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.64      | 20.68 | 20.87 | 21.80              |                    |

| LTE B5-State 3 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.59 | 23.63 | 23.74 | 24.80              |
|                       |         | MID       | QPSK       | 23.60 | 23.74 | 23.60 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.88 | 23.98 | 23.74 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.81 | 23.74 | 23.54 | 24.80              |
|                       |         | MID       | QPSK       | 23.81 | 23.67 | 23.45 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.50 | 23.76 | 23.40 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.57 | 22.68 | 22.52 | 23.80              |
|                       | 1.4     | LOW       | Q16        | 22.66 | 23.13 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.45 | 23.08 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.52 | 23.20 | 22.76 | 23.80              |
|                       |         | LOW       | Q16        | 22.73 | 22.88 | 22.84 | 23.80              |
|                       |         | MID       | Q16        | 22.71 | 22.72 | 22.76 | 23.80              |
|                       |         | HIGH      | Q16        | 22.80 | 22.91 | 22.48 | 23.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.64 | 22.25 | 21.62 | 22.80              |
|                       |         | MID       | 64QAM      | 21.49 | 22.28 | 21.77 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.47 | 22.48 | 21.69 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.89 | 21.57 | 21.79 | 22.80              |
|                       |         | MID       | 64QAM      | 21.90 | 22.02 | 21.64 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.56 | 22.14 | 21.70 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.74 | 20.76 | 20.91 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.71 | 23.55 | 23.55 | 24.80              |
|                       |         | MID       | QPSK       | 23.75 | 23.81 | 23.81 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.66 | 23.79 | 23.48 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.76 | 22.58 | 22.54 | 23.80              |
|                       |         | MID       | QPSK       | 22.51 | 22.76 | 22.59 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.70 | 22.83 | 22.54 | 23.80              |
|                       | 15      | LOW       | QPSK       | 22.85 | 22.59 | 22.81 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.70 | 23.04 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.41 | 23.06 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.75 | 23.29 | 22.73 | 23.80              |
|                       |         | LOW       | Q16        | 21.69 | 21.97 | 21.60 | 22.80              |
|                       |         | MID       | Q16        | 21.61 | 21.94 | 21.54 | 22.80              |
|                       |         | HIGH      | Q16        | 21.89 | 21.76 | 21.48 | 22.80              |
| 3                     | 1       | LOW       | Q16        | 21.74 | 21.86 | 21.84 | 22.80              |
|                       |         | LOW       | 64QAM      | 21.57 | 22.03 | 21.51 | 22.80              |
|                       |         | MID       | 64QAM      | 21.57 | 22.12 | 22.01 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.58 | 22.42 | 21.83 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.77 | 20.78 | 20.86 | 21.80              |
|                       |         | MID       | 64QAM      | 20.65 | 21.06 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.70 | 21.08 | 20.48 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.68 | 20.76 | 20.87 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.80 | 23.72 | 23.69 | 24.80              |
|                 |         | MID       | QPSK       | 23.70 | 23.67 | 23.58 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.95 | 23.69 | 23.55 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.65 | 22.58 | 22.63 | 23.80              |
|                 |         | MID       | QPSK       | 22.83 | 22.85 | 22.66 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.73 | 22.67 | 22.51 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.83 | 22.73 | 22.54 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.54 | 23.04 | 22.63 | 23.80              |
|                 |         | MID       | Q16        | 22.38 | 23.32 | 22.57 | 23.80              |
|                 |         | HIGH      | Q16        | 22.48 | 23.24 | 22.80 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.71 | 21.81 | 21.87 | 22.80              |
|                 |         | MID       | Q16        | 21.67 | 21.81 | 21.85 | 22.80              |
|                 |         | HIGH      | Q16        | 21.69 | 21.93 | 21.63 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.85 | 21.91 | 21.77 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.38 | 22.07 | 21.44 | 22.80              |
|                 |         | MID       | 64QAM      | 21.49 | 22.08 | 21.92 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.65 | 22.33 | 21.67 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.56 | 20.74 | 20.71 | 21.80              |
|                 |         | MID       | 64QAM      | 20.82 | 21.04 | 20.74 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.78 | 20.85 | 20.60 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.74 | 20.54 | 20.93 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.73 | 23.72 | 23.67 | 24.80              |
|                 |         | MID       | QPSK       | 23.77 | 23.79 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.83 | 23.86 | 23.67 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.81 | 22.83 | 22.68 | 23.80              |
|                 |         | MID       | QPSK       | 22.76 | 22.78 | 22.68 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.75 | 22.85 | 22.65 | 23.80              |
|                 | 50      | LOW       | QPSK       | 22.78 | 22.82 | 22.70 | 23.80              |
| 10              | 1       | LOW       | Q16        | 22.61 | 23.11 | 22.74 | 23.80              |
|                 |         | MID       | Q16        | 22.61 | 23.20 | 22.75 | 23.80              |
|                 |         | HIGH      | Q16        | 22.68 | 23.22 | 22.71 | 23.80              |
|                 | 25      | LOW       | Q16        | 21.82 | 21.88 | 21.80 | 22.80              |
|                 |         | MID       | Q16        | 21.78 | 21.85 | 21.76 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.89 | 21.72 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.76 | 21.82 | 21.73 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.53 | 22.14 | 21.66 | 22.80              |
|                 |         | MID       | 64QAM      | 21.66 | 22.28 | 21.90 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.69 | 22.44 | 21.76 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.79 | 20.80 | 20.92 | 21.80              |
|                 |         | MID       | 64QAM      | 20.86 | 21.06 | 20.64 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.68 | 21.08 | 20.60 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.64 | 20.68 | 20.87 | 21.80              |

| LTE B5-State 4 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.59 | 23.63 | 23.74 | 24.80              |
|                       |         | MID       | QPSK       | 23.60 | 23.74 | 23.60 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.88 | 23.98 | 23.74 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.81 | 23.74 | 23.54 | 24.80              |
|                       |         | MID       | QPSK       | 23.81 | 23.67 | 23.45 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.50 | 23.76 | 23.40 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.57 | 22.68 | 22.52 | 23.80              |
|                       | 1.4     | LOW       | Q16        | 22.66 | 23.13 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.45 | 23.08 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.52 | 23.20 | 22.76 | 23.80              |
|                       |         | LOW       | Q16        | 22.73 | 22.88 | 22.84 | 23.80              |
|                       |         | MID       | Q16        | 22.71 | 22.72 | 22.76 | 23.80              |
|                       |         | HIGH      | Q16        | 22.80 | 22.91 | 22.48 | 23.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.64 | 22.25 | 21.62 | 22.80              |
|                       |         | MID       | 64QAM      | 21.49 | 22.28 | 21.77 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.47 | 22.48 | 21.69 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.89 | 21.57 | 21.79 | 22.80              |
|                       |         | MID       | 64QAM      | 21.90 | 22.02 | 21.64 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.56 | 22.14 | 21.70 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.74 | 20.76 | 20.91 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.71 | 23.55 | 23.55 | 24.80              |
|                       |         | MID       | QPSK       | 23.75 | 23.81 | 23.81 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.66 | 23.79 | 23.48 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.76 | 22.58 | 22.54 | 23.80              |
|                       |         | MID       | QPSK       | 22.51 | 22.76 | 22.59 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.70 | 22.83 | 22.54 | 23.80              |
|                       | 15      | LOW       | QPSK       | 22.85 | 22.59 | 22.81 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.70 | 23.04 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.41 | 23.06 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.75 | 23.29 | 22.73 | 23.80              |
|                       |         | LOW       | Q16        | 21.69 | 21.97 | 21.60 | 22.80              |
|                       |         | MID       | Q16        | 21.61 | 21.94 | 21.54 | 22.80              |
|                       |         | HIGH      | Q16        | 21.89 | 21.76 | 21.48 | 22.80              |
| 3                     | 1       | LOW       | Q16        | 21.74 | 21.86 | 21.84 | 22.80              |
|                       |         | LOW       | 64QAM      | 21.57 | 22.03 | 21.51 | 22.80              |
|                       |         | MID       | 64QAM      | 21.57 | 22.12 | 22.01 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.58 | 22.42 | 21.83 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.77 | 20.78 | 20.86 | 21.80              |
|                       |         | MID       | 64QAM      | 20.65 | 21.06 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.70 | 21.08 | 20.48 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.68 | 20.76 | 20.87 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.80 | 23.72 | 23.69 | 24.80              |
|                 |         | MID       | QPSK       | 23.70 | 23.67 | 23.58 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.95 | 23.69 | 23.55 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.65 | 22.58 | 22.63 | 23.80              |
|                 |         | MID       | QPSK       | 22.83 | 22.85 | 22.66 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.73 | 22.67 | 22.51 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.83 | 22.73 | 22.54 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.54 | 23.04 | 22.63 | 23.80              |
|                 |         | MID       | Q16        | 22.38 | 23.32 | 22.57 | 23.80              |
|                 |         | HIGH      | Q16        | 22.48 | 23.24 | 22.80 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.71 | 21.81 | 21.87 | 22.80              |
|                 |         | MID       | Q16        | 21.67 | 21.81 | 21.85 | 22.80              |
|                 |         | HIGH      | Q16        | 21.69 | 21.93 | 21.63 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.85 | 21.91 | 21.77 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.38 | 22.07 | 21.44 | 22.80              |
|                 |         | MID       | 64QAM      | 21.49 | 22.08 | 21.92 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.65 | 22.33 | 21.67 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.56 | 20.74 | 20.71 | 21.80              |
|                 |         | MID       | 64QAM      | 20.82 | 21.04 | 20.74 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.78 | 20.85 | 20.60 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.74 | 20.54 | 20.93 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.73 | 23.72 | 23.67 | 24.80              |
|                 |         | MID       | QPSK       | 23.77 | 23.79 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.83 | 23.86 | 23.67 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.81 | 22.83 | 22.68 | 23.80              |
|                 |         | MID       | QPSK       | 22.76 | 22.78 | 22.68 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.75 | 22.85 | 22.65 | 23.80              |
|                 | 50      | LOW       | QPSK       | 22.78 | 22.82 | 22.70 | 23.80              |
| 10              | 1       | LOW       | Q16        | 22.61 | 23.11 | 22.74 | 23.80              |
|                 |         | MID       | Q16        | 22.61 | 23.20 | 22.75 | 23.80              |
|                 |         | HIGH      | Q16        | 22.68 | 23.22 | 22.71 | 23.80              |
|                 | 25      | LOW       | Q16        | 21.82 | 21.88 | 21.80 | 22.80              |
|                 |         | MID       | Q16        | 21.78 | 21.85 | 21.76 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.89 | 21.72 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.76 | 21.82 | 21.73 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.53 | 22.14 | 21.66 | 22.80              |
|                 |         | MID       | 64QAM      | 21.66 | 22.28 | 21.90 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.69 | 22.44 | 21.76 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.79 | 20.80 | 20.92 | 21.80              |
|                 |         | MID       | 64QAM      | 20.86 | 21.06 | 20.64 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.68 | 21.08 | 20.60 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.64 | 20.68 | 20.87 | 21.80              |

| LTE B5-State 5 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.59 | 23.63 | 23.74 | 24.80              |
|                       |         | MID       | QPSK       | 23.60 | 23.74 | 23.60 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.88 | 23.98 | 23.74 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.81 | 23.74 | 23.54 | 24.80              |
|                       |         | MID       | QPSK       | 23.81 | 23.67 | 23.45 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.50 | 23.76 | 23.40 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.57 | 22.68 | 22.52 | 23.80              |
|                       | 1.4     | LOW       | Q16        | 22.66 | 23.13 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.45 | 23.08 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.52 | 23.20 | 22.76 | 23.80              |
|                       |         | LOW       | Q16        | 22.73 | 22.88 | 22.84 | 23.80              |
|                       |         | MID       | Q16        | 22.71 | 22.72 | 22.76 | 23.80              |
|                       |         | HIGH      | Q16        | 22.80 | 22.91 | 22.48 | 23.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.64 | 22.25 | 21.62 | 22.80              |
|                       |         | MID       | 64QAM      | 21.49 | 22.28 | 21.77 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.47 | 22.48 | 21.69 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.89 | 21.57 | 21.79 | 22.80              |
|                       |         | MID       | 64QAM      | 21.90 | 22.02 | 21.64 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.56 | 22.14 | 21.70 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.74 | 20.76 | 20.91 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.71 | 23.55 | 23.55 | 24.80              |
|                       |         | MID       | QPSK       | 23.75 | 23.81 | 23.81 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.66 | 23.79 | 23.48 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.76 | 22.58 | 22.54 | 23.80              |
|                       |         | MID       | QPSK       | 22.51 | 22.76 | 22.59 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.70 | 22.83 | 22.54 | 23.80              |
|                       | 15      | LOW       | QPSK       | 22.85 | 22.59 | 22.81 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.70 | 23.04 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.41 | 23.06 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.75 | 23.29 | 22.73 | 23.80              |
|                       |         | LOW       | Q16        | 21.69 | 21.97 | 21.60 | 22.80              |
|                       |         | MID       | Q16        | 21.61 | 21.94 | 21.54 | 22.80              |
|                       |         | HIGH      | Q16        | 21.89 | 21.76 | 21.48 | 22.80              |
| 3                     | 1       | LOW       | Q16        | 21.74 | 21.86 | 21.84 | 22.80              |
|                       |         | LOW       | 64QAM      | 21.57 | 22.03 | 21.51 | 22.80              |
|                       |         | MID       | 64QAM      | 21.57 | 22.12 | 22.01 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.58 | 22.42 | 21.83 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.77 | 20.78 | 20.86 | 21.80              |
|                       |         | MID       | 64QAM      | 20.65 | 21.06 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.70 | 21.08 | 20.48 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.68 | 20.76 | 20.87 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.80 | 23.72 | 23.69 | 24.80              |
|                 |         | MID       | QPSK       | 23.70 | 23.67 | 23.58 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.95 | 23.69 | 23.55 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.65 | 22.58 | 22.63 | 23.80              |
|                 |         | MID       | QPSK       | 22.83 | 22.85 | 22.66 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.73 | 22.67 | 22.51 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.83 | 22.73 | 22.54 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.54 | 23.04 | 22.63 | 23.80              |
|                 |         | MID       | Q16        | 22.38 | 23.32 | 22.57 | 23.80              |
|                 |         | HIGH      | Q16        | 22.48 | 23.24 | 22.80 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.71 | 21.81 | 21.87 | 22.80              |
|                 |         | MID       | Q16        | 21.67 | 21.81 | 21.85 | 22.80              |
|                 |         | HIGH      | Q16        | 21.69 | 21.93 | 21.63 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.85 | 21.91 | 21.77 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.38 | 22.07 | 21.44 | 22.80              |
|                 |         | MID       | 64QAM      | 21.49 | 22.08 | 21.92 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.65 | 22.33 | 21.67 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.56 | 20.74 | 20.71 | 21.80              |
|                 |         | MID       | 64QAM      | 20.82 | 21.04 | 20.74 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.78 | 20.85 | 20.60 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.74 | 20.54 | 20.93 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.73 | 23.72 | 23.67 | 24.80              |
|                 |         | MID       | QPSK       | 23.77 | 23.79 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.83 | 23.86 | 23.67 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.81 | 22.83 | 22.68 | 23.80              |
|                 |         | MID       | QPSK       | 22.76 | 22.78 | 22.68 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.75 | 22.85 | 22.65 | 23.80              |
|                 | 50      | LOW       | QPSK       | 22.78 | 22.82 | 22.70 | 23.80              |
| 10              | 1       | LOW       | Q16        | 22.61 | 23.11 | 22.74 | 23.80              |
|                 |         | MID       | Q16        | 22.61 | 23.20 | 22.75 | 23.80              |
|                 |         | HIGH      | Q16        | 22.68 | 23.22 | 22.71 | 23.80              |
|                 | 25      | LOW       | Q16        | 21.82 | 21.88 | 21.80 | 22.80              |
|                 |         | MID       | Q16        | 21.78 | 21.85 | 21.76 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.89 | 21.72 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.76 | 21.82 | 21.73 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.53 | 22.14 | 21.66 | 22.80              |
|                 |         | MID       | 64QAM      | 21.66 | 22.28 | 21.90 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.69 | 22.44 | 21.76 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.79 | 20.80 | 20.92 | 21.80              |
|                 |         | MID       | 64QAM      | 20.86 | 21.06 | 20.64 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.68 | 21.08 | 20.60 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.64 | 20.68 | 20.87 | 21.80              |

| LTE B5-State 6 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.59 | 23.63 | 23.74 | 24.80              |
|                       |         | MID       | QPSK       | 23.60 | 23.74 | 23.60 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.88 | 23.98 | 23.74 | 24.80              |
|                       | 3       | LOW       | QPSK       | 23.81 | 23.74 | 23.54 | 24.80              |
|                       |         | MID       | QPSK       | 23.81 | 23.67 | 23.45 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.50 | 23.76 | 23.40 | 24.80              |
|                       | 6       | LOW       | QPSK       | 22.57 | 22.68 | 22.52 | 23.80              |
|                       | 1.4     | LOW       | Q16        | 22.66 | 23.13 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.45 | 23.08 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.52 | 23.20 | 22.76 | 23.80              |
|                       | 3       | LOW       | Q16        | 22.73 | 22.88 | 22.84 | 23.80              |
|                       |         | MID       | Q16        | 22.71 | 22.72 | 22.76 | 23.80              |
|                       |         | HIGH      | Q16        | 22.80 | 22.91 | 22.48 | 23.80              |
|                       | 6       | LOW       | Q16        | 21.65 | 21.89 | 21.69 | 22.80              |
| 1.4                   | 1       | LOW       | 64QAM      | 21.64 | 22.25 | 21.62 | 22.80              |
|                       |         | MID       | 64QAM      | 21.49 | 22.28 | 21.77 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.47 | 22.48 | 21.69 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.89 | 21.57 | 21.79 | 22.80              |
|                       |         | MID       | 64QAM      | 21.90 | 22.02 | 21.64 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.56 | 22.14 | 21.70 | 22.80              |
|                       | 6       | LOW       | 64QAM      | 20.74 | 20.76 | 20.91 | 21.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 23.71 | 23.55 | 23.55 | 24.80              |
|                       |         | MID       | QPSK       | 23.75 | 23.81 | 23.81 | 24.80              |
|                       |         | HIGH      | QPSK       | 23.66 | 23.79 | 23.48 | 24.80              |
|                       | 8       | LOW       | QPSK       | 22.76 | 22.58 | 22.54 | 23.80              |
|                       |         | MID       | QPSK       | 22.51 | 22.76 | 22.59 | 23.80              |
|                       |         | HIGH      | QPSK       | 22.70 | 22.83 | 22.54 | 23.80              |
| 3                     | 15      | LOW       | QPSK       | 22.85 | 22.59 | 22.81 | 23.80              |
|                       | 1       | LOW       | Q16        | 22.70 | 23.04 | 22.65 | 23.80              |
|                       |         | MID       | Q16        | 22.41 | 23.06 | 22.57 | 23.80              |
|                       |         | HIGH      | Q16        | 22.75 | 23.29 | 22.73 | 23.80              |
|                       | 8       | LOW       | Q16        | 21.69 | 21.97 | 21.60 | 22.80              |
|                       |         | MID       | Q16        | 21.61 | 21.94 | 21.54 | 22.80              |
|                       |         | HIGH      | Q16        | 21.89 | 21.76 | 21.48 | 22.80              |
|                       | 15      | LOW       | Q16        | 21.74 | 21.86 | 21.84 | 22.80              |
|                       | 3       | LOW       | 64QAM      | 21.57 | 22.03 | 21.51 | 22.80              |
|                       |         | MID       | 64QAM      | 21.57 | 22.12 | 22.01 | 22.80              |
|                       |         | HIGH      | 64QAM      | 21.58 | 22.42 | 21.83 | 22.80              |
|                       | 8       | LOW       | 64QAM      | 20.77 | 20.78 | 20.86 | 21.80              |
|                       |         | MID       | 64QAM      | 20.65 | 21.06 | 20.47 | 21.80              |
|                       |         | HIGH      | 64QAM      | 20.70 | 21.08 | 20.48 | 21.80              |
|                       | 15      | LOW       | 64QAM      | 20.68 | 20.76 | 20.87 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.80 | 23.72 | 23.69 | 24.80              |
|                 |         | MID       | QPSK       | 23.70 | 23.67 | 23.58 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.95 | 23.69 | 23.55 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.65 | 22.58 | 22.63 | 23.80              |
|                 |         | MID       | QPSK       | 22.83 | 22.85 | 22.66 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.73 | 22.67 | 22.51 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.83 | 22.73 | 22.54 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.54 | 23.04 | 22.63 | 23.80              |
|                 |         | MID       | Q16        | 22.38 | 23.32 | 22.57 | 23.80              |
|                 |         | HIGH      | Q16        | 22.48 | 23.24 | 22.80 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.71 | 21.81 | 21.87 | 22.80              |
|                 |         | MID       | Q16        | 21.67 | 21.81 | 21.85 | 22.80              |
|                 |         | HIGH      | Q16        | 21.69 | 21.93 | 21.63 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.85 | 21.91 | 21.77 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.38 | 22.07 | 21.44 | 22.80              |
|                 |         | MID       | 64QAM      | 21.49 | 22.08 | 21.92 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.65 | 22.33 | 21.67 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.56 | 20.74 | 20.71 | 21.80              |
|                 |         | MID       | 64QAM      | 20.82 | 21.04 | 20.74 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.78 | 20.85 | 20.60 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.74 | 20.54 | 20.93 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.73 | 23.72 | 23.67 | 24.80              |
|                 |         | MID       | QPSK       | 23.77 | 23.79 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.83 | 23.86 | 23.67 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.81 | 22.83 | 22.68 | 23.80              |
|                 |         | MID       | QPSK       | 22.76 | 22.78 | 22.68 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.75 | 22.85 | 22.65 | 23.80              |
|                 | 50      | LOW       | QPSK       | 22.78 | 22.82 | 22.70 | 23.80              |
| 10              | 1       | LOW       | Q16        | 22.61 | 23.11 | 22.74 | 23.80              |
|                 |         | MID       | Q16        | 22.61 | 23.20 | 22.75 | 23.80              |
|                 |         | HIGH      | Q16        | 22.68 | 23.22 | 22.71 | 23.80              |
|                 | 25      | LOW       | Q16        | 21.82 | 21.88 | 21.80 | 22.80              |
|                 |         | MID       | Q16        | 21.78 | 21.85 | 21.76 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.89 | 21.72 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.76 | 21.82 | 21.73 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.53 | 22.14 | 21.66 | 22.80              |
|                 |         | MID       | 64QAM      | 21.66 | 22.28 | 21.90 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.69 | 22.44 | 21.76 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.79 | 20.80 | 20.92 | 21.80              |
|                 |         | MID       | 64QAM      | 20.86 | 21.06 | 20.64 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.68 | 21.08 | 20.60 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.64 | 20.68 | 20.87 | 21.80              |

### 8.3.4 LTE Band7 Output Power

BL-SZ2220432-701

| LTE B7-State 1 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 17.39 | 17.36 | 17.38 | 17.80              |
|                       |         | MID       | QPSK       | 17.57 | 17.62 | 17.41 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.27 | 17.56 | 17.22 | 17.80              |
|                       | 12      | LOW       | QPSK       | 17.63 | 17.48 | 17.62 | 17.80              |
|                       |         | MID       | QPSK       | 17.48 | 17.40 | 17.44 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.51 | 17.65 | 17.46 | 17.80              |
|                       | 25      | LOW       | QPSK       | 17.57 | 17.39 | 17.44 | 17.80              |
| 5                     | 1       | LOW       | Q16        | 17.65 | 17.45 | 17.46 | 17.80              |
|                       |         | MID       | Q16        | 17.67 | 17.56 | 17.67 | 17.80              |
|                       |         | HIGH      | Q16        | 17.74 | 17.67 | 17.59 | 17.80              |
|                       | 12      | LOW       | Q16        | 17.63 | 17.43 | 17.51 | 17.80              |
|                       |         | MID       | Q16        | 17.56 | 17.37 | 17.52 | 17.80              |
|                       |         | HIGH      | Q16        | 17.54 | 17.56 | 17.38 | 17.80              |
|                       | 25      | LOW       | Q16        | 17.62 | 17.44 | 17.45 | 17.80              |
| 5                     | 1       | LOW       | 64QAM      | 17.59 | 17.60 | 17.56 | 17.80              |
|                       |         | MID       | 64QAM      | 17.57 | 17.64 | 17.40 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.52 | 17.79 | 17.58 | 17.80              |
|                       | 12      | LOW       | 64QAM      | 17.61 | 17.47 | 17.44 | 17.80              |
|                       |         | MID       | 64QAM      | 17.64 | 17.74 | 17.32 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.55 | 17.46 | 17.22 | 17.80              |
|                       | 25      | LOW       | 64QAM      | 17.58 | 17.56 | 17.50 | 17.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 17.33 | 17.53 | 17.16 | 17.80              |
|                       |         | MID       | QPSK       | 17.43 | 17.45 | 17.25 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.53 | 17.45 | 17.35 | 17.80              |
|                       | 25      | LOW       | QPSK       | 17.56 | 17.43 | 17.55 | 17.80              |
|                       |         | MID       | QPSK       | 17.73 | 17.49 | 17.57 | 17.80              |
|                       |         | HIGH      | QPSK       | 17.57 | 17.54 | 17.39 | 17.80              |
| 10                    | 1       | LOW       | QPSK       | 17.52 | 17.60 | 17.58 | 17.80              |
|                       |         | LOW       | Q16        | 17.49 | 17.47 | 17.45 | 17.80              |
|                       |         | MID       | Q16        | 17.71 | 17.72 | 17.51 | 17.80              |
|                       | 25      | HIGH      | Q16        | 17.65 | 17.48 | 17.61 | 17.80              |
|                       |         | LOW       | Q16        | 17.63 | 17.47 | 17.47 | 17.80              |
|                       |         | MID       | Q16        | 17.60 | 17.43 | 17.33 | 17.80              |
|                       | 50      | HIGH      | Q16        | 17.51 | 17.45 | 17.52 | 17.80              |
|                       |         | LOW       | Q16        | 17.57 | 17.34 | 17.45 | 17.80              |
| 10                    |         | 1         | LOW        | 64QAM | 17.57 | 17.67 | 17.65              |
|                       | MID     |           | 64QAM      | 17.60 | 17.73 | 17.48 | 17.80              |
|                       | HIGH    |           | 64QAM      | 17.72 | 17.60 | 17.56 | 17.80              |
|                       | 25      | LOW       | 64QAM      | 17.65 | 17.45 | 17.30 | 17.80              |
|                       |         | MID       | 64QAM      | 17.53 | 17.48 | 17.46 | 17.80              |
|                       |         | HIGH      | 64QAM      | 17.30 | 17.42 | 17.26 | 17.80              |
|                       | 50      | LOW       | 64QAM      | 17.77 | 17.57 | 17.62 | 17.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 17.30 | 17.51 | 17.35 | 17.80              |
|                 |         | MID       | QPSK       | 17.57 | 17.64 | 17.27 | 17.80              |
|                 |         | HIGH      | QPSK       | 17.32 | 17.31 | 17.43 | 17.80              |
|                 | 36      | LOW       | QPSK       | 17.63 | 17.34 | 17.41 | 17.80              |
|                 |         | MID       | QPSK       | 17.55 | 17.44 | 17.41 | 17.80              |
|                 |         | HIGH      | QPSK       | 17.42 | 17.47 | 17.51 | 17.80              |
|                 | 75      | LOW       | QPSK       | 17.46 | 17.44 | 17.58 | 17.80              |
|                 |         | LOW       | Q16        | 17.58 | 17.59 | 17.53 | 17.80              |
|                 |         | MID       | Q16        | 17.80 | 17.49 | 17.67 | 17.80              |
| 15              | 1       | HIGH      | Q16        | 17.56 | 17.55 | 17.54 | 17.80              |
|                 |         | LOW       | Q16        | 17.63 | 17.48 | 17.32 | 17.80              |
|                 |         | MID       | Q16        | 17.46 | 17.50 | 17.35 | 17.80              |
|                 | 36      | HIGH      | Q16        | 17.60 | 17.45 | 17.52 | 17.80              |
|                 |         | LOW       | Q16        | 17.48 | 17.58 | 17.56 | 17.80              |
|                 |         | LOW       | 64QAM      | 17.43 | 17.73 | 17.54 | 17.80              |
|                 | 1       | MID       | 64QAM      | 17.66 | 17.62 | 17.45 | 17.80              |
|                 |         | HIGH      | 64QAM      | 17.65 | 17.63 | 17.61 | 17.80              |
|                 |         | LOW       | 64QAM      | 17.69 | 17.47 | 17.27 | 17.80              |
| 15              | 36      | MID       | 64QAM      | 17.73 | 17.51 | 17.45 | 17.80              |
|                 |         | HIGH      | 64QAM      | 17.30 | 17.32 | 17.41 | 17.80              |
|                 |         | LOW       | 64QAM      | 17.60 | 17.57 | 17.37 | 17.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 17.49 | 17.46 | 17.33 | 17.80              |
|                 |         | MID       | QPSK       | 17.57 | 17.57 | 17.44 | 17.80              |
|                 |         | HIGH      | QPSK       | 17.46 | 17.47 | 17.38 | 17.80              |
|                 | 50      | LOW       | QPSK       | 17.54 | 17.52 | 17.55 | 17.80              |
|                 |         | MID       | QPSK       | 17.64 | 17.58 | 17.55 | 17.80              |
|                 |         | HIGH      | QPSK       | 17.53 | 17.58 | 17.49 | 17.80              |
|                 | 100     | LOW       | QPSK       | 17.57 | 17.53 | 17.49 | 17.80              |
|                 |         | LOW       | Q16        | 17.67 | 17.52 | 17.48 | 17.80              |
|                 |         | MID       | Q16        | 17.80 | 17.68 | 17.63 | 17.80              |
| 20              | 1       | HIGH      | Q16        | 17.76 | 17.62 | 17.68 | 17.80              |
|                 |         | LOW       | Q16        | 17.59 | 17.52 | 17.51 | 17.80              |
|                 |         | MID       | Q16        | 17.65 | 17.55 | 17.47 | 17.80              |
|                 | 50      | HIGH      | Q16        | 17.56 | 17.56 | 17.43 | 17.80              |
|                 |         | LOW       | Q16        | 17.62 | 17.53 | 17.47 | 17.80              |
|                 |         | LOW       | 64QAM      | 17.52 | 17.71 | 17.65 | 17.80              |
|                 | 1       | MID       | 64QAM      | 17.71 | 17.80 | 17.59 | 17.80              |
|                 |         | HIGH      | 64QAM      | 17.70 | 17.72 | 17.76 | 17.80              |
|                 |         | LOW       | 64QAM      | 17.76 | 17.47 | 17.39 | 17.80              |
| 20              | 50      | MID       | 64QAM      | 17.71 | 17.67 | 17.48 | 17.80              |
|                 |         | HIGH      | 64QAM      | 17.46 | 17.44 | 17.38 | 17.80              |
|                 |         | LOW       | 64QAM      | 17.72 | 17.61 | 17.55 | 17.80              |

| LTE B7-State 2 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 16.41 | 16.38 | 16.30 | 16.80              |
|                       |         | MID       | QPSK       | 16.50 | 16.49 | 16.39 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.36 | 16.46 | 16.23 | 16.80              |
|                       | 12      | LOW       | QPSK       | 16.23 | 16.45 | 16.38 | 16.80              |
|                       |         | MID       | QPSK       | 16.49 | 16.56 | 16.53 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.53 | 16.41 | 16.41 | 16.80              |
|                       | 25      | LOW       | QPSK       | 16.41 | 16.62 | 16.48 | 16.80              |
|                       | 5       | LOW       | Q16        | 16.72 | 16.42 | 16.27 | 16.80              |
|                       |         | MID       | Q16        | 16.55 | 16.56 | 16.53 | 16.80              |
|                       |         | HIGH      | Q16        | 16.68 | 16.67 | 16.49 | 16.80              |
|                       |         | LOW       | Q16        | 16.23 | 16.43 | 16.23 | 16.80              |
|                       |         | MID       | Q16        | 16.61 | 16.55 | 16.42 | 16.80              |
|                       |         | HIGH      | Q16        | 16.39 | 16.36 | 16.41 | 16.80              |
|                       | 25      | LOW       | Q16        | 16.60 | 16.43 | 16.21 | 16.80              |
| 5                     | 1       | LOW       | 64QAM      | 16.52 | 16.43 | 16.45 | 16.80              |
|                       |         | MID       | 64QAM      | 16.67 | 16.63 | 16.47 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.67 | 16.73 | 16.68 | 16.80              |
|                       | 12      | LOW       | 64QAM      | 16.60 | 16.40 | 16.40 | 16.80              |
|                       |         | MID       | 64QAM      | 16.71 | 16.45 | 16.48 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.37 | 16.30 | 16.19 | 16.80              |
|                       | 25      | LOW       | 64QAM      | 16.60 | 16.52 | 16.54 | 16.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 16.24 | 16.46 | 16.38 | 16.80              |
|                       |         | MID       | QPSK       | 16.45 | 16.54 | 16.26 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.23 | 16.39 | 16.13 | 16.80              |
|                       | 25      | LOW       | QPSK       | 16.33 | 16.47 | 16.35 | 16.80              |
|                       |         | MID       | QPSK       | 16.47 | 16.55 | 16.65 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.57 | 16.49 | 16.17 | 16.80              |
| 10                    | 50      | LOW       | QPSK       | 16.58 | 16.38 | 16.34 | 16.80              |
|                       | 1       | LOW       | Q16        | 16.72 | 16.41 | 16.45 | 16.80              |
|                       |         | MID       | Q16        | 16.50 | 16.49 | 16.42 | 16.80              |
|                       |         | HIGH      | Q16        | 16.63 | 16.66 | 16.56 | 16.80              |
|                       | 25      | LOW       | Q16        | 16.48 | 16.65 | 16.43 | 16.80              |
|                       |         | MID       | Q16        | 16.51 | 16.50 | 16.45 | 16.80              |
|                       |         | HIGH      | Q16        | 16.33 | 16.50 | 16.15 | 16.80              |
|                       | 50      | LOW       | Q16        | 16.67 | 16.40 | 16.14 | 16.80              |
|                       | 10      | LOW       | 64QAM      | 16.37 | 16.66 | 16.43 | 16.80              |
|                       |         | MID       | 64QAM      | 16.64 | 16.67 | 16.37 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.60 | 16.63 | 16.51 | 16.80              |
|                       |         | LOW       | 64QAM      | 16.60 | 16.59 | 16.29 | 16.80              |
|                       |         | MID       | 64QAM      | 16.75 | 16.50 | 16.32 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.38 | 16.44 | 16.14 | 16.80              |
|                       | 50      | LOW       | 64QAM      | 16.42 | 16.51 | 16.44 | 16.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825        | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 16.41        | 16.53 | 16.40 | 16.80              |
|                 |         | MID       | QPSK       | 16.55        | 16.49 | 16.44 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.37        | 16.42 | 16.12 | 16.80              |
|                 | 36      | LOW       | QPSK       | 16.34        | 16.32 | 16.35 | 16.80              |
|                 |         | MID       | QPSK       | 16.52        | 16.61 | 16.66 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.45        | 16.51 | 16.15 | 16.80              |
|                 | 75      | LOW       | QPSK       | 16.49        | 16.53 | 16.49 | 16.80              |
|                 |         | LOW       | Q16        | 16.68        | 16.34 | 16.22 | 16.80              |
|                 |         | MID       | Q16        | 16.54        | 16.66 | 16.48 | 16.80              |
| 15              | 1       | HIGH      | Q16        | 16.63        | 16.49 | 16.58 | 16.80              |
|                 |         | LOW       | Q16        | 16.26        | 16.53 | 16.18 | 16.80              |
|                 |         | MID       | Q16        | 16.43        | 16.48 | 16.42 | 16.80              |
|                 | 36      | HIGH      | Q16        | 16.49        | 16.50 | 16.20 | 16.80              |
|                 |         | LOW       | Q16        | 16.73        | 16.46 | 16.29 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.62        | 16.66 | 16.61 | 16.80              |
|                 | 1       | MID       | 64QAM      | 16.79        | 16.73 | 16.26 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.77        | 16.78 | 16.43 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.61        | 16.47 | 16.49 | 16.80              |
| 15              | 36      | MID       | 64QAM      | 16.55        | 16.50 | 16.55 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.25        | 16.48 | 16.28 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.50        | 16.26 | 16.50 | 16.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850        | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 16.39        | 16.51 | 16.40 | 16.80              |
|                 |         | MID       | QPSK       | <b>16.60</b> | 16.54 | 16.39 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.34        | 16.54 | 16.28 | 16.80              |
|                 | 50      | LOW       | QPSK       | 16.36        | 16.47 | 16.45 | 16.80              |
|                 |         | MID       | QPSK       | <b>16.64</b> | 16.58 | 16.58 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.60        | 16.46 | 16.33 | 16.80              |
|                 | 100     | LOW       | QPSK       | <b>16.56</b> | 16.55 | 16.46 | 16.80              |
|                 |         | LOW       | Q16        | 16.75        | 16.44 | 16.40 | 16.80              |
|                 |         | MID       | Q16        | 16.67        | 16.61 | 16.60 | 16.80              |
| 20              | 1       | HIGH      | Q16        | 16.76        | 16.59 | 16.56 | 16.80              |
|                 |         | LOW       | Q16        | 16.41        | 16.60 | 16.36 | 16.80              |
|                 | 50      | MID       | Q16        | 16.58        | 16.63 | 16.50 | 16.80              |
|                 |         | HIGH      | Q16        | 16.41        | 16.53 | 16.33 | 16.80              |
|                 | 100     | LOW       | Q16        | 16.70        | 16.58 | 16.32 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.55        | 16.61 | 16.58 | 16.80              |
|                 | 1       | MID       | 64QAM      | 16.79        | 16.80 | 16.44 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.75        | 16.75 | 16.61 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.58        | 16.52 | 16.47 | 16.80              |
| 20              | 50      | MID       | 64QAM      | 16.73        | 16.50 | 16.50 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.30        | 16.41 | 16.25 | 16.80              |
|                 | 100     | LOW       | 64QAM      | 16.57        | 16.44 | 16.47 | 16.80              |

| LTE B7-State 3 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 16.41 | 16.38 | 16.30 | 16.80              |
|                       |         | MID       | QPSK       | 16.50 | 16.49 | 16.39 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.36 | 16.46 | 16.23 | 16.80              |
|                       | 12      | LOW       | QPSK       | 16.23 | 16.45 | 16.38 | 16.80              |
|                       |         | MID       | QPSK       | 16.49 | 16.56 | 16.53 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.53 | 16.41 | 16.41 | 16.80              |
|                       | 25      | LOW       | QPSK       | 16.41 | 16.62 | 16.48 | 16.80              |
|                       | 5       | LOW       | Q16        | 16.72 | 16.42 | 16.27 | 16.80              |
|                       |         | MID       | Q16        | 16.55 | 16.56 | 16.53 | 16.80              |
|                       |         | HIGH      | Q16        | 16.68 | 16.67 | 16.49 | 16.80              |
|                       |         | LOW       | Q16        | 16.23 | 16.43 | 16.23 | 16.80              |
|                       |         | MID       | Q16        | 16.61 | 16.55 | 16.42 | 16.80              |
|                       |         | HIGH      | Q16        | 16.39 | 16.36 | 16.41 | 16.80              |
| 5                     | 1       | LOW       | 64QAM      | 16.52 | 16.43 | 16.45 | 16.80              |
|                       |         | MID       | 64QAM      | 16.67 | 16.63 | 16.47 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.67 | 16.73 | 16.68 | 16.80              |
|                       | 12      | LOW       | 64QAM      | 16.60 | 16.40 | 16.40 | 16.80              |
|                       |         | MID       | 64QAM      | 16.71 | 16.45 | 16.48 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.37 | 16.30 | 16.19 | 16.80              |
|                       | 25      | LOW       | 64QAM      | 16.60 | 16.52 | 16.54 | 16.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 16.24 | 16.46 | 16.38 | 16.80              |
|                       |         | MID       | QPSK       | 16.45 | 16.54 | 16.26 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.23 | 16.39 | 16.13 | 16.80              |
|                       | 25      | LOW       | QPSK       | 16.33 | 16.47 | 16.35 | 16.80              |
|                       |         | MID       | QPSK       | 16.47 | 16.55 | 16.65 | 16.80              |
|                       |         | HIGH      | QPSK       | 16.57 | 16.49 | 16.17 | 16.80              |
| 10                    | 50      | LOW       | QPSK       | 16.58 | 16.38 | 16.34 | 16.80              |
|                       | 1       | LOW       | Q16        | 16.72 | 16.41 | 16.45 | 16.80              |
|                       |         | MID       | Q16        | 16.50 | 16.49 | 16.42 | 16.80              |
|                       |         | HIGH      | Q16        | 16.63 | 16.66 | 16.56 | 16.80              |
|                       | 25      | LOW       | Q16        | 16.48 | 16.65 | 16.43 | 16.80              |
|                       |         | MID       | Q16        | 16.51 | 16.50 | 16.45 | 16.80              |
|                       |         | HIGH      | Q16        | 16.33 | 16.50 | 16.15 | 16.80              |
|                       | 50      | LOW       | Q16        | 16.67 | 16.40 | 16.14 | 16.80              |
| 10                    | 1       | LOW       | 64QAM      | 16.37 | 16.66 | 16.43 | 16.80              |
|                       |         | MID       | 64QAM      | 16.64 | 16.67 | 16.37 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.60 | 16.63 | 16.51 | 16.80              |
|                       | 25      | LOW       | 64QAM      | 16.60 | 16.59 | 16.29 | 16.80              |
|                       |         | MID       | 64QAM      | 16.75 | 16.50 | 16.32 | 16.80              |
|                       |         | HIGH      | 64QAM      | 16.38 | 16.44 | 16.14 | 16.80              |
|                       | 50      | LOW       | 64QAM      | 16.42 | 16.51 | 16.44 | 16.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 16.41      | 16.53 | 16.40 | 16.80              |                    |
|                 |                 | MID       | QPSK       | 16.55      | 16.49 | 16.44 | 16.80              |                    |
|                 |                 | HIGH      | QPSK       | 16.37      | 16.42 | 16.12 | 16.80              |                    |
|                 | 36              | LOW       | QPSK       | 16.34      | 16.32 | 16.35 | 16.80              |                    |
|                 |                 | MID       | QPSK       | 16.52      | 16.61 | 16.66 | 16.80              |                    |
|                 |                 | HIGH      | QPSK       | 16.45      | 16.51 | 16.15 | 16.80              |                    |
|                 | 75              | LOW       | QPSK       | 16.49      | 16.53 | 16.49 | 16.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 16.68 | 16.34 | 16.22              | 16.80              |
|                 |                 |           | MID        | Q16        | 16.54 | 16.66 | 16.48              | 16.80              |
| HIGH            |                 |           | Q16        | 16.63      | 16.49 | 16.58 | 16.80              |                    |
| 36              |                 | LOW       | Q16        | 16.26      | 16.53 | 16.18 | 16.80              |                    |
|                 |                 | MID       | Q16        | 16.43      | 16.48 | 16.42 | 16.80              |                    |
|                 |                 | HIGH      | Q16        | 16.49      | 16.50 | 16.20 | 16.80              |                    |
| 75              | LOW             | Q16       | 16.73      | 16.46      | 16.29 | 16.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 16.62      | 16.66 | 16.61 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.79      | 16.73 | 16.26 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.77      | 16.78 | 16.43 | 16.80              |                    |
|                 | 36              | LOW       | 64QAM      | 16.61      | 16.47 | 16.49 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.55      | 16.50 | 16.55 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.25      | 16.48 | 16.28 | 16.80              |                    |
|                 | 75              | LOW       | 64QAM      | 16.50      | 16.26 | 16.50 | 16.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 16.39 | 16.51 | 16.40              | 16.80              |
| MID             |                 |           | QPSK       | 16.60      | 16.54 | 16.39 | 16.80              |                    |
| HIGH            |                 |           | QPSK       | 16.34      | 16.54 | 16.28 | 16.80              |                    |
| 50              |                 | LOW       | QPSK       | 16.36      | 16.47 | 16.45 | 16.80              |                    |
|                 |                 | MID       | QPSK       | 16.64      | 16.58 | 16.58 | 16.80              |                    |
|                 |                 | HIGH      | QPSK       | 16.60      | 16.46 | 16.33 | 16.80              |                    |
| 100             | LOW             | QPSK      | 16.56      | 16.55      | 16.46 | 16.80 |                    |                    |
| 20              | 1               | LOW       | Q16        | 16.75      | 16.44 | 16.40 | 16.80              |                    |
|                 |                 | MID       | Q16        | 16.67      | 16.61 | 16.60 | 16.80              |                    |
|                 |                 | HIGH      | Q16        | 16.76      | 16.59 | 16.56 | 16.80              |                    |
|                 | 50              | LOW       | Q16        | 16.41      | 16.60 | 16.36 | 16.80              |                    |
|                 |                 | MID       | Q16        | 16.58      | 16.63 | 16.50 | 16.80              |                    |
|                 |                 | HIGH      | Q16        | 16.41      | 16.53 | 16.33 | 16.80              |                    |
| 100             | LOW             | Q16       | 16.70      | 16.58      | 16.32 | 16.80 |                    |                    |
| 20              | 1               | LOW       | 64QAM      | 16.55      | 16.61 | 16.58 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.79      | 16.80 | 16.44 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.75      | 16.75 | 16.61 | 16.80              |                    |
|                 | 50              | LOW       | 64QAM      | 16.58      | 16.52 | 16.47 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.73      | 16.50 | 16.50 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.30      | 16.41 | 16.25 | 16.80              |                    |
|                 | 100             | LOW       | 64QAM      | 16.57      | 16.44 | 16.47 | 16.80              |                    |

| LTE B7-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 21.57 | 21.45 | 21.38 | 21.80              |
|                       |         | MID       | QPSK       | 21.61 | 21.59 | 21.21 | 21.80              |
|                       |         | HIGH      | QPSK       | 21.26 | 21.34 | 21.30 | 21.80              |
|                       | 12      | LOW       | QPSK       | 21.65 | 21.53 | 21.50 | 21.80              |
|                       |         | MID       | QPSK       | 21.62 | 21.53 | 21.63 | 21.80              |
|                       |         | HIGH      | QPSK       | 21.58 | 21.37 | 21.43 | 21.80              |
|                       | 25      | LOW       | QPSK       | 21.44 | 21.30 | 21.32 | 21.80              |
|                       | 5       | LOW       | Q16        | 21.64 | 21.62 | 21.48 | 21.80              |
|                       |         | MID       | Q16        | 21.54 | 21.57 | 21.64 | 21.80              |
|                       |         | HIGH      | Q16        | 21.69 | 21.59 | 21.50 | 21.80              |
|                       |         | LOW       | Q16        | 21.54 | 21.46 | 21.63 | 21.80              |
|                       |         | MID       | Q16        | 21.57 | 21.44 | 21.28 | 21.80              |
|                       |         | HIGH      | Q16        | 21.45 | 21.51 | 21.52 | 21.80              |
| 5                     | 1       | LOW       | 64QAM      | 21.57 | 21.28 | 21.21 | 21.80              |
|                       |         | MID       | 64QAM      | 21.65 | 21.29 | 21.59 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.62 | 21.23 | 21.56 | 21.80              |
|                       | 12      | LOW       | 64QAM      | 21.06 | 20.61 | 20.63 | 21.30              |
|                       |         | MID       | 64QAM      | 21.19 | 20.75 | 21.07 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.76 | 20.94 | 20.65 | 21.30              |
|                       | 25      | LOW       | 64QAM      | 20.97 | 20.68 | 20.72 | 21.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 21.46 | 21.36 | 21.13 | 21.80              |
|                       |         | MID       | QPSK       | 21.46 | 21.46 | 21.42 | 21.80              |
|                       |         | HIGH      | QPSK       | 21.30 | 21.32 | 21.37 | 21.80              |
|                       | 25      | LOW       | QPSK       | 21.41 | 21.59 | 21.33 | 21.80              |
|                       |         | MID       | QPSK       | 21.54 | 21.55 | 21.33 | 21.80              |
|                       |         | HIGH      | QPSK       | 21.63 | 21.35 | 21.56 | 21.80              |
| 10                    | 50      | LOW       | QPSK       | 21.40 | 21.58 | 21.62 | 21.80              |
|                       | 1       | LOW       | Q16        | 21.75 | 21.69 | 21.55 | 21.80              |
|                       |         | MID       | Q16        | 21.80 | 21.48 | 21.71 | 21.80              |
|                       |         | HIGH      | Q16        | 21.62 | 21.50 | 21.41 | 21.80              |
|                       | 25      | LOW       | Q16        | 21.54 | 21.29 | 21.50 | 21.80              |
|                       |         | MID       | Q16        | 21.52 | 21.44 | 21.26 | 21.80              |
|                       |         | HIGH      | Q16        | 21.62 | 21.40 | 21.26 | 21.80              |
|                       | 50      | LOW       | Q16        | 21.49 | 21.65 | 21.42 | 21.80              |
| 10                    | 1       | LOW       | 64QAM      | 21.50 | 21.41 | 20.98 | 21.80              |
|                       |         | MID       | 64QAM      | 21.78 | 21.33 | 21.64 | 21.80              |
|                       |         | HIGH      | 64QAM      | 21.51 | 21.42 | 21.56 | 21.80              |
|                       | 25      | LOW       | 64QAM      | 21.09 | 20.67 | 20.74 | 21.30              |
|                       |         | MID       | 64QAM      | 21.00 | 20.84 | 21.28 | 21.30              |
|                       |         | HIGH      | 64QAM      | 20.66 | 20.67 | 20.51 | 21.30              |
|                       | 50      | LOW       | 64QAM      | 21.08 | 20.68 | 20.80 | 21.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 21.46      | 21.36 | 21.17 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 21.68      | 21.49 | 21.23 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.45      | 21.29 | 21.30 | 21.80              |                    |
|                 | 36              | LOW       | QPSK       | 21.48      | 21.53 | 21.41 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 21.51      | 21.51 | 21.63 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.60      | 21.35 | 21.51 | 21.80              |                    |
|                 | 75              | LOW       | QPSK       | 21.64      | 21.58 | 21.47 | 21.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 21.53 | 21.64 | 21.35              | 21.80              |
|                 |                 |           | MID        | Q16        | 21.54 | 21.55 | 21.51              | 21.80              |
| HIGH            |                 |           | Q16        | 21.56      | 21.74 | 21.34 | 21.80              |                    |
| 36              |                 | LOW       | Q16        | 21.47      | 21.52 | 21.61 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.63      | 21.48 | 21.49 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.52      | 21.68 | 21.43 | 21.80              |                    |
| 75              | LOW             | Q16       | 21.58      | 21.65      | 21.25 | 21.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 21.61      | 21.30 | 21.13 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 21.63      | 21.44 | 21.46 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.66      | 21.44 | 21.53 | 21.80              |                    |
|                 | 36              | LOW       | 64QAM      | 21.17      | 20.63 | 20.66 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 20.88      | 20.98 | 21.18 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 20.80      | 20.71 | 20.57 | 21.30              |                    |
|                 | 75              | LOW       | 64QAM      | 21.08      | 20.79 | 20.82 | 21.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 21.48 | 21.45 | 21.34              | 21.80              |
| MID             |                 |           | QPSK       | 21.57      | 21.55 | 21.42 | 21.80              |                    |
| HIGH            |                 |           | QPSK       | 21.47      | 21.51 | 21.43 | 21.80              |                    |
| 50              |                 | LOW       | QPSK       | 21.54      | 21.53 | 21.52 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 21.60      | 21.55 | 21.52 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.54      | 21.54 | 21.47 | 21.80              |                    |
| 100             |                 | LOW       | QPSK       | 21.55      | 21.54 | 21.51 | 21.80              |                    |
| 20              | 1               | LOW       | Q16        | 21.66      | 21.58 | 21.44 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.76      | 21.68 | 21.60 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.73      | 21.70 | 21.56 | 21.80              |                    |
|                 | 50              | LOW       | Q16        | 21.60      | 21.50 | 21.52 | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.61      | 21.59 | 21.47 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 21.56      | 21.62 | 21.43 | 21.80              |                    |
|                 | 100             | LOW       | Q16        | 21.58      | 21.56 | 21.46 | 21.80              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 21.59 | 21.39 | 21.15              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 21.76 | 21.50 | 21.68              | 21.80              |
| HIGH            |                 |           | 64QAM      | 21.75      | 21.40 | 21.62 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 21.17      | 20.65 | 20.78 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.11      | 20.92 | 21.20 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 20.78      | 20.84 | 20.65 | 21.30              |                    |
| 100             |                 | LOW       | 64QAM      | 21.14      | 20.87 | 20.74 | 21.30              |                    |

| LTE B7-State 5 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.41 | 19.17 | 19.09 | 19.80              |
|                       |         | MID       | QPSK       | 19.32 | 19.44 | 19.29 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.35 | 19.46 | 19.80              |
|                       | 12      | LOW       | QPSK       | 19.34 | 19.32 | 19.31 | 19.80              |
|                       |         | MID       | QPSK       | 19.42 | 19.53 | 19.38 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.59 | 19.50 | 19.80              |
|                       | 25      | LOW       | QPSK       | 19.44 | 19.45 | 19.50 | 19.80              |
| 5                     | 1       | LOW       | Q16        | 19.39 | 19.46 | 19.27 | 19.80              |
|                       |         | MID       | Q16        | 19.78 | 19.67 | 19.48 | 19.80              |
|                       |         | HIGH      | Q16        | 19.67 | 19.65 | 19.58 | 19.80              |
|                       | 12      | LOW       | Q16        | 19.44 | 19.41 | 19.31 | 19.80              |
|                       |         | MID       | Q16        | 19.46 | 19.39 | 19.38 | 19.80              |
|                       |         | HIGH      | Q16        | 19.44 | 19.52 | 19.33 | 19.80              |
|                       | 25      | LOW       | Q16        | 19.50 | 19.41 | 19.25 | 19.80              |
| 5                     | 1       | LOW       | 64QAM      | 19.35 | 19.42 | 19.12 | 19.80              |
|                       |         | MID       | 64QAM      | 19.68 | 19.53 | 19.24 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.63 | 19.33 | 19.70 | 19.80              |
|                       | 12      | LOW       | 64QAM      | 19.68 | 19.07 | 19.05 | 19.80              |
|                       |         | MID       | 64QAM      | 19.52 | 19.33 | 19.32 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.23 | 19.60 | 19.14 | 19.80              |
|                       | 25      | LOW       | 64QAM      | 19.54 | 19.20 | 19.32 | 19.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 19.37 | 19.22 | 19.22 | 19.80              |
|                       |         | MID       | QPSK       | 19.46 | 19.29 | 19.20 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.48 | 19.41 | 19.21 | 19.80              |
|                       | 25      | LOW       | QPSK       | 19.48 | 19.36 | 19.40 | 19.80              |
|                       |         | MID       | QPSK       | 19.44 | 19.33 | 19.30 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.37 | 19.28 | 19.80              |
| 10                    | 50      | LOW       | QPSK       | 19.46 | 19.30 | 19.44 | 19.80              |
|                       | 1       | LOW       | Q16        | 19.45 | 19.34 | 19.44 | 19.80              |
|                       |         | MID       | Q16        | 19.76 | 19.45 | 19.40 | 19.80              |
|                       |         | HIGH      | Q16        | 19.65 | 19.35 | 19.54 | 19.80              |
|                       | 25      | LOW       | Q16        | 19.50 | 19.30 | 19.49 | 19.80              |
|                       |         | MID       | Q16        | 19.56 | 19.61 | 19.48 | 19.80              |
|                       |         | HIGH      | Q16        | 19.60 | 19.52 | 19.43 | 19.80              |
|                       | 50      | LOW       | Q16        | 19.36 | 19.53 | 19.28 | 19.80              |
| 10                    | 1       | LOW       | 64QAM      | 19.39 | 19.58 | 19.12 | 19.80              |
|                       |         | MID       | 64QAM      | 19.60 | 19.69 | 19.28 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.59 | 19.63 | 19.68 | 19.80              |
|                       | 25      | LOW       | 64QAM      | 19.64 | 19.22 | 19.20 | 19.80              |
|                       |         | MID       | 64QAM      | 19.54 | 19.49 | 19.42 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.36 | 19.54 | 19.01 | 19.80              |
|                       | 50      | LOW       | 64QAM      | 19.70 | 19.25 | 19.42 | 19.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.51      | 19.36 | 19.20 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.44      | 19.56 | 19.43 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.26      | 19.29 | 19.32 | 19.80              |                    |
|                 | 36              | LOW       | QPSK       | 19.34      | 19.29 | 19.54 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.42      | 19.59 | 19.30 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.34      | 19.35 | 19.19 | 19.80              |                    |
|                 | 75              | LOW       | QPSK       | 19.52      | 19.39 | 19.32 | 19.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 19.49 | 19.60 | 19.50              | 19.80              |
|                 |                 |           | MID        | Q16        | 19.62 | 19.47 | 19.60              | 19.80              |
| HIGH            |                 |           | Q16        | 19.49      | 19.65 | 19.52 | 19.80              |                    |
| 36              |                 | LOW       | Q16        | 19.56      | 19.49 | 19.55 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.52      | 19.49 | 19.40 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.56      | 19.31 | 19.35 | 19.80              |                    |
| 75              | LOW             | Q16       | 19.48      | 19.31      | 19.32 | 19.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 19.29      | 19.54 | 19.25 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.58      | 19.57 | 19.30 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.63      | 19.45 | 19.52 | 19.80              |                    |
|                 | 36              | LOW       | 64QAM      | 19.50      | 19.20 | 19.07 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.58      | 19.37 | 19.13 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.26      | 19.58 | 19.01 | 19.80              |                    |
|                 | 75              | LOW       | 64QAM      | 19.40      | 19.27 | 19.32 | 19.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 19.43 | 19.38 | 19.28              | 19.80              |
| MID             |                 |           | QPSK       | 19.52      | 19.50 | 19.37 | 19.80              |                    |
| HIGH            |                 |           | QPSK       | 19.40      | 19.45 | 19.36 | 19.80              |                    |
| 50              |                 | LOW       | QPSK       | 19.52      | 19.48 | 19.52 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.58      | 19.53 | 19.46 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.50      | 19.55 | 19.40 | 19.80              |                    |
| 100             | LOW             | QPSK      | 19.52      | 19.49      | 19.44 | 19.80 |                    |                    |
| 20              | 1               | LOW       | Q16        | 19.61      | 19.50 | 19.48 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.74      | 19.61 | 19.62 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.69      | 19.57 | 19.56 | 19.80              |                    |
|                 | 50              | LOW       | Q16        | 19.54      | 19.49 | 19.45 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.60      | 19.55 | 19.44 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.54      | 19.52 | 19.33 | 19.80              |                    |
| 100             | LOW             | Q16       | 19.52      | 19.47      | 19.44 | 19.80 |                    |                    |
| 20              | 1               | LOW       | 64QAM      | 19.47      | 19.60 | 19.29 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.80      | 19.69 | 19.40 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.57      | 19.53 | 19.60 | 19.80              |                    |
|                 | 50              | LOW       | 64QAM      | 19.60      | 19.28 | 19.26 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.56      | 19.49 | 19.32 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.42      | 19.52 | 19.18 | 19.80              |                    |
|                 | 100             | LOW       | 64QAM      | 19.60      | 19.35 | 19.46 | 19.80              |                    |

| LTE B7-State 6 -Ant.1 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.41 | 19.17 | 19.09 | 19.80              |
|                       |         | MID       | QPSK       | 19.32 | 19.44 | 19.29 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.35 | 19.46 | 19.80              |
|                       | 12      | LOW       | QPSK       | 19.34 | 19.32 | 19.31 | 19.80              |
|                       |         | MID       | QPSK       | 19.42 | 19.53 | 19.38 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.59 | 19.50 | 19.80              |
|                       | 25      | LOW       | QPSK       | 19.44 | 19.45 | 19.50 | 19.80              |
|                       | 5       | LOW       | Q16        | 19.39 | 19.46 | 19.27 | 19.80              |
|                       |         | MID       | Q16        | 19.78 | 19.67 | 19.48 | 19.80              |
|                       |         | HIGH      | Q16        | 19.67 | 19.65 | 19.58 | 19.80              |
|                       |         | LOW       | Q16        | 19.44 | 19.41 | 19.31 | 19.80              |
|                       |         | MID       | Q16        | 19.46 | 19.39 | 19.38 | 19.80              |
|                       |         | HIGH      | Q16        | 19.44 | 19.52 | 19.33 | 19.80              |
|                       | 25      | LOW       | Q16        | 19.50 | 19.41 | 19.25 | 19.80              |
| 5                     | 1       | LOW       | 64QAM      | 19.35 | 19.42 | 19.12 | 19.80              |
|                       |         | MID       | 64QAM      | 19.68 | 19.53 | 19.24 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.63 | 19.33 | 19.70 | 19.80              |
|                       | 12      | LOW       | 64QAM      | 19.68 | 19.07 | 19.05 | 19.80              |
|                       |         | MID       | 64QAM      | 19.52 | 19.33 | 19.32 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.23 | 19.60 | 19.14 | 19.80              |
|                       | 25      | LOW       | 64QAM      | 19.54 | 19.20 | 19.32 | 19.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 19.37 | 19.22 | 19.22 | 19.80              |
|                       |         | MID       | QPSK       | 19.46 | 19.29 | 19.20 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.48 | 19.41 | 19.21 | 19.80              |
|                       | 25      | LOW       | QPSK       | 19.48 | 19.36 | 19.40 | 19.80              |
|                       |         | MID       | QPSK       | 19.44 | 19.33 | 19.30 | 19.80              |
|                       |         | HIGH      | QPSK       | 19.42 | 19.37 | 19.28 | 19.80              |
| 10                    | 50      | LOW       | QPSK       | 19.46 | 19.30 | 19.44 | 19.80              |
|                       | 1       | LOW       | Q16        | 19.45 | 19.34 | 19.44 | 19.80              |
|                       |         | MID       | Q16        | 19.76 | 19.45 | 19.40 | 19.80              |
|                       |         | HIGH      | Q16        | 19.65 | 19.35 | 19.54 | 19.80              |
|                       | 25      | LOW       | Q16        | 19.50 | 19.30 | 19.49 | 19.80              |
|                       |         | MID       | Q16        | 19.56 | 19.61 | 19.48 | 19.80              |
|                       |         | HIGH      | Q16        | 19.60 | 19.52 | 19.43 | 19.80              |
|                       | 50      | LOW       | Q16        | 19.36 | 19.53 | 19.28 | 19.80              |
|                       | 10      | LOW       | 64QAM      | 19.39 | 19.58 | 19.12 | 19.80              |
|                       |         | MID       | 64QAM      | 19.60 | 19.69 | 19.28 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.59 | 19.63 | 19.68 | 19.80              |
|                       | 25      | LOW       | 64QAM      | 19.64 | 19.22 | 19.20 | 19.80              |
|                       |         | MID       | 64QAM      | 19.54 | 19.49 | 19.42 | 19.80              |
|                       |         | HIGH      | 64QAM      | 19.36 | 19.54 | 19.01 | 19.80              |
|                       | 50      | LOW       | 64QAM      | 19.70 | 19.25 | 19.42 | 19.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.51      | 19.36 | 19.20 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.44      | 19.56 | 19.43 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.26      | 19.29 | 19.32 | 19.80              |                    |
|                 | 36              | LOW       | QPSK       | 19.34      | 19.29 | 19.54 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.42      | 19.59 | 19.30 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.34      | 19.35 | 19.19 | 19.80              |                    |
|                 | 75              | LOW       | QPSK       | 19.52      | 19.39 | 19.32 | 19.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 19.49 | 19.60 | 19.50              | 19.80              |
|                 |                 |           | MID        | Q16        | 19.62 | 19.47 | 19.60              | 19.80              |
| HIGH            |                 |           | Q16        | 19.49      | 19.65 | 19.52 | 19.80              |                    |
| 36              |                 | LOW       | Q16        | 19.56      | 19.49 | 19.55 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.52      | 19.49 | 19.40 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.56      | 19.31 | 19.35 | 19.80              |                    |
| 75              | LOW             | Q16       | 19.48      | 19.31      | 19.32 | 19.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 19.29      | 19.54 | 19.25 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.58      | 19.57 | 19.30 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.63      | 19.45 | 19.52 | 19.80              |                    |
|                 | 36              | LOW       | 64QAM      | 19.50      | 19.20 | 19.07 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.58      | 19.37 | 19.13 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.26      | 19.58 | 19.01 | 19.80              |                    |
|                 | 75              | LOW       | 64QAM      | 19.40      | 19.27 | 19.32 | 19.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 19.43 | 19.38 | 19.28              | 19.80              |
| MID             |                 |           | QPSK       | 19.52      | 19.50 | 19.37 | 19.80              |                    |
| HIGH            |                 |           | QPSK       | 19.40      | 19.45 | 19.36 | 19.80              |                    |
| 50              |                 | LOW       | QPSK       | 19.52      | 19.48 | 19.52 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.58      | 19.53 | 19.46 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.50      | 19.55 | 19.40 | 19.80              |                    |
| 100             | LOW             | QPSK      | 19.52      | 19.49      | 19.44 | 19.80 |                    |                    |
| 20              | 1               | LOW       | Q16        | 19.61      | 19.50 | 19.48 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.74      | 19.61 | 19.62 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.69      | 19.57 | 19.56 | 19.80              |                    |
|                 | 50              | LOW       | Q16        | 19.54      | 19.49 | 19.45 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.60      | 19.55 | 19.44 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.54      | 19.52 | 19.33 | 19.80              |                    |
| 100             | LOW             | Q16       | 19.52      | 19.47      | 19.44 | 19.80 |                    |                    |
| 20              | 1               | LOW       | 64QAM      | 19.47      | 19.60 | 19.29 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.80      | 19.69 | 19.40 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.57      | 19.53 | 19.60 | 19.80              |                    |
|                 | 50              | LOW       | 64QAM      | 19.60      | 19.28 | 19.26 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.56      | 19.49 | 19.32 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.42      | 19.52 | 19.18 | 19.80              |                    |
|                 | 100             | LOW       | 64QAM      | 19.60      | 19.35 | 19.46 | 19.80              |                    |

| LTE B7-State 1 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 15.03 | 14.87 | 14.57 | 15.30              |
|                            |         | MID       | QPSK       | 14.92 | 14.93 | 14.88 | 15.30              |
|                            |         | HIGH      | QPSK       | 14.77 | 15.06 | 14.88 | 15.30              |
|                            | 12      | LOW       | QPSK       | 14.88 | 15.10 | 14.84 | 15.30              |
|                            |         | MID       | QPSK       | 15.01 | 15.01 | 15.03 | 15.30              |
|                            |         | HIGH      | QPSK       | 14.95 | 15.21 | 14.75 | 15.30              |
|                            | 25      | LOW       | QPSK       | 14.89 | 15.02 | 14.93 | 15.30              |
| 5                          | 1       | LOW       | Q16        | 15.06 | 15.04 | 14.94 | 15.30              |
|                            |         | MID       | Q16        | 15.06 | 15.29 | 15.11 | 15.30              |
|                            |         | HIGH      | Q16        | 15.08 | 15.25 | 15.01 | 15.30              |
|                            | 12      | LOW       | Q16        | 15.22 | 15.00 | 14.91 | 15.30              |
|                            |         | MID       | Q16        | 14.94 | 15.12 | 14.91 | 15.30              |
|                            |         | HIGH      | Q16        | 14.91 | 14.88 | 14.81 | 15.30              |
|                            | 25      | LOW       | Q16        | 15.00 | 14.91 | 14.77 | 15.30              |
| 5                          | 1       | LOW       | 64QAM      | 14.90 | 15.04 | 15.04 | 15.30              |
|                            |         | MID       | 64QAM      | 14.90 | 15.07 | 14.92 | 15.30              |
|                            |         | HIGH      | 64QAM      | 15.26 | 15.19 | 15.13 | 15.30              |
|                            | 12      | LOW       | 64QAM      | 15.28 | 14.89 | 14.83 | 15.30              |
|                            |         | MID       | 64QAM      | 14.99 | 15.24 | 14.96 | 15.30              |
|                            |         | HIGH      | 64QAM      | 14.79 | 14.96 | 14.80 | 15.30              |
|                            | 25      | LOW       | 64QAM      | 14.90 | 15.02 | 14.85 | 15.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 15.08 | 15.03 | 14.71 | 15.30              |
|                            |         | MID       | QPSK       | 14.92 | 14.99 | 14.88 | 15.30              |
|                            |         | HIGH      | QPSK       | 14.80 | 14.90 | 14.80 | 15.30              |
|                            | 25      | LOW       | QPSK       | 14.94 | 15.01 | 15.00 | 15.30              |
|                            |         | MID       | QPSK       | 15.08 | 15.08 | 15.10 | 15.30              |
|                            |         | HIGH      | QPSK       | 14.90 | 15.10 | 14.74 | 15.30              |
| 10                         | 50      | LOW       | QPSK       | 15.04 | 15.06 | 15.06 | 15.30              |
|                            | 1       | LOW       | Q16        | 14.91 | 14.98 | 14.85 | 15.30              |
|                            |         | MID       | Q16        | 15.26 | 15.17 | 15.05 | 15.30              |
|                            |         | HIGH      | Q16        | 15.15 | 15.12 | 15.15 | 15.30              |
|                            | 25      | LOW       | Q16        | 15.14 | 14.94 | 14.90 | 15.30              |
|                            |         | MID       | Q16        | 14.86 | 15.02 | 15.03 | 15.30              |
|                            |         | HIGH      | Q16        | 14.84 | 14.95 | 14.83 | 15.30              |
|                            | 50      | LOW       | Q16        | 15.15 | 14.93 | 14.87 | 15.30              |
| 10                         | 1       | LOW       | 64QAM      | 14.80 | 15.11 | 15.13 | 15.30              |
|                            |         | MID       | 64QAM      | 15.12 | 15.05 | 14.77 | 15.30              |
|                            |         | HIGH      | 64QAM      | 15.26 | 15.14 | 15.27 | 15.30              |
|                            | 25      | LOW       | 64QAM      | 15.08 | 14.91 | 14.82 | 15.30              |
|                            |         | MID       | 64QAM      | 14.92 | 15.27 | 15.07 | 15.30              |
|                            |         | HIGH      | 64QAM      | 14.99 | 14.96 | 14.69 | 15.30              |
|                            | 50      | LOW       | 64QAM      | 15.02 | 15.02 | 14.84 | 15.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 15.07 | 14.99 | 14.67 | 15.30              |
|                 |         | MID       | QPSK       | 15.06 | 15.10 | 14.84 | 15.30              |
|                 |         | HIGH      | QPSK       | 14.86 | 14.99 | 14.83 | 15.30              |
|                 | 36      | LOW       | QPSK       | 14.89 | 15.05 | 14.85 | 15.30              |
|                 |         | MID       | QPSK       | 15.10 | 15.05 | 15.08 | 15.30              |
|                 |         | HIGH      | QPSK       | 15.04 | 15.18 | 14.84 | 15.30              |
|                 | 75      | LOW       | QPSK       | 14.91 | 15.03 | 15.08 | 15.30              |
|                 |         | LOW       | Q16        | 14.93 | 15.13 | 14.91 | 15.30              |
|                 |         | MID       | Q16        | 15.15 | 15.21 | 14.91 | 15.30              |
| 15              | 1       | HIGH      | Q16        | 15.21 | 15.02 | 15.09 | 15.30              |
|                 |         | LOW       | Q16        | 15.16 | 15.02 | 14.90 | 15.30              |
|                 |         | MID       | Q16        | 14.98 | 14.99 | 14.97 | 15.30              |
|                 | 36      | HIGH      | Q16        | 14.90 | 14.94 | 14.86 | 15.30              |
|                 |         | LOW       | Q16        | 15.10 | 15.16 | 14.97 | 15.30              |
|                 |         | MID       | Q16        | 15.15 | 15.16 | 15.15 | 15.30              |
|                 | 75      | HIGH      | 64QAM      | 14.89 | 15.16 | 14.76 | 15.30              |
|                 |         | MID       | 64QAM      | 14.95 | 15.16 | 14.76 | 15.30              |
|                 |         | HIGH      | 64QAM      | 15.25 | 15.24 | 15.29 | 15.30              |
| 15              | 1       | LOW       | 64QAM      | 15.20 | 14.96 | 14.89 | 15.30              |
|                 |         | MID       | 64QAM      | 15.15 | 15.11 | 14.91 | 15.30              |
|                 |         | HIGH      | 64QAM      | 14.91 | 14.97 | 14.73 | 15.30              |
|                 | 36      | LOW       | 64QAM      | 15.04 | 15.19 | 14.75 | 15.30              |
|                 |         | MID       | 64QAM      | 15.04 | 15.19 | 14.75 | 15.30              |
|                 |         | HIGH      | 64QAM      | 15.04 | 15.19 | 14.75 | 15.30              |
|                 | 75      | LOW       | 64QAM      | 15.04 | 15.19 | 14.75 | 15.30              |
|                 |         | MID       | 64QAM      | 15.04 | 15.19 | 14.75 | 15.30              |
|                 |         | HIGH      | 64QAM      | 15.04 | 15.19 | 14.75 | 15.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 15.05 | 14.99 | 14.70 | 15.30              |
|                 |         | MID       | QPSK       | 15.09 | 15.10 | 14.97 | 15.30              |
|                 |         | HIGH      | QPSK       | 14.83 | 15.01 | 14.95 | 15.30              |
|                 | 50      | LOW       | QPSK       | 14.95 | 15.10 | 14.97 | 15.30              |
|                 |         | MID       | QPSK       | 15.16 | 15.16 | 15.08 | 15.30              |
|                 |         | HIGH      | QPSK       | 15.01 | 15.13 | 14.84 | 15.30              |
|                 | 100     | LOW       | QPSK       | 14.98 | 15.08 | 15.00 | 15.30              |
|                 |         | LOW       | Q16        | 15.00 | 15.07 | 14.88 | 15.30              |
|                 |         | MID       | Q16        | 15.18 | 15.26 | 15.08 | 15.30              |
| 20              | 1       | HIGH      | Q16        | 15.23 | 15.17 | 15.09 | 15.30              |
|                 |         | LOW       | Q16        | 15.14 | 15.02 | 14.87 | 15.30              |
|                 |         | MID       | Q16        | 14.98 | 15.10 | 15.03 | 15.30              |
|                 | 50      | HIGH      | Q16        | 14.94 | 14.91 | 14.87 | 15.30              |
|                 |         | LOW       | Q16        | 15.15 | 15.08 | 14.93 | 15.30              |
|                 |         | MID       | Q16        | 15.15 | 15.08 | 14.93 | 15.30              |
|                 | 100     | LOW       | 64QAM      | 14.93 | 15.16 | 15.18 | 15.30              |
|                 |         | MID       | 64QAM      | 15.07 | 15.13 | 14.92 | 15.30              |
|                 |         | HIGH      | 64QAM      | 15.23 | 15.22 | 15.21 | 15.30              |
| 20              | 1       | LOW       | 64QAM      | 15.23 | 14.90 | 14.82 | 15.30              |
|                 |         | MID       | 64QAM      | 15.07 | 15.19 | 15.02 | 15.30              |
|                 |         | HIGH      | 64QAM      | 14.95 | 14.97 | 14.76 | 15.30              |
|                 | 50      | LOW       | 64QAM      | 15.07 | 15.19 | 15.02 | 15.30              |
|                 |         | MID       | 64QAM      | 15.07 | 15.19 | 15.02 | 15.30              |
|                 |         | HIGH      | 64QAM      | 14.95 | 14.97 | 14.76 | 15.30              |
|                 | 100     | LOW       | 64QAM      | 15.07 | 15.11 | 14.91 | 15.30              |
|                 |         | MID       | 64QAM      | 15.07 | 15.11 | 14.91 | 15.30              |
|                 |         | HIGH      | 64QAM      | 15.07 | 15.11 | 14.91 | 15.30              |

| LTE B7-State 2 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 13.53 | 13.36 | 13.21 | 13.80              |
|                            |         | MID       | QPSK       | 13.56 | 13.48 | 13.37 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.39 | 13.38 | 13.36 | 13.80              |
|                            | 12      | LOW       | QPSK       | 13.47 | 13.47 | 13.62 | 13.80              |
|                            |         | MID       | QPSK       | 13.48 | 13.64 | 13.50 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.39 | 13.62 | 13.51 | 13.80              |
|                            | 25      | LOW       | QPSK       | 13.44 | 13.37 | 13.40 | 13.80              |
| 5                          | 1       | LOW       | Q16        | 13.47 | 13.44 | 13.40 | 13.80              |
|                            |         | MID       | Q16        | 13.70 | 13.63 | 13.72 | 13.80              |
|                            |         | HIGH      | Q16        | 13.72 | 13.66 | 13.48 | 13.80              |
|                            | 12      | LOW       | Q16        | 13.46 | 13.46 | 13.53 | 13.80              |
|                            |         | MID       | Q16        | 13.58 | 13.53 | 13.57 | 13.80              |
|                            |         | HIGH      | Q16        | 13.62 | 13.48 | 13.35 | 13.80              |
|                            | 25      | LOW       | Q16        | 13.37 | 13.46 | 13.36 | 13.80              |
| 5                          | 1       | LOW       | 64QAM      | 13.60 | 13.57 | 13.46 | 13.80              |
|                            |         | MID       | 64QAM      | 13.78 | 13.73 | 13.42 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.47 | 13.76 | 13.68 | 13.80              |
|                            | 12      | LOW       | 64QAM      | 13.65 | 13.39 | 13.43 | 13.80              |
|                            |         | MID       | 64QAM      | 13.68 | 13.59 | 13.48 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.39 | 13.33 | 13.38 | 13.80              |
|                            | 25      | LOW       | 64QAM      | 13.50 | 13.53 | 13.54 | 13.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 13.38 | 13.39 | 13.23 | 13.80              |
|                            |         | MID       | QPSK       | 13.60 | 13.53 | 13.41 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.31 | 13.50 | 13.40 | 13.80              |
|                            | 25      | LOW       | QPSK       | 13.39 | 13.45 | 13.60 | 13.80              |
|                            |         | MID       | QPSK       | 13.58 | 13.65 | 13.65 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.40 | 13.66 | 13.57 | 13.80              |
| 50                         | LOW     | QPSK      | 13.42      | 13.46 | 13.43 | 13.80 |                    |
| 10                         | 1       | LOW       | Q16        | 13.47 | 13.42 | 13.42 | 13.80              |
|                            |         | MID       | Q16        | 13.55 | 13.63 | 13.54 | 13.80              |
|                            |         | HIGH      | Q16        | 13.53 | 13.62 | 13.38 | 13.80              |
|                            | 25      | LOW       | Q16        | 13.40 | 13.40 | 13.39 | 13.80              |
|                            |         | MID       | Q16        | 13.66 | 13.39 | 13.49 | 13.80              |
|                            |         | HIGH      | Q16        | 13.47 | 13.46 | 13.51 | 13.80              |
|                            | 50      | LOW       | Q16        | 13.45 | 13.61 | 13.48 | 13.80              |
| 10                         | 1       | LOW       | 64QAM      | 13.59 | 13.72 | 13.46 | 13.80              |
|                            |         | MID       | 64QAM      | 13.71 | 13.68 | 13.39 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.55 | 13.78 | 13.60 | 13.80              |
|                            | 25      | LOW       | 64QAM      | 13.69 | 13.47 | 13.50 | 13.80              |
|                            |         | MID       | 64QAM      | 13.64 | 13.47 | 13.48 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.38 | 13.53 | 13.24 | 13.80              |
|                            | 50      | LOW       | 64QAM      | 13.45 | 13.42 | 13.48 | 13.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 13.57 | 13.51 | 13.15 | 13.80              |
|                 |         | MID       | QPSK       | 13.54 | 13.61 | 13.40 | 13.80              |
|                 |         | HIGH      | QPSK       | 13.34 | 13.53 | 13.36 | 13.80              |
|                 | 36      | LOW       | QPSK       | 13.37 | 13.39 | 13.62 | 13.80              |
|                 |         | MID       | QPSK       | 13.48 | 13.58 | 13.61 | 13.80              |
|                 |         | HIGH      | QPSK       | 13.48 | 13.56 | 13.53 | 13.80              |
|                 | 75      | LOW       | QPSK       | 13.41 | 13.35 | 13.29 | 13.80              |
| 15              | 1       | LOW       | Q16        | 13.47 | 13.36 | 13.43 | 13.80              |
|                 |         | MID       | Q16        | 13.51 | 13.53 | 13.64 | 13.80              |
|                 |         | HIGH      | Q16        | 13.57 | 13.51 | 13.42 | 13.80              |
|                 | 36      | LOW       | Q16        | 13.39 | 13.48 | 13.49 | 13.80              |
|                 |         | MID       | Q16        | 13.72 | 13.51 | 13.42 | 13.80              |
|                 |         | HIGH      | Q16        | 13.51 | 13.57 | 13.36 | 13.80              |
|                 | 75      | LOW       | Q16        | 13.59 | 13.60 | 13.28 | 13.80              |
| 15              | 1       | LOW       | 64QAM      | 13.63 | 13.75 | 13.61 | 13.80              |
|                 |         | MID       | 64QAM      | 13.60 | 13.73 | 13.57 | 13.80              |
|                 |         | HIGH      | 64QAM      | 13.54 | 13.67 | 13.72 | 13.80              |
|                 | 36      | LOW       | 64QAM      | 13.63 | 13.40 | 13.43 | 13.80              |
|                 |         | MID       | 64QAM      | 13.57 | 13.53 | 13.47 | 13.80              |
|                 |         | HIGH      | 64QAM      | 13.35 | 13.36 | 13.36 | 13.80              |
|                 | 75      | LOW       | 64QAM      | 13.42 | 13.38 | 13.62 | 13.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 13.52 | 13.51 | 13.24 | 13.80              |
|                 |         | MID       | QPSK       | 13.59 | 13.57 | 13.48 | 13.80              |
|                 |         | HIGH      | QPSK       | 13.35 | 13.50 | 13.41 | 13.80              |
|                 | 50      | LOW       | QPSK       | 13.50 | 13.40 | 13.59 | 13.80              |
|                 |         | MID       | QPSK       | 13.63 | 13.61 | 13.60 | 13.80              |
|                 |         | HIGH      | QPSK       | 13.48 | 13.59 | 13.50 | 13.80              |
| 20              | 100     | LOW       | QPSK       | 13.49 | 13.42 | 13.36 | 13.80              |
|                 |         | LOW       | Q16        | 13.56 | 13.41 | 13.39 | 13.80              |
|                 |         | MID       | Q16        | 13.66 | 13.67 | 13.68 | 13.80              |
|                 | 50      | LOW       | Q16        | 13.68 | 13.62 | 13.53 | 13.80              |
|                 |         | LOW       | Q16        | 13.54 | 13.43 | 13.50 | 13.80              |
|                 |         | MID       | Q16        | 13.69 | 13.50 | 13.54 | 13.80              |
| 20              | 1       | HIGH      | Q16        | 13.55 | 13.60 | 13.48 | 13.80              |
|                 |         | LOW       | Q16        | 13.52 | 13.57 | 13.43 | 13.80              |
|                 |         | LOW       | 64QAM      | 13.56 | 13.68 | 13.58 | 13.80              |
|                 | 50      | MID       | 64QAM      | 13.74 | 13.72 | 13.54 | 13.80              |
|                 |         | HIGH      | 64QAM      | 13.59 | 13.75 | 13.75 | 13.80              |
|                 |         | LOW       | 64QAM      | 13.70 | 13.54 | 13.43 | 13.80              |
| 100             | MID     | 64QAM     | 13.72      | 13.56 | 13.51 | 13.80 |                    |
|                 | HIGH    | 64QAM     | 13.38      | 13.48 | 13.39 | 13.80 |                    |
| 100             | LOW     | 64QAM     | 13.57      | 13.53 | 13.59 | 13.80 |                    |

| LTE B7-State 3 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 13.53 | 13.36 | 13.21 | 13.80              |
|                            |         | MID       | QPSK       | 13.56 | 13.48 | 13.37 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.39 | 13.38 | 13.36 | 13.80              |
|                            | 12      | LOW       | QPSK       | 13.47 | 13.47 | 13.62 | 13.80              |
|                            |         | MID       | QPSK       | 13.48 | 13.64 | 13.50 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.39 | 13.62 | 13.51 | 13.80              |
|                            | 25      | LOW       | QPSK       | 13.44 | 13.37 | 13.40 | 13.80              |
| 5                          | 1       | LOW       | Q16        | 13.47 | 13.44 | 13.40 | 13.80              |
|                            |         | MID       | Q16        | 13.70 | 13.63 | 13.72 | 13.80              |
|                            |         | HIGH      | Q16        | 13.72 | 13.66 | 13.48 | 13.80              |
|                            | 12      | LOW       | Q16        | 13.46 | 13.46 | 13.53 | 13.80              |
|                            |         | MID       | Q16        | 13.58 | 13.53 | 13.57 | 13.80              |
|                            |         | HIGH      | Q16        | 13.62 | 13.48 | 13.35 | 13.80              |
|                            | 25      | LOW       | Q16        | 13.37 | 13.46 | 13.36 | 13.80              |
| 5                          | 1       | LOW       | 64QAM      | 13.60 | 13.57 | 13.46 | 13.80              |
|                            |         | MID       | 64QAM      | 13.78 | 13.73 | 13.42 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.47 | 13.76 | 13.68 | 13.80              |
|                            | 12      | LOW       | 64QAM      | 13.65 | 13.39 | 13.43 | 13.80              |
|                            |         | MID       | 64QAM      | 13.68 | 13.59 | 13.48 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.39 | 13.33 | 13.38 | 13.80              |
|                            | 25      | LOW       | 64QAM      | 13.50 | 13.53 | 13.54 | 13.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 13.38 | 13.39 | 13.23 | 13.80              |
|                            |         | MID       | QPSK       | 13.60 | 13.53 | 13.41 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.31 | 13.50 | 13.40 | 13.80              |
|                            | 25      | LOW       | QPSK       | 13.39 | 13.45 | 13.60 | 13.80              |
|                            |         | MID       | QPSK       | 13.58 | 13.65 | 13.65 | 13.80              |
|                            |         | HIGH      | QPSK       | 13.40 | 13.66 | 13.57 | 13.80              |
| 50                         | LOW     | QPSK      | 13.42      | 13.46 | 13.43 | 13.80 |                    |
| 10                         | 1       | LOW       | Q16        | 13.47 | 13.42 | 13.42 | 13.80              |
|                            |         | MID       | Q16        | 13.55 | 13.63 | 13.54 | 13.80              |
|                            |         | HIGH      | Q16        | 13.53 | 13.62 | 13.38 | 13.80              |
|                            | 25      | LOW       | Q16        | 13.40 | 13.40 | 13.39 | 13.80              |
|                            |         | MID       | Q16        | 13.66 | 13.39 | 13.49 | 13.80              |
|                            |         | HIGH      | Q16        | 13.47 | 13.46 | 13.51 | 13.80              |
|                            | 50      | LOW       | Q16        | 13.45 | 13.61 | 13.48 | 13.80              |
| 10                         | 1       | LOW       | 64QAM      | 13.59 | 13.72 | 13.46 | 13.80              |
|                            |         | MID       | 64QAM      | 13.71 | 13.68 | 13.39 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.55 | 13.78 | 13.60 | 13.80              |
|                            | 25      | LOW       | 64QAM      | 13.69 | 13.47 | 13.50 | 13.80              |
|                            |         | MID       | 64QAM      | 13.64 | 13.47 | 13.48 | 13.80              |
|                            |         | HIGH      | 64QAM      | 13.38 | 13.53 | 13.24 | 13.80              |
|                            | 50      | LOW       | 64QAM      | 13.45 | 13.42 | 13.48 | 13.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 13.57      | 13.51 | 13.15 | 13.80              |                    |
|                 |                 | MID       | QPSK       | 13.54      | 13.61 | 13.40 | 13.80              |                    |
|                 |                 | HIGH      | QPSK       | 13.34      | 13.53 | 13.36 | 13.80              |                    |
|                 | 36              | LOW       | QPSK       | 13.37      | 13.39 | 13.62 | 13.80              |                    |
|                 |                 | MID       | QPSK       | 13.48      | 13.58 | 13.61 | 13.80              |                    |
|                 |                 | HIGH      | QPSK       | 13.48      | 13.56 | 13.53 | 13.80              |                    |
|                 | 75              | LOW       | QPSK       | 13.41      | 13.35 | 13.29 | 13.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 13.47 | 13.36 | 13.43              | 13.80              |
|                 |                 |           | MID        | Q16        | 13.51 | 13.53 | 13.64              | 13.80              |
| HIGH            |                 |           | Q16        | 13.57      | 13.51 | 13.42 | 13.80              |                    |
| 36              |                 | LOW       | Q16        | 13.39      | 13.48 | 13.49 | 13.80              |                    |
|                 |                 | MID       | Q16        | 13.72      | 13.51 | 13.42 | 13.80              |                    |
|                 |                 | HIGH      | Q16        | 13.51      | 13.57 | 13.36 | 13.80              |                    |
| 75              |                 | LOW       | Q16        | 13.59      | 13.60 | 13.28 | 13.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 13.63 | 13.75 | 13.61              | 13.80              |
|                 |                 |           | MID        | 64QAM      | 13.60 | 13.73 | 13.57              | 13.80              |
|                 | HIGH            |           | 64QAM      | 13.54      | 13.67 | 13.72 | 13.80              |                    |
|                 | 36              | LOW       | 64QAM      | 13.63      | 13.40 | 13.43 | 13.80              |                    |
|                 |                 | MID       | 64QAM      | 13.57      | 13.53 | 13.47 | 13.80              |                    |
|                 |                 | HIGH      | 64QAM      | 13.35      | 13.36 | 13.36 | 13.80              |                    |
|                 | 75              | LOW       | 64QAM      | 13.42      | 13.38 | 13.62 | 13.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 13.52 | 13.51 | 13.24              | 13.80              |
| MID             |                 |           | QPSK       | 13.59      | 13.57 | 13.48 | 13.80              |                    |
| HIGH            |                 |           | QPSK       | 13.35      | 13.50 | 13.41 | 13.80              |                    |
| 50              |                 | LOW       | QPSK       | 13.50      | 13.40 | 13.59 | 13.80              |                    |
|                 |                 | MID       | QPSK       | 13.63      | 13.61 | 13.60 | 13.80              |                    |
|                 |                 | HIGH      | QPSK       | 13.48      | 13.59 | 13.50 | 13.80              |                    |
| 100             |                 | LOW       | QPSK       | 13.49      | 13.42 | 13.36 | 13.80              |                    |
| 20              |                 | 1         | LOW        | Q16        | 13.56 | 13.41 | 13.39              | 13.80              |
|                 |                 |           | MID        | Q16        | 13.66 | 13.67 | 13.68              | 13.80              |
|                 | HIGH            |           | Q16        | 13.68      | 13.62 | 13.53 | 13.80              |                    |
|                 | 50              | LOW       | Q16        | 13.54      | 13.43 | 13.50 | 13.80              |                    |
|                 |                 | MID       | Q16        | 13.69      | 13.50 | 13.54 | 13.80              |                    |
|                 |                 | HIGH      | Q16        | 13.55      | 13.60 | 13.48 | 13.80              |                    |
|                 | 100             | LOW       | Q16        | 13.52      | 13.57 | 13.43 | 13.80              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 13.56 | 13.68 | 13.58              | 13.80              |
|                 |                 |           | MID        | 64QAM      | 13.74 | 13.72 | 13.54              | 13.80              |
| HIGH            |                 |           | 64QAM      | 13.59      | 13.75 | 13.75 | 13.80              |                    |
| 50              |                 | LOW       | 64QAM      | 13.70      | 13.54 | 13.43 | 13.80              |                    |
|                 |                 | MID       | 64QAM      | 13.72      | 13.56 | 13.51 | 13.80              |                    |
|                 |                 | HIGH      | 64QAM      | 13.38      | 13.48 | 13.39 | 13.80              |                    |
| 100             |                 | LOW       | 64QAM      | 13.57      | 13.53 | 13.59 | 13.80              |                    |

| LTE B7-State 4 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 17.78 | 17.89 | 17.49 | 18.30              |
|                            |         | MID       | QPSK       | 18.12 | 17.98 | 18.00 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.89 | 18.01 | 17.79 | 18.30              |
|                            | 12      | LOW       | QPSK       | 17.99 | 17.90 | 17.92 | 18.30              |
|                            |         | MID       | QPSK       | 18.09 | 18.09 | 18.15 | 18.30              |
|                            |         | HIGH      | QPSK       | 18.02 | 17.96 | 17.99 | 18.30              |
|                            | 25      | LOW       | QPSK       | 18.07 | 18.13 | 17.86 | 18.30              |
| 5                          | 1       | LOW       | Q16        | 18.02 | 18.01 | 17.60 | 18.30              |
|                            |         | MID       | Q16        | 18.10 | 18.08 | 17.95 | 18.30              |
|                            |         | HIGH      | Q16        | 18.17 | 18.01 | 18.03 | 18.30              |
|                            | 12      | LOW       | Q16        | 18.02 | 17.78 | 17.85 | 18.30              |
|                            |         | MID       | Q16        | 18.10 | 17.95 | 17.86 | 18.30              |
|                            |         | HIGH      | Q16        | 17.84 | 18.22 | 17.83 | 18.30              |
|                            | 25      | LOW       | Q16        | 17.96 | 17.74 | 17.81 | 18.30              |
| 5                          | 1       | LOW       | 64QAM      | 17.82 | 17.97 | 17.91 | 18.30              |
|                            |         | MID       | 64QAM      | 17.96 | 18.21 | 18.03 | 18.30              |
|                            |         | HIGH      | 64QAM      | 18.21 | 18.06 | 18.21 | 18.30              |
|                            | 12      | LOW       | 64QAM      | 18.13 | 17.94 | 17.55 | 18.30              |
|                            |         | MID       | 64QAM      | 17.99 | 18.14 | 17.69 | 18.30              |
|                            |         | HIGH      | 64QAM      | 17.78 | 17.62 | 17.66 | 18.30              |
|                            | 25      | LOW       | 64QAM      | 18.20 | 17.98 | 17.92 | 18.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 17.69 | 17.98 | 17.67 | 18.30              |
|                            |         | MID       | QPSK       | 18.05 | 18.20 | 18.00 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.82 | 17.95 | 17.83 | 18.30              |
|                            | 25      | LOW       | QPSK       | 18.04 | 17.77 | 17.96 | 18.30              |
|                            |         | MID       | QPSK       | 18.05 | 18.23 | 18.04 | 18.30              |
|                            |         | HIGH      | QPSK       | 18.16 | 18.17 | 17.80 | 18.30              |
| 10                         | 50      | LOW       | QPSK       | 18.07 | 18.13 | 17.90 | 18.30              |
|                            | 1       | LOW       | Q16        | 18.11 | 17.97 | 17.80 | 18.30              |
|                            |         | MID       | Q16        | 18.05 | 18.07 | 17.92 | 18.30              |
|                            |         | HIGH      | Q16        | 18.10 | 17.94 | 17.92 | 18.30              |
|                            | 25      | LOW       | Q16        | 18.11 | 17.96 | 18.12 | 18.30              |
|                            |         | MID       | Q16        | 17.97 | 17.86 | 17.61 | 18.30              |
|                            |         | HIGH      | Q16        | 17.93 | 18.06 | 17.83 | 18.30              |
|                            | 50      | LOW       | Q16        | 17.98 | 17.99 | 17.93 | 18.30              |
| 10                         | 1       | LOW       | 64QAM      | 17.95 | 18.15 | 18.06 | 18.30              |
|                            |         | MID       | 64QAM      | 18.14 | 18.28 | 18.07 | 18.30              |
|                            |         | HIGH      | 64QAM      | 18.27 | 18.06 | 18.19 | 18.30              |
|                            | 25      | LOW       | 64QAM      | 18.08 | 17.90 | 17.55 | 18.30              |
|                            |         | MID       | 64QAM      | 18.02 | 17.90 | 17.89 | 18.30              |
|                            |         | HIGH      | 64QAM      | 18.07 | 17.60 | 17.77 | 18.30              |
|                            | 50      | LOW       | 64QAM      | 18.15 | 17.93 | 18.01 | 18.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 17.76 | 17.91 | 17.70 | 18.30              |
|                 |         | MID       | QPSK       | 18.00 | 18.03 | 18.04 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.71 | 18.04 | 17.81 | 18.30              |
|                 | 36      | LOW       | QPSK       | 17.93 | 18.04 | 18.05 | 18.30              |
|                 |         | MID       | QPSK       | 17.91 | 18.14 | 18.08 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.91 | 18.12 | 17.78 | 18.30              |
|                 | 75      | LOW       | QPSK       | 18.12 | 18.02 | 18.02 | 18.30              |
| 15              | 1       | LOW       | Q16        | 18.04 | 18.11 | 17.83 | 18.30              |
|                 |         | MID       | Q16        | 18.05 | 18.16 | 17.90 | 18.30              |
|                 |         | HIGH      | Q16        | 18.13 | 18.03 | 18.07 | 18.30              |
|                 | 36      | LOW       | Q16        | 17.93 | 17.91 | 17.90 | 18.30              |
|                 |         | MID       | Q16        | 18.19 | 17.91 | 17.67 | 18.30              |
|                 |         | HIGH      | Q16        | 17.86 | 18.13 | 17.83 | 18.30              |
|                 | 75      | LOW       | Q16        | 17.87 | 17.74 | 17.97 | 18.30              |
| 15              | 1       | LOW       | 64QAM      | 17.89 | 17.94 | 18.11 | 18.30              |
|                 |         | MID       | 64QAM      | 18.12 | 18.26 | 17.78 | 18.30              |
|                 |         | HIGH      | 64QAM      | 18.10 | 17.93 | 18.19 | 18.30              |
|                 | 36      | LOW       | 64QAM      | 18.20 | 17.83 | 17.80 | 18.30              |
|                 |         | MID       | 64QAM      | 18.17 | 18.08 | 17.78 | 18.30              |
|                 |         | HIGH      | 64QAM      | 18.05 | 17.58 | 17.86 | 18.30              |
|                 | 75      | LOW       | 64QAM      | 18.29 | 17.93 | 17.92 | 18.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 17.83 | 17.98 | 17.65 | 18.30              |
|                 |         | MID       | QPSK       | 18.07 | 18.16 | 17.95 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.87 | 17.97 | 17.81 | 18.30              |
|                 | 50      | LOW       | QPSK       | 17.97 | 17.95 | 18.01 | 18.30              |
|                 |         | MID       | QPSK       | 18.09 | 18.14 | 18.08 | 18.30              |
|                 |         | HIGH      | QPSK       | 18.07 | 18.12 | 17.94 | 18.30              |
|                 | 100     | LOW       | QPSK       | 18.14 | 18.15 | 17.97 | 18.30              |
| 20              | 1       | LOW       | Q16        | 18.13 | 18.06 | 17.78 | 18.30              |
|                 |         | MID       | Q16        | 18.25 | 18.23 | 18.08 | 18.30              |
|                 |         | HIGH      | Q16        | 18.26 | 17.99 | 18.03 | 18.30              |
|                 | 50      | LOW       | Q16        | 18.09 | 17.91 | 18.03 | 18.30              |
|                 |         | MID       | Q16        | 18.17 | 18.00 | 17.81 | 18.30              |
|                 |         | HIGH      | Q16        | 17.86 | 18.13 | 17.97 | 18.30              |
|                 | 100     | LOW       | Q16        | 18.03 | 17.92 | 17.97 | 18.30              |
| 20              | 1       | LOW       | 64QAM      | 17.93 | 18.10 | 18.04 | 18.30              |
|                 |         | MID       | 64QAM      | 18.14 | 18.21 | 17.98 | 18.30              |
|                 |         | HIGH      | 64QAM      | 18.25 | 18.02 | 18.30 | 18.30              |
|                 | 50      | LOW       | 64QAM      | 18.15 | 18.01 | 17.73 | 18.30              |
|                 |         | MID       | 64QAM      | 18.17 | 18.10 | 17.87 | 18.30              |
|                 |         | HIGH      | 64QAM      | 17.98 | 17.78 | 17.77 | 18.30              |
|                 | 100     | LOW       | 64QAM      | 18.22 | 18.09 | 18.10 | 18.30              |

| LTE B7-State 5 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 16.46 | 16.34 | 16.29 | 16.80              |
|                            |         | MID       | QPSK       | 16.42 | 16.51 | 16.44 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.32 | 16.41 | 16.33 | 16.80              |
|                            | 12      | LOW       | QPSK       | 16.41 | 16.39 | 16.37 | 16.80              |
|                            |         | MID       | QPSK       | 16.51 | 16.50 | 16.55 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.67 | 16.53 | 16.40 | 16.80              |
|                            | 25      | LOW       | QPSK       | 16.54 | 16.37 | 16.53 | 16.80              |
|                            | 5       | LOW       | Q16        | 16.63 | 16.51 | 16.48 | 16.80              |
|                            |         | MID       | Q16        | 16.55 | 16.51 | 16.42 | 16.80              |
|                            |         | HIGH      | Q16        | 16.64 | 16.51 | 16.54 | 16.80              |
|                            |         | LOW       | Q16        | 16.36 | 16.55 | 16.25 | 16.80              |
|                            |         | MID       | Q16        | 16.51 | 16.58 | 16.58 | 16.80              |
|                            |         | HIGH      | Q16        | 16.39 | 16.56 | 16.30 | 16.80              |
|                            | 25      | LOW       | Q16        | 16.55 | 16.53 | 16.29 | 16.80              |
| 5                          | 1       | LOW       | 64QAM      | 16.52 | 16.56 | 16.45 | 16.80              |
|                            |         | MID       | 64QAM      | 16.66 | 16.63 | 16.51 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.63 | 16.75 | 16.53 | 16.80              |
|                            | 12      | LOW       | 64QAM      | 16.45 | 16.49 | 16.49 | 16.80              |
|                            |         | MID       | 64QAM      | 16.55 | 16.35 | 16.50 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.35 | 16.36 | 16.27 | 16.80              |
|                            | 25      | LOW       | 64QAM      | 16.65 | 16.28 | 16.50 | 16.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 16.42 | 16.58 | 16.47 | 16.80              |
|                            |         | MID       | QPSK       | 16.48 | 16.61 | 16.37 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.34 | 16.59 | 16.12 | 16.80              |
|                            | 25      | LOW       | QPSK       | 16.36 | 16.54 | 16.40 | 16.80              |
|                            |         | MID       | QPSK       | 16.47 | 16.53 | 16.65 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.42 | 16.49 | 16.23 | 16.80              |
| 10                         | 50      | LOW       | QPSK       | 16.56 | 16.42 | 16.48 | 16.80              |
|                            | 1       | LOW       | Q16        | 16.65 | 16.36 | 16.35 | 16.80              |
|                            |         | MID       | Q16        | 16.65 | 16.61 | 16.58 | 16.80              |
|                            |         | HIGH      | Q16        | 16.74 | 16.44 | 16.54 | 16.80              |
|                            | 25      | LOW       | Q16        | 16.46 | 16.68 | 16.33 | 16.80              |
|                            |         | MID       | Q16        | 16.40 | 16.45 | 16.34 | 16.80              |
|                            |         | HIGH      | Q16        | 16.36 | 16.43 | 16.35 | 16.80              |
|                            | 50      | LOW       | Q16        | 16.52 | 16.63 | 16.17 | 16.80              |
|                            | 10      | LOW       | 64QAM      | 16.60 | 16.68 | 16.65 | 16.80              |
|                            |         | MID       | 64QAM      | 16.71 | 16.73 | 16.49 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.63 | 16.65 | 16.48 | 16.80              |
|                            |         | LOW       | 64QAM      | 16.41 | 16.37 | 16.45 | 16.80              |
|                            |         | MID       | 64QAM      | 16.63 | 16.32 | 16.58 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.20 | 16.23 | 16.14 | 16.80              |
|                            | 50      | LOW       | 64QAM      | 16.60 | 16.32 | 16.40 | 16.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825        | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 16.46        | 16.53 | 16.38 | 16.80              |
|                 |         | MID       | QPSK       | 16.43        | 16.52 | 16.42 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.34        | 16.42 | 16.12 | 16.80              |
|                 | 36      | LOW       | QPSK       | 16.43        | 16.40 | 16.32 | 16.80              |
|                 |         | MID       | QPSK       | 16.57        | 16.48 | 16.65 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.57        | 16.34 | 16.41 | 16.80              |
|                 | 75      | LOW       | QPSK       | 16.59        | 16.63 | 16.36 | 16.80              |
|                 |         | LOW       | Q16        | 16.63        | 16.29 | 16.33 | 16.80              |
|                 |         | MID       | Q16        | 16.70        | 16.56 | 16.53 | 16.80              |
| 15              | 1       | HIGH      | Q16        | 16.59        | 16.44 | 16.59 | 16.80              |
|                 |         | LOW       | Q16        | 16.41        | 16.43 | 16.18 | 16.80              |
|                 |         | MID       | Q16        | 16.53        | 16.58 | 16.50 | 16.80              |
|                 | 36      | HIGH      | Q16        | 16.44        | 16.38 | 16.17 | 16.80              |
|                 |         | LOW       | Q16        | 16.55        | 16.51 | 16.29 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.38        | 16.54 | 16.65 | 16.80              |
|                 | 1       | MID       | 64QAM      | 16.67        | 16.67 | 16.32 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.80        | 16.63 | 16.51 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.46        | 16.52 | 16.31 | 16.80              |
| 15              | 36      | MID       | 64QAM      | 16.78        | 16.32 | 16.32 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.19        | 16.36 | 16.09 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.39        | 16.41 | 16.55 | 16.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850        | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 16.39        | 16.51 | 16.40 | 16.80              |
|                 |         | MID       | QPSK       | <b>16.60</b> | 16.54 | 16.39 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.34        | 16.54 | 16.28 | 16.80              |
|                 | 50      | LOW       | QPSK       | 16.36        | 16.47 | 16.45 | 16.80              |
|                 |         | MID       | QPSK       | <b>16.64</b> | 16.58 | 16.58 | 16.80              |
|                 |         | HIGH      | QPSK       | 16.60        | 16.46 | 16.33 | 16.80              |
|                 | 100     | LOW       | QPSK       | <b>16.56</b> | 16.55 | 16.46 | 16.80              |
|                 |         | LOW       | Q16        | 16.75        | 16.44 | 16.40 | 16.80              |
|                 |         | MID       | Q16        | 16.67        | 16.61 | 16.60 | 16.80              |
| 20              | 1       | HIGH      | Q16        | 16.76        | 16.59 | 16.56 | 16.80              |
|                 |         | LOW       | Q16        | 16.41        | 16.60 | 16.36 | 16.80              |
|                 |         | MID       | Q16        | 16.58        | 16.63 | 16.50 | 16.80              |
|                 | 50      | HIGH      | Q16        | 16.41        | 16.53 | 16.33 | 16.80              |
|                 |         | LOW       | Q16        | 16.70        | 16.58 | 16.32 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.55        | 16.61 | 16.58 | 16.80              |
|                 | 1       | MID       | 64QAM      | 16.79        | 16.80 | 16.44 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.75        | 16.75 | 16.61 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.58        | 16.52 | 16.47 | 16.80              |
| 20              | 50      | MID       | 64QAM      | 16.73        | 16.50 | 16.50 | 16.80              |
|                 |         | HIGH      | 64QAM      | 16.30        | 16.41 | 16.25 | 16.80              |
|                 |         | LOW       | 64QAM      | 16.57        | 16.44 | 16.47 | 16.80              |

| LTE B7-State 6 -Ant.1(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 16.46 | 16.34 | 16.29 | 16.80              |
|                            |         | MID       | QPSK       | 16.42 | 16.51 | 16.44 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.32 | 16.41 | 16.33 | 16.80              |
|                            | 12      | LOW       | QPSK       | 16.41 | 16.39 | 16.37 | 16.80              |
|                            |         | MID       | QPSK       | 16.51 | 16.50 | 16.55 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.67 | 16.53 | 16.40 | 16.80              |
|                            | 25      | LOW       | QPSK       | 16.54 | 16.37 | 16.53 | 16.80              |
|                            | 5       | LOW       | Q16        | 16.63 | 16.51 | 16.48 | 16.80              |
|                            |         | MID       | Q16        | 16.55 | 16.51 | 16.42 | 16.80              |
|                            |         | HIGH      | Q16        | 16.64 | 16.51 | 16.54 | 16.80              |
|                            |         | LOW       | Q16        | 16.36 | 16.55 | 16.25 | 16.80              |
|                            |         | MID       | Q16        | 16.51 | 16.58 | 16.58 | 16.80              |
|                            |         | HIGH      | Q16        | 16.39 | 16.56 | 16.30 | 16.80              |
|                            | 25      | LOW       | Q16        | 16.55 | 16.53 | 16.29 | 16.80              |
| 5                          | 1       | LOW       | 64QAM      | 16.52 | 16.56 | 16.45 | 16.80              |
|                            |         | MID       | 64QAM      | 16.66 | 16.63 | 16.51 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.63 | 16.75 | 16.53 | 16.80              |
|                            | 12      | LOW       | 64QAM      | 16.45 | 16.49 | 16.49 | 16.80              |
|                            |         | MID       | 64QAM      | 16.55 | 16.35 | 16.50 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.35 | 16.36 | 16.27 | 16.80              |
|                            | 25      | LOW       | 64QAM      | 16.65 | 16.28 | 16.50 | 16.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 16.42 | 16.58 | 16.47 | 16.80              |
|                            |         | MID       | QPSK       | 16.48 | 16.61 | 16.37 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.34 | 16.59 | 16.12 | 16.80              |
|                            | 25      | LOW       | QPSK       | 16.36 | 16.54 | 16.40 | 16.80              |
|                            |         | MID       | QPSK       | 16.47 | 16.53 | 16.65 | 16.80              |
|                            |         | HIGH      | QPSK       | 16.42 | 16.49 | 16.23 | 16.80              |
| 10                         | 50      | LOW       | QPSK       | 16.56 | 16.42 | 16.48 | 16.80              |
|                            | 1       | LOW       | Q16        | 16.65 | 16.36 | 16.35 | 16.80              |
|                            |         | MID       | Q16        | 16.65 | 16.61 | 16.58 | 16.80              |
|                            |         | HIGH      | Q16        | 16.74 | 16.44 | 16.54 | 16.80              |
|                            | 25      | LOW       | Q16        | 16.46 | 16.68 | 16.33 | 16.80              |
|                            |         | MID       | Q16        | 16.40 | 16.45 | 16.34 | 16.80              |
|                            |         | HIGH      | Q16        | 16.36 | 16.43 | 16.35 | 16.80              |
|                            | 50      | LOW       | Q16        | 16.52 | 16.63 | 16.17 | 16.80              |
|                            | 10      | LOW       | 64QAM      | 16.60 | 16.68 | 16.65 | 16.80              |
|                            |         | MID       | 64QAM      | 16.71 | 16.73 | 16.49 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.63 | 16.65 | 16.48 | 16.80              |
|                            |         | LOW       | 64QAM      | 16.41 | 16.37 | 16.45 | 16.80              |
|                            |         | MID       | 64QAM      | 16.63 | 16.32 | 16.58 | 16.80              |
|                            |         | HIGH      | 64QAM      | 16.20 | 16.23 | 16.14 | 16.80              |
|                            | 50      | LOW       | 64QAM      | 16.60 | 16.32 | 16.40 | 16.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 16.46      | 16.53 | 16.38 | 16.80              |                    |
|                 |                 | MID       | QPSK       | 16.43      | 16.52 | 16.42 | 16.80              |                    |
|                 |                 | HIGH      | QPSK       | 16.34      | 16.42 | 16.12 | 16.80              |                    |
|                 | 36              | LOW       | QPSK       | 16.43      | 16.40 | 16.32 | 16.80              |                    |
|                 |                 | MID       | QPSK       | 16.57      | 16.48 | 16.65 | 16.80              |                    |
|                 |                 | HIGH      | QPSK       | 16.57      | 16.34 | 16.41 | 16.80              |                    |
|                 | 75              | LOW       | QPSK       | 16.59      | 16.63 | 16.36 | 16.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 16.63 | 16.29 | 16.33              | 16.80              |
|                 |                 |           | MID        | Q16        | 16.70 | 16.56 | 16.53              | 16.80              |
| HIGH            |                 |           | Q16        | 16.59      | 16.44 | 16.59 | 16.80              |                    |
| 36              |                 | LOW       | Q16        | 16.41      | 16.43 | 16.18 | 16.80              |                    |
|                 |                 | MID       | Q16        | 16.53      | 16.58 | 16.50 | 16.80              |                    |
|                 |                 | HIGH      | Q16        | 16.44      | 16.38 | 16.17 | 16.80              |                    |
| 75              | LOW             | Q16       | 16.55      | 16.51      | 16.29 | 16.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 16.38      | 16.54 | 16.65 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.67      | 16.67 | 16.32 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.80      | 16.63 | 16.51 | 16.80              |                    |
|                 | 36              | LOW       | 64QAM      | 16.46      | 16.52 | 16.31 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.78      | 16.32 | 16.32 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.19      | 16.36 | 16.09 | 16.80              |                    |
|                 | 75              | LOW       | 64QAM      | 16.39      | 16.41 | 16.55 | 16.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 16.39 | 16.51 | 16.40              | 16.80              |
| MID             |                 |           | QPSK       | 16.60      | 16.54 | 16.39 | 16.80              |                    |
| HIGH            |                 |           | QPSK       | 16.34      | 16.54 | 16.28 | 16.80              |                    |
| 50              |                 | LOW       | QPSK       | 16.36      | 16.47 | 16.45 | 16.80              |                    |
|                 |                 | MID       | QPSK       | 16.64      | 16.58 | 16.58 | 16.80              |                    |
|                 |                 | HIGH      | QPSK       | 16.60      | 16.46 | 16.33 | 16.80              |                    |
| 100             | LOW             | QPSK      | 16.56      | 16.55      | 16.46 | 16.80 |                    |                    |
| 20              | 1               | LOW       | Q16        | 16.75      | 16.44 | 16.40 | 16.80              |                    |
|                 |                 | MID       | Q16        | 16.67      | 16.61 | 16.60 | 16.80              |                    |
|                 |                 | HIGH      | Q16        | 16.76      | 16.59 | 16.56 | 16.80              |                    |
|                 | 50              | LOW       | Q16        | 16.41      | 16.60 | 16.36 | 16.80              |                    |
|                 |                 | MID       | Q16        | 16.58      | 16.63 | 16.50 | 16.80              |                    |
|                 |                 | HIGH      | Q16        | 16.41      | 16.53 | 16.33 | 16.80              |                    |
| 100             | LOW             | Q16       | 16.70      | 16.58      | 16.32 | 16.80 |                    |                    |
| 20              | 1               | LOW       | 64QAM      | 16.55      | 16.61 | 16.58 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.79      | 16.80 | 16.44 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.75      | 16.75 | 16.61 | 16.80              |                    |
|                 | 50              | LOW       | 64QAM      | 16.58      | 16.52 | 16.47 | 16.80              |                    |
|                 |                 | MID       | 64QAM      | 16.73      | 16.50 | 16.50 | 16.80              |                    |
|                 |                 | HIGH      | 64QAM      | 16.30      | 16.41 | 16.25 | 16.80              |                    |
|                 | 100             | LOW       | 64QAM      | 16.57      | 16.44 | 16.47 | 16.80              |                    |

| LTE B7-State 1 -Ant.0 |         |           |            |       |       |       |                    |       |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |       |
| 5                     | 1       | LOW       | QPSK       | 24.13 | 24.20 | 23.81 | 24.30              |       |
|                       |         | MID       | QPSK       | 24.18 | 24.01 | 24.11 | 24.30              |       |
|                       |         | HIGH      | QPSK       | 23.92 | 24.16 | 23.93 | 24.30              |       |
|                       | 12      | LOW       | QPSK       | 23.00 | 23.10 | 23.16 | 23.30              |       |
|                       |         | MID       | QPSK       | 23.14 | 23.30 | 23.15 | 23.30              |       |
|                       |         | HIGH      | QPSK       | 23.03 | 23.11 | 23.15 | 23.30              |       |
|                       | 25      | LOW       | QPSK       | 23.25 | 23.11 | 22.98 | 23.30              |       |
| 5                     | 1       | LOW       | Q16        | 23.25 | 23.14 | 22.90 | 23.30              |       |
|                       |         | MID       | Q16        | 23.15 | 23.15 | 23.09 | 23.30              |       |
|                       |         | HIGH      | Q16        | 23.27 | 23.02 | 22.99 | 23.30              |       |
|                       | 12      | LOW       | Q16        | 22.12 | 22.19 | 22.24 | 22.30              |       |
|                       |         | MID       | Q16        | 22.09 | 22.08 | 22.17 | 22.30              |       |
|                       |         | HIGH      | Q16        | 21.94 | 22.08 | 22.12 | 22.30              |       |
|                       | 25      | LOW       | Q16        | 22.14 | 22.13 | 22.08 | 22.30              |       |
| 5                     | 1       | LOW       | 64QAM      | 21.77 | 21.64 | 21.71 | 22.30              |       |
|                       |         | MID       | 64QAM      | 22.06 | 21.91 | 21.95 | 22.30              |       |
|                       |         | HIGH      | 64QAM      | 21.96 | 22.19 | 21.74 | 22.30              |       |
|                       | 12      | LOW       | 64QAM      | 21.26 | 21.15 | 21.19 | 21.30              |       |
|                       |         | MID       | 64QAM      | 21.07 | 21.16 | 20.78 | 21.30              |       |
|                       |         | HIGH      | 64QAM      | 21.19 | 21.18 | 20.71 | 21.30              |       |
|                       | 25      | LOW       | 64QAM      | 21.20 | 20.96 | 21.05 | 21.30              |       |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |       |
| 10                    | 1       | LOW       | QPSK       | 23.96 | 24.20 | 24.10 | 24.30              |       |
|                       |         | MID       | QPSK       | 24.13 | 24.17 | 23.94 | 24.30              |       |
|                       |         | HIGH      | QPSK       | 24.17 | 24.28 | 23.83 | 24.30              |       |
|                       | 25      | LOW       | QPSK       | 23.28 | 23.03 | 23.26 | 23.30              |       |
|                       |         | MID       | QPSK       | 23.17 | 23.12 | 23.01 | 23.30              |       |
|                       |         | HIGH      | QPSK       | 23.11 | 23.11 | 23.01 | 23.30              |       |
| 10                    | 25      | LOW       | QPSK       | 23.01 | 23.20 | 22.98 | 23.30              |       |
|                       |         | 1         | LOW        | Q16   | 23.13 | 23.19 | 22.95              | 23.30 |
|                       |         |           | MID        | Q16   | 23.24 | 23.27 | 23.11              | 23.30 |
|                       |         |           | HIGH       | Q16   | 23.25 | 23.16 | 22.99              | 23.30 |
|                       |         | 25        | LOW        | Q16   | 22.19 | 22.21 | 22.11              | 22.30 |
|                       |         |           | MID        | Q16   | 22.05 | 22.12 | 22.13              | 22.30 |
|                       | HIGH    |           | Q16        | 22.18 | 22.21 | 22.07 | 22.30              |       |
|                       | 50      | LOW       | Q16        | 22.12 | 22.11 | 22.19 | 22.30              |       |
| 10                    | 1       | LOW       | 64QAM      | 22.01 | 21.93 | 21.87 | 22.30              |       |
|                       |         | MID       | 64QAM      | 22.11 | 21.67 | 22.06 | 22.30              |       |
|                       |         | HIGH      | 64QAM      | 21.98 | 22.21 | 21.87 | 22.30              |       |
|                       | 25      | LOW       | 64QAM      | 21.05 | 20.94 | 21.23 | 21.30              |       |
|                       |         | MID       | 64QAM      | 21.00 | 20.97 | 20.65 | 21.30              |       |
|                       |         | HIGH      | 64QAM      | 21.17 | 21.05 | 20.69 | 21.30              |       |
|                       | 50      | LOW       | 64QAM      | 21.03 | 20.77 | 20.76 | 21.30              |       |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.16 | 24.11 | 23.86 | 24.30              |
|                 |         | MID       | QPSK       | 24.18 | 24.10 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.12 | 24.30 | 23.83 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.25 | 22.96 | 23.00 | 23.30              |
|                 |         | MID       | QPSK       | 23.23 | 23.18 | 22.94 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.21 | 23.24 | 23.15 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 23.02 | 22.94 | 23.30              |
| 15              | 1       | LOW       | Q16        | 22.99 | 23.14 | 22.84 | 23.30              |
|                 |         | MID       | Q16        | 23.15 | 22.94 | 23.02 | 23.30              |
|                 |         | HIGH      | Q16        | 23.06 | 23.09 | 22.99 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.01 | 22.14 | 22.11 | 22.30              |
|                 |         | MID       | Q16        | 22.27 | 22.15 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.05 | 22.19 | 22.10 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.03 | 22.04 | 22.13 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 21.90 | 21.79 | 21.63 | 22.30              |
|                 |         | MID       | 64QAM      | 22.09 | 21.75 | 22.06 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.87 | 22.21 | 21.78 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.30 | 21.17 | 21.19 | 21.30              |
|                 |         | MID       | 64QAM      | 21.11 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.21 | 21.11 | 20.64 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 20.93 | 20.85 | 20.93 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.23 | 24.18 | 23.98 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.25 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.19 | 24.18 | 24.10 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.23 | 23.22 | 23.21 | 23.30              |
|                 |         | MID       | QPSK       | 23.28 | 23.25 | 23.20 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.26 | 23.24 | 23.17 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.27 | 23.25 | 23.17 | 23.30              |
| 20              | 1       | LOW       | Q16        | 23.13 | 23.07 | 22.95 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 23.20 | 23.09 | 23.30              |
|                 |         | HIGH      | Q16        | 23.18 | 23.14 | 23.11 | 23.30              |
|                 | 50      | LOW       | Q16        | 22.23 | 22.23 | 22.20 | 22.30              |
|                 |         | MID       | Q16        | 22.25 | 22.28 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.18 | 22.28 | 22.14 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.21 | 22.22 | 22.17 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 22.01 | 21.86 | 21.80 | 22.30              |
|                 |         | MID       | 64QAM      | 22.22 | 21.84 | 22.13 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.98 | 22.30 | 21.87 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.22 | 21.09 | 21.17 | 21.30              |
|                 |         | MID       | 64QAM      | 21.13 | 21.16 | 20.88 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.25 | 21.20 | 20.81 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 21.16 | 21.00 | 20.95 | 21.30              |

| LTE B7-State 2 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 24.13 | 24.20 | 23.81 | 24.30              |
|                       |         | MID       | QPSK       | 24.18 | 24.01 | 24.11 | 24.30              |
|                       |         | HIGH      | QPSK       | 23.92 | 24.16 | 23.93 | 24.30              |
|                       | 12      | LOW       | QPSK       | 23.00 | 23.10 | 23.16 | 23.30              |
|                       |         | MID       | QPSK       | 23.14 | 23.30 | 23.15 | 23.30              |
|                       |         | HIGH      | QPSK       | 23.03 | 23.11 | 23.15 | 23.30              |
|                       | 25      | LOW       | QPSK       | 23.25 | 23.11 | 22.98 | 23.30              |
| 5                     | 1       | LOW       | Q16        | 23.25 | 23.14 | 22.90 | 23.30              |
|                       |         | MID       | Q16        | 23.15 | 23.15 | 23.09 | 23.30              |
|                       |         | HIGH      | Q16        | 23.27 | 23.02 | 22.99 | 23.30              |
|                       | 12      | LOW       | Q16        | 22.12 | 22.19 | 22.24 | 22.30              |
|                       |         | MID       | Q16        | 22.09 | 22.08 | 22.17 | 22.30              |
|                       |         | HIGH      | Q16        | 21.94 | 22.08 | 22.12 | 22.30              |
|                       | 25      | LOW       | Q16        | 22.14 | 22.13 | 22.08 | 22.30              |
| 5                     | 1       | LOW       | 64QAM      | 21.77 | 21.64 | 21.71 | 22.30              |
|                       |         | MID       | 64QAM      | 22.06 | 21.91 | 21.95 | 22.30              |
|                       |         | HIGH      | 64QAM      | 21.96 | 22.19 | 21.74 | 22.30              |
|                       | 12      | LOW       | 64QAM      | 21.26 | 21.15 | 21.19 | 21.30              |
|                       |         | MID       | 64QAM      | 21.07 | 21.16 | 20.78 | 21.30              |
|                       |         | HIGH      | 64QAM      | 21.19 | 21.18 | 20.71 | 21.30              |
|                       | 25      | LOW       | 64QAM      | 21.20 | 20.96 | 21.05 | 21.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 23.96 | 24.20 | 24.10 | 24.30              |
|                       |         | MID       | QPSK       | 24.13 | 24.17 | 23.94 | 24.30              |
|                       |         | HIGH      | QPSK       | 24.17 | 24.28 | 23.83 | 24.30              |
|                       | 25      | LOW       | QPSK       | 23.28 | 23.03 | 23.26 | 23.30              |
|                       |         | MID       | QPSK       | 23.17 | 23.12 | 23.01 | 23.30              |
|                       |         | HIGH      | QPSK       | 23.11 | 23.11 | 23.01 | 23.30              |
| 10                    | 1       | LOW       | Q16        | 23.13 | 23.19 | 22.95 | 23.30              |
|                       |         | MID       | Q16        | 23.24 | 23.27 | 23.11 | 23.30              |
|                       |         | HIGH      | Q16        | 23.25 | 23.16 | 22.99 | 23.30              |
|                       | 25      | LOW       | Q16        | 22.19 | 22.21 | 22.11 | 22.30              |
|                       |         | MID       | Q16        | 22.05 | 22.12 | 22.13 | 22.30              |
|                       |         | HIGH      | Q16        | 22.18 | 22.21 | 22.07 | 22.30              |
|                       | 50      | LOW       | Q16        | 22.12 | 22.11 | 22.19 | 22.30              |
|                       |         | LOW       | 64QAM      | 22.01 | 21.93 | 21.87 | 22.30              |
| 10                    | 1       | MID       | 64QAM      | 22.11 | 21.67 | 22.06 | 22.30              |
|                       |         | HIGH      | 64QAM      | 21.98 | 22.21 | 21.87 | 22.30              |
|                       |         | LOW       | 64QAM      | 21.05 | 20.94 | 21.23 | 21.30              |
|                       | 25      | MID       | 64QAM      | 21.00 | 20.97 | 20.65 | 21.30              |
|                       |         | HIGH      | 64QAM      | 21.17 | 21.05 | 20.69 | 21.30              |
|                       |         | LOW       | 64QAM      | 21.03 | 20.77 | 20.76 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.16 | 24.11 | 23.86 | 24.30              |
|                 |         | MID       | QPSK       | 24.18 | 24.10 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.12 | 24.30 | 23.83 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.25 | 22.96 | 23.00 | 23.30              |
|                 |         | MID       | QPSK       | 23.23 | 23.18 | 22.94 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.21 | 23.24 | 23.15 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 23.02 | 22.94 | 23.30              |
| 15              | 1       | LOW       | Q16        | 22.99 | 23.14 | 22.84 | 23.30              |
|                 |         | MID       | Q16        | 23.15 | 22.94 | 23.02 | 23.30              |
|                 |         | HIGH      | Q16        | 23.06 | 23.09 | 22.99 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.01 | 22.14 | 22.11 | 22.30              |
|                 |         | MID       | Q16        | 22.27 | 22.15 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.05 | 22.19 | 22.10 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.03 | 22.04 | 22.13 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 21.90 | 21.79 | 21.63 | 22.30              |
|                 |         | MID       | 64QAM      | 22.09 | 21.75 | 22.06 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.87 | 22.21 | 21.78 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.30 | 21.17 | 21.19 | 21.30              |
|                 |         | MID       | 64QAM      | 21.11 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.21 | 21.11 | 20.64 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 20.93 | 20.85 | 20.93 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.23 | 24.18 | 23.98 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.25 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.19 | 24.18 | 24.10 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.23 | 23.22 | 23.21 | 23.30              |
|                 |         | MID       | QPSK       | 23.28 | 23.25 | 23.20 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.26 | 23.24 | 23.17 | 23.30              |
| 20              | 100     | LOW       | QPSK       | 23.27 | 23.25 | 23.17 | 23.30              |
|                 |         | LOW       | Q16        | 23.13 | 23.07 | 22.95 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 23.20 | 23.09 | 23.30              |
|                 | 1       | HIGH      | Q16        | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 22.23 | 22.23 | 22.20 | 22.30              |
|                 | 50      | MID       | Q16        | 22.25 | 22.28 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.18 | 22.28 | 22.14 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.21 | 22.22 | 22.17 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 22.01 | 21.86 | 21.80 | 22.30              |
|                 |         | MID       | 64QAM      | 22.22 | 21.84 | 22.13 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.98 | 22.30 | 21.87 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.22 | 21.09 | 21.17 | 21.30              |
|                 |         | MID       | 64QAM      | 21.13 | 21.16 | 20.88 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.25 | 21.20 | 20.81 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 21.16 | 21.00 | 20.95 | 21.30              |

| LTE B7-State 3 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 24.13 | 24.20 | 23.81 | 24.30              |
|                       |         | MID       | QPSK       | 24.18 | 24.01 | 24.11 | 24.30              |
|                       |         | HIGH      | QPSK       | 23.92 | 24.16 | 23.93 | 24.30              |
|                       | 12      | LOW       | QPSK       | 23.00 | 23.10 | 23.16 | 23.30              |
|                       |         | MID       | QPSK       | 23.14 | 23.30 | 23.15 | 23.30              |
|                       |         | HIGH      | QPSK       | 23.03 | 23.11 | 23.15 | 23.30              |
|                       | 25      | LOW       | QPSK       | 23.25 | 23.11 | 22.98 | 23.30              |
| 5                     | 1       | LOW       | Q16        | 23.25 | 23.14 | 22.90 | 23.30              |
|                       |         | MID       | Q16        | 23.15 | 23.15 | 23.09 | 23.30              |
|                       |         | HIGH      | Q16        | 23.27 | 23.02 | 22.99 | 23.30              |
|                       | 12      | LOW       | Q16        | 22.12 | 22.19 | 22.24 | 22.30              |
|                       |         | MID       | Q16        | 22.09 | 22.08 | 22.17 | 22.30              |
|                       |         | HIGH      | Q16        | 21.94 | 22.08 | 22.12 | 22.30              |
|                       | 25      | LOW       | Q16        | 22.14 | 22.13 | 22.08 | 22.30              |
| 5                     | 1       | LOW       | 64QAM      | 21.77 | 21.64 | 21.71 | 22.30              |
|                       |         | MID       | 64QAM      | 22.06 | 21.91 | 21.95 | 22.30              |
|                       |         | HIGH      | 64QAM      | 21.96 | 22.19 | 21.74 | 22.30              |
|                       | 12      | LOW       | 64QAM      | 21.26 | 21.15 | 21.19 | 21.30              |
|                       |         | MID       | 64QAM      | 21.07 | 21.16 | 20.78 | 21.30              |
|                       |         | HIGH      | 64QAM      | 21.19 | 21.18 | 20.71 | 21.30              |
|                       | 25      | LOW       | 64QAM      | 21.20 | 20.96 | 21.05 | 21.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 23.96 | 24.20 | 24.10 | 24.30              |
|                       |         | MID       | QPSK       | 24.13 | 24.17 | 23.94 | 24.30              |
|                       |         | HIGH      | QPSK       | 24.17 | 24.28 | 23.83 | 24.30              |
|                       | 25      | LOW       | QPSK       | 23.28 | 23.03 | 23.26 | 23.30              |
|                       |         | MID       | QPSK       | 23.17 | 23.12 | 23.01 | 23.30              |
|                       |         | HIGH      | QPSK       | 23.11 | 23.11 | 23.01 | 23.30              |
| 10                    | 1       | LOW       | Q16        | 23.13 | 23.19 | 22.95 | 23.30              |
|                       |         | MID       | Q16        | 23.24 | 23.27 | 23.11 | 23.30              |
|                       |         | HIGH      | Q16        | 23.25 | 23.16 | 22.99 | 23.30              |
|                       | 25      | LOW       | Q16        | 22.19 | 22.21 | 22.11 | 22.30              |
|                       |         | MID       | Q16        | 22.05 | 22.12 | 22.13 | 22.30              |
|                       |         | HIGH      | Q16        | 22.18 | 22.21 | 22.07 | 22.30              |
|                       | 50      | LOW       | Q16        | 22.12 | 22.11 | 22.19 | 22.30              |
|                       |         | LOW       | 64QAM      | 22.01 | 21.93 | 21.87 | 22.30              |
| 10                    | 1       | MID       | 64QAM      | 22.11 | 21.67 | 22.06 | 22.30              |
|                       |         | HIGH      | 64QAM      | 21.98 | 22.21 | 21.87 | 22.30              |
|                       |         | LOW       | 64QAM      | 21.05 | 20.94 | 21.23 | 21.30              |
|                       | 25      | MID       | 64QAM      | 21.00 | 20.97 | 20.65 | 21.30              |
|                       |         | HIGH      | 64QAM      | 21.17 | 21.05 | 20.69 | 21.30              |
|                       |         | LOW       | 64QAM      | 21.03 | 20.77 | 20.76 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.16 | 24.11 | 23.86 | 24.30              |
|                 |         | MID       | QPSK       | 24.18 | 24.10 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.12 | 24.30 | 23.83 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.25 | 22.96 | 23.00 | 23.30              |
|                 |         | MID       | QPSK       | 23.23 | 23.18 | 22.94 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.21 | 23.24 | 23.15 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 23.02 | 22.94 | 23.30              |
| 15              | 1       | LOW       | Q16        | 22.99 | 23.14 | 22.84 | 23.30              |
|                 |         | MID       | Q16        | 23.15 | 22.94 | 23.02 | 23.30              |
|                 |         | HIGH      | Q16        | 23.06 | 23.09 | 22.99 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.01 | 22.14 | 22.11 | 22.30              |
|                 |         | MID       | Q16        | 22.27 | 22.15 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.05 | 22.19 | 22.10 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.03 | 22.04 | 22.13 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 21.90 | 21.79 | 21.63 | 22.30              |
|                 |         | MID       | 64QAM      | 22.09 | 21.75 | 22.06 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.87 | 22.21 | 21.78 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.30 | 21.17 | 21.19 | 21.30              |
|                 |         | MID       | 64QAM      | 21.11 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.21 | 21.11 | 20.64 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 20.93 | 20.85 | 20.93 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.23 | 24.18 | 23.98 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.25 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.19 | 24.18 | 24.10 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.23 | 23.22 | 23.21 | 23.30              |
|                 |         | MID       | QPSK       | 23.28 | 23.25 | 23.20 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.26 | 23.24 | 23.17 | 23.30              |
| 20              | 100     | LOW       | QPSK       | 23.27 | 23.25 | 23.17 | 23.30              |
|                 |         | LOW       | Q16        | 23.13 | 23.07 | 22.95 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 23.20 | 23.09 | 23.30              |
|                 | 50      | HIGH      | Q16        | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 22.23 | 22.23 | 22.20 | 22.30              |
|                 |         | MID       | Q16        | 22.25 | 22.28 | 22.15 | 22.30              |
| 20              | 1       | HIGH      | Q16        | 22.18 | 22.28 | 22.14 | 22.30              |
|                 |         | LOW       | Q16        | 22.21 | 22.22 | 22.17 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.01 | 21.86 | 21.80 | 22.30              |
|                 | 50      | MID       | 64QAM      | 22.22 | 21.84 | 22.13 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.98 | 22.30 | 21.87 | 22.30              |
|                 |         | LOW       | 64QAM      | 21.22 | 21.09 | 21.17 | 21.30              |
| 100             | MID     | 64QAM     | 21.13      | 21.16 | 20.88 | 21.30 |                    |
|                 | HIGH    | 64QAM     | 21.25      | 21.20 | 20.81 | 21.30 |                    |
|                 | LOW     | 64QAM     | 21.16      | 21.00 | 20.95 | 21.30 |                    |

| LTE B7-State 4 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 22.38 | 22.43 | 22.52 | 22.80              |
|                       |         | MID       | QPSK       | 22.76 | 22.36 | 22.30 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.36 | 22.38 | 22.35 | 22.80              |
|                       | 12      | LOW       | QPSK       | 22.57 | 22.68 | 22.78 | 22.80              |
|                       |         | MID       | QPSK       | 22.62 | 22.73 | 22.56 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.62 | 22.73 | 22.42 | 22.80              |
|                       | 25      | LOW       | QPSK       | 22.63 | 22.61 | 22.36 | 22.80              |
| 5                     | 1       | LOW       | Q16        | 22.60 | 22.49 | 22.30 | 22.80              |
|                       |         | MID       | Q16        | 22.55 | 22.69 | 22.80 | 22.80              |
|                       |         | HIGH      | Q16        | 22.54 | 22.38 | 22.67 | 23.30              |
|                       | 12      | LOW       | Q16        | 22.16 | 22.23 | 22.29 | 22.30              |
|                       |         | MID       | Q16        | 22.25 | 22.22 | 22.17 | 22.30              |
|                       |         | HIGH      | Q16        | 22.27 | 22.02 | 22.06 | 22.30              |
|                       | 25      | LOW       | Q16        | 22.15 | 22.16 | 21.91 | 22.30              |
| 5                     | 1       | LOW       | 64QAM      | 21.55 | 21.49 | 21.75 | 22.30              |
|                       |         | MID       | 64QAM      | 22.28 | 21.75 | 22.24 | 22.30              |
|                       |         | HIGH      | 64QAM      | 21.87 | 22.12 | 21.65 | 22.30              |
|                       | 12      | LOW       | 64QAM      | 21.09 | 21.18 | 21.25 | 21.30              |
|                       |         | MID       | 64QAM      | 21.11 | 20.99 | 20.73 | 21.30              |
|                       |         | HIGH      | 64QAM      | 21.03 | 21.20 | 20.68 | 21.30              |
|                       | 25      | LOW       | 64QAM      | 20.89 | 20.83 | 20.85 | 21.30              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 22.65 | 22.57 | 22.41 | 22.80              |
|                       |         | MID       | QPSK       | 22.44 | 22.72 | 22.55 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.68 | 22.41 | 22.48 | 22.80              |
|                       | 25      | LOW       | QPSK       | 22.55 | 22.72 | 22.60 | 22.80              |
|                       |         | MID       | QPSK       | 22.61 | 22.77 | 22.70 | 22.80              |
|                       |         | HIGH      | QPSK       | 22.57 | 22.51 | 22.46 | 22.80              |
| 10                    | 50      | LOW       | QPSK       | 22.68 | 22.68 | 22.61 | 22.80              |
|                       | 1       | LOW       | Q16        | 22.51 | 22.42 | 22.37 | 22.80              |
|                       |         | MID       | Q16        | 22.80 | 22.51 | 22.69 | 22.80              |
|                       |         | HIGH      | Q16        | 22.52 | 22.41 | 22.58 | 23.30              |
|                       | 25      | LOW       | Q16        | 22.21 | 22.10 | 22.22 | 22.30              |
|                       |         | MID       | Q16        | 22.18 | 22.04 | 21.97 | 22.30              |
|                       |         | HIGH      | Q16        | 22.14 | 22.22 | 21.95 | 22.30              |
|                       | 50      | LOW       | Q16        | 22.24 | 22.09 | 22.09 | 22.30              |
| 10                    | 1       | LOW       | 64QAM      | 21.59 | 21.58 | 21.91 | 22.30              |
|                       |         | MID       | 64QAM      | 22.15 | 21.82 | 22.20 | 22.30              |
|                       |         | HIGH      | 64QAM      | 22.05 | 22.21 | 21.48 | 22.30              |
|                       | 25      | LOW       | 64QAM      | 21.15 | 21.01 | 21.27 | 21.30              |
|                       |         | MID       | 64QAM      | 21.28 | 20.92 | 20.98 | 21.30              |
|                       |         | HIGH      | 64QAM      | 21.18 | 21.08 | 20.44 | 21.30              |
|                       | 50      | LOW       | 64QAM      | 20.95 | 20.83 | 20.76 | 21.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825        | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|--------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 22.38        | 22.45 | 22.45 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.67        | 22.45 | 22.44 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.41        | 22.43 | 22.55 | 22.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.69        | 22.47 | 22.58 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 22.50        | 22.79 | 22.67 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.62        | 22.55 | 22.60 | 22.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.56        | 22.57 | 22.68 | 22.80              |                    |
|                 | 15              | 1         | LOW        | Q16          | 22.74 | 22.46 | 22.46              | 22.80              |
|                 |                 |           | MID        | Q16          | 22.62 | 22.71 | 22.62              | 22.80              |
| HIGH            |                 |           | Q16        | 22.83        | 22.43 | 22.56 | 23.30              |                    |
| 36              |                 | LOW       | Q16        | 22.10        | 21.94 | 22.29 | 22.30              |                    |
|                 |                 | MID       | Q16        | 22.05        | 22.02 | 22.08 | 22.30              |                    |
|                 |                 | HIGH      | Q16        | 22.27        | 21.94 | 21.97 | 22.30              |                    |
| 75              |                 | LOW       | Q16        | 22.24        | 22.05 | 21.98 | 22.30              |                    |
| 15              |                 | 1         | LOW        | 64QAM        | 21.64 | 21.49 | 21.71              | 22.30              |
|                 |                 |           | MID        | 64QAM        | 22.19 | 21.84 | 22.04              | 22.30              |
|                 | HIGH            |           | 64QAM      | 22.13        | 22.12 | 21.59 | 22.30              |                    |
|                 | 36              | LOW       | 64QAM      | 21.15        | 21.18 | 21.00 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.13        | 20.86 | 20.98 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 21.03        | 20.97 | 20.60 | 21.30              |                    |
|                 | 75              | LOW       | 64QAM      | 21.16        | 20.92 | 20.81 | 21.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation   | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK         | 22.58 | 22.52 | 22.41              | 22.80              |
| MID             |                 |           | QPSK       | <b>22.69</b> | 22.61 | 22.55 | 22.80              |                    |
| HIGH            |                 |           | QPSK       | 22.61        | 22.52 | 22.53 | 22.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.71        | 22.63 | 22.67 | 22.80              |                    |
|                 |                 | MID       | QPSK       | <b>22.75</b> | 22.68 | 22.65 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.71        | 22.71 | 22.60 | 22.80              |                    |
| 100             |                 | LOW       | QPSK       | <b>22.70</b> | 22.66 | 22.59 | 22.80              |                    |
| 20              |                 | 1         | LOW        | Q16          | 22.74 | 22.60 | 22.55              | 22.80              |
|                 |                 |           | MID        | Q16          | 22.80 | 22.71 | 22.71              | 22.80              |
|                 | HIGH            |           | Q16        | 22.72        | 22.61 | 22.76 | 23.30              |                    |
|                 | 50              | LOW       | Q16        | 22.23        | 22.12 | 22.18 | 22.30              |                    |
|                 |                 | MID       | Q16        | 22.27        | 22.15 | 22.15 | 22.30              |                    |
|                 |                 | HIGH      | Q16        | 22.23        | 22.18 | 22.10 | 22.30              |                    |
|                 | 100             | LOW       | Q16        | 22.22        | 22.16 | 22.13 | 22.30              |                    |
|                 | 20              | 1         | LOW        | 64QAM        | 21.79 | 21.64 | 21.82              | 22.30              |
|                 |                 |           | MID        | 64QAM        | 22.26 | 21.84 | 22.20              | 22.30              |
| HIGH            |                 |           | 64QAM      | 22.09        | 22.19 | 21.72 | 22.30              |                    |
| 50              |                 | LOW       | 64QAM      | 21.11        | 21.20 | 21.19 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.24        | 21.03 | 20.90 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 21.14        | 21.16 | 20.58 | 21.30              |                    |
| 100             |                 | LOW       | 64QAM      | 21.08        | 20.98 | 20.89 | 21.30              |                    |

| LTE B7-State 5 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 20.38 | 20.47 | 20.28 | 20.80              |
|                       |         | MID       | QPSK       | 20.48 | 20.63 | 20.40 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.62 | 20.54 | 20.38 | 20.80              |
|                       | 12      | LOW       | QPSK       | 20.66 | 20.66 | 20.66 | 20.80              |
|                       |         | MID       | QPSK       | 20.80 | 20.60 | 20.49 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.63 | 20.59 | 20.43 | 20.80              |
|                       | 25      | LOW       | QPSK       | 20.48 | 20.72 | 20.55 | 20.80              |
| 5                     | 1       | LOW       | Q16        | 20.55 | 20.42 | 20.60 | 20.80              |
|                       |         | MID       | Q16        | 20.55 | 20.69 | 20.53 | 20.80              |
|                       |         | HIGH      | Q16        | 20.71 | 20.44 | 20.65 | 20.80              |
|                       | 12      | LOW       | Q16        | 20.78 | 20.48 | 20.68 | 20.80              |
|                       |         | MID       | Q16        | 20.74 | 20.52 | 20.68 | 20.80              |
|                       |         | HIGH      | Q16        | 20.57 | 20.74 | 20.58 | 20.80              |
|                       | 25      | LOW       | Q16        | 20.60 | 20.57 | 20.65 | 20.80              |
| 5                     | 1       | LOW       | 64QAM      | 20.49 | 20.43 | 20.50 | 20.80              |
|                       |         | MID       | 64QAM      | 20.43 | 20.55 | 20.41 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.79 | 20.56 | 20.62 | 20.80              |
|                       | 12      | LOW       | 64QAM      | 20.64 | 20.40 | 20.46 | 20.80              |
|                       |         | MID       | 64QAM      | 20.62 | 20.78 | 20.49 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.20 | 20.76 | 20.47 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.58 | 20.56 | 20.34 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 20.41 | 20.41 | 20.34 | 20.80              |
|                       |         | MID       | QPSK       | 20.75 | 20.55 | 20.34 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.46 | 20.25 | 20.44 | 20.80              |
|                       | 25      | LOW       | QPSK       | 20.74 | 20.43 | 20.39 | 20.80              |
|                       |         | MID       | QPSK       | 20.62 | 20.52 | 20.49 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.50 | 20.71 | 20.34 | 20.80              |
|                       | 50      | LOW       | QPSK       | 20.71 | 20.68 | 20.37 | 20.80              |
| 10                    | 1       | LOW       | Q16        | 20.71 | 20.44 | 20.64 | 20.80              |
|                       |         | MID       | Q16        | 20.55 | 20.71 | 20.80 | 20.80              |
|                       |         | HIGH      | Q16        | 20.63 | 20.56 | 20.65 | 20.80              |
|                       | 25      | LOW       | Q16        | 20.74 | 20.50 | 20.70 | 20.80              |
|                       |         | MID       | Q16        | 20.78 | 20.54 | 20.62 | 20.80              |
|                       |         | HIGH      | Q16        | 20.75 | 20.72 | 20.64 | 20.80              |
|                       | 50      | LOW       | Q16        | 20.58 | 20.57 | 20.42 | 20.80              |
| 10                    | 1       | LOW       | 64QAM      | 20.41 | 20.35 | 20.20 | 20.80              |
|                       |         | MID       | 64QAM      | 20.57 | 20.61 | 20.35 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.59 | 20.34 | 20.54 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.74 | 20.50 | 20.38 | 20.80              |
|                       |         | MID       | 64QAM      | 20.66 | 20.53 | 20.39 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.50 | 20.45 | 20.54 | 20.80              |
|                       | 50      | LOW       | 64QAM      | 20.48 | 20.79 | 20.22 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 20.65      | 20.43 | 20.36 | 20.80              |                    |
|                 |                 | MID       | QPSK       | 20.51      | 20.47 | 20.56 | 20.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.54      | 20.56 | 20.32 | 20.80              |                    |
|                 | 36              | LOW       | QPSK       | 20.78      | 20.41 | 20.39 | 20.80              |                    |
|                 |                 | MID       | QPSK       | 20.72      | 20.43 | 20.63 | 20.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.50      | 20.61 | 20.57 | 20.80              |                    |
|                 | 75              | LOW       | QPSK       | 20.75      | 20.58 | 20.57 | 20.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 20.51 | 20.52 | 20.46              | 20.80              |
|                 |                 |           | MID        | Q16        | 20.61 | 20.55 | 20.51              | 20.80              |
| HIGH            |                 |           | Q16        | 20.49      | 20.42 | 20.54 | 20.80              |                    |
| 36              |                 | LOW       | Q16        | 20.55      | 20.66 | 20.39 | 20.80              |                    |
|                 |                 | MID       | Q16        | 20.70      | 20.68 | 20.48 | 20.80              |                    |
|                 |                 | HIGH      | Q16        | 20.75      | 20.76 | 20.52 | 20.80              |                    |
| 75              | LOW             | Q16       | 20.64      | 20.49      | 20.45 | 20.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 20.41      | 20.21 | 20.22 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.59      | 20.61 | 20.55 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.67      | 20.38 | 20.58 | 20.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.43      | 20.46 | 20.36 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.51 | 20.29 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.24      | 20.54 | 20.74 | 20.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.60      | 20.58 | 20.48 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 20.57 | 20.47 | 20.36              | 20.80              |
| MID             |                 |           | QPSK       | 20.65      | 20.55 | 20.48 | 20.80              |                    |
| HIGH            |                 |           | QPSK       | 20.58      | 20.48 | 20.46 | 20.80              |                    |
| 50              |                 | LOW       | QPSK       | 20.68      | 20.64 | 20.58 | 20.80              |                    |
|                 |                 | MID       | QPSK       | 20.74      | 20.66 | 20.59 | 20.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.67      | 20.67 | 20.55 | 20.80              |                    |
| 100             |                 | LOW       | QPSK       | 20.71      | 20.64 | 20.53 | 20.80              |                    |
| 20              | 1               | LOW       | Q16        | 20.65      | 20.56 | 20.54 | 20.80              |                    |
|                 |                 | MID       | Q16        | 20.69      | 20.65 | 20.72 | 20.80              |                    |
|                 |                 | HIGH      | Q16        | 20.63      | 20.56 | 20.75 | 20.80              |                    |
|                 | 50              | LOW       | Q16        | 20.72      | 20.62 | 20.62 | 20.80              |                    |
|                 |                 | MID       | Q16        | 20.74      | 20.64 | 20.62 | 20.80              |                    |
|                 |                 | HIGH      | Q16        | 20.65      | 20.68 | 20.60 | 20.80              |                    |
|                 | 100             | LOW       | Q16        | 20.68      | 20.63 | 20.61 | 20.80              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 20.57 | 20.37 | 20.40              | 20.80              |
|                 |                 |           | MID        | 64QAM      | 20.59 | 20.63 | 20.51              | 20.80              |
| HIGH            |                 |           | 64QAM      | 20.71      | 20.48 | 20.60 | 20.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.64      | 20.46 | 20.48 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.72 | 20.43 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.42      | 20.66 | 20.64 | 20.80              |                    |
| 100             |                 | LOW       | 64QAM      | 20.60      | 20.73 | 20.40 | 20.80              |                    |

| LTE B7-State 6 -Ant.0 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 20.38 | 20.47 | 20.28 | 20.80              |
|                       |         | MID       | QPSK       | 20.48 | 20.63 | 20.40 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.62 | 20.54 | 20.38 | 20.80              |
|                       | 12      | LOW       | QPSK       | 20.66 | 20.66 | 20.66 | 20.80              |
|                       |         | MID       | QPSK       | 20.80 | 20.60 | 20.49 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.63 | 20.59 | 20.43 | 20.80              |
|                       | 25      | LOW       | QPSK       | 20.48 | 20.72 | 20.55 | 20.80              |
| 5                     | 1       | LOW       | Q16        | 20.55 | 20.42 | 20.60 | 20.80              |
|                       |         | MID       | Q16        | 20.55 | 20.69 | 20.53 | 20.80              |
|                       |         | HIGH      | Q16        | 20.71 | 20.44 | 20.65 | 20.80              |
|                       | 12      | LOW       | Q16        | 20.78 | 20.48 | 20.68 | 20.80              |
|                       |         | MID       | Q16        | 20.74 | 20.52 | 20.68 | 20.80              |
|                       |         | HIGH      | Q16        | 20.57 | 20.74 | 20.58 | 20.80              |
|                       | 25      | LOW       | Q16        | 20.60 | 20.57 | 20.65 | 20.80              |
| 5                     | 1       | LOW       | 64QAM      | 20.49 | 20.43 | 20.50 | 20.80              |
|                       |         | MID       | 64QAM      | 20.43 | 20.55 | 20.41 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.79 | 20.56 | 20.62 | 20.80              |
|                       | 12      | LOW       | 64QAM      | 20.64 | 20.40 | 20.46 | 20.80              |
|                       |         | MID       | 64QAM      | 20.62 | 20.78 | 20.49 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.20 | 20.76 | 20.47 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.58 | 20.56 | 20.34 | 20.80              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 20.41 | 20.41 | 20.34 | 20.80              |
|                       |         | MID       | QPSK       | 20.75 | 20.55 | 20.34 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.46 | 20.25 | 20.44 | 20.80              |
|                       | 25      | LOW       | QPSK       | 20.74 | 20.43 | 20.39 | 20.80              |
|                       |         | MID       | QPSK       | 20.62 | 20.52 | 20.49 | 20.80              |
|                       |         | HIGH      | QPSK       | 20.50 | 20.71 | 20.34 | 20.80              |
|                       | 50      | LOW       | QPSK       | 20.71 | 20.68 | 20.37 | 20.80              |
| 10                    | 1       | LOW       | Q16        | 20.71 | 20.44 | 20.64 | 20.80              |
|                       |         | MID       | Q16        | 20.55 | 20.71 | 20.80 | 20.80              |
|                       |         | HIGH      | Q16        | 20.63 | 20.56 | 20.65 | 20.80              |
|                       | 25      | LOW       | Q16        | 20.74 | 20.50 | 20.70 | 20.80              |
|                       |         | MID       | Q16        | 20.78 | 20.54 | 20.62 | 20.80              |
|                       |         | HIGH      | Q16        | 20.75 | 20.72 | 20.64 | 20.80              |
|                       | 50      | LOW       | Q16        | 20.58 | 20.57 | 20.42 | 20.80              |
| 10                    | 1       | LOW       | 64QAM      | 20.41 | 20.35 | 20.20 | 20.80              |
|                       |         | MID       | 64QAM      | 20.57 | 20.61 | 20.35 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.59 | 20.34 | 20.54 | 20.80              |
|                       | 25      | LOW       | 64QAM      | 20.74 | 20.50 | 20.38 | 20.80              |
|                       |         | MID       | 64QAM      | 20.66 | 20.53 | 20.39 | 20.80              |
|                       |         | HIGH      | 64QAM      | 20.50 | 20.45 | 20.54 | 20.80              |
|                       | 50      | LOW       | 64QAM      | 20.48 | 20.79 | 20.22 | 20.80              |

| Bandwidth (MHz) | RB Size | RB offset       | Modulation | 20825     | 21100      | 21375 | Tune-up power(dBm) |       |
|-----------------|---------|-----------------|------------|-----------|------------|-------|--------------------|-------|
| 15              | 1       | LOW             | QPSK       | 20.65     | 20.43      | 20.36 | 20.80              |       |
|                 |         | MID             | QPSK       | 20.51     | 20.47      | 20.56 | 20.80              |       |
|                 |         | HIGH            | QPSK       | 20.54     | 20.56      | 20.32 | 20.80              |       |
|                 | 36      | LOW             | QPSK       | 20.78     | 20.41      | 20.39 | 20.80              |       |
|                 |         | MID             | QPSK       | 20.72     | 20.43      | 20.63 | 20.80              |       |
|                 |         | HIGH            | QPSK       | 20.50     | 20.61      | 20.57 | 20.80              |       |
|                 | 75      | LOW             | QPSK       | 20.75     | 20.58      | 20.57 | 20.80              |       |
|                 |         | LOW             | Q16        | 20.51     | 20.52      | 20.46 | 20.80              |       |
| 15              | 1       | MID             | Q16        | 20.61     | 20.55      | 20.51 | 20.80              |       |
|                 |         | HIGH            | Q16        | 20.49     | 20.42      | 20.54 | 20.80              |       |
|                 |         | LOW             | Q16        | 20.55     | 20.66      | 20.39 | 20.80              |       |
|                 | 36      | MID             | Q16        | 20.70     | 20.68      | 20.48 | 20.80              |       |
|                 |         | HIGH            | Q16        | 20.75     | 20.76      | 20.52 | 20.80              |       |
|                 |         | LOW             | Q16        | 20.64     | 20.49      | 20.45 | 20.80              |       |
|                 | 15      | 1               | LOW        | 64QAM     | 20.41      | 20.21 | 20.22              | 20.80 |
|                 |         |                 | MID        | 64QAM     | 20.59      | 20.61 | 20.55              | 20.80 |
| HIGH            |         |                 | 64QAM      | 20.67     | 20.38      | 20.58 | 20.80              |       |
| 36              |         | LOW             | 64QAM      | 20.43     | 20.46      | 20.36 | 20.80              |       |
|                 |         | MID             | 64QAM      | 20.76     | 20.51      | 20.29 | 20.80              |       |
|                 |         | HIGH            | 64QAM      | 20.24     | 20.54      | 20.74 | 20.80              |       |
| 75              |         | LOW             | 64QAM      | 20.60     | 20.58      | 20.48 | 20.80              |       |
|                 |         | Bandwidth (MHz) | RB Size    | RB offset | Modulation | 20850 | 21100              | 21350 |
| 20              | 1       | LOW             | QPSK       | 20.57     | 20.47      | 20.36 | 20.80              |       |
|                 |         | MID             | QPSK       | 20.65     | 20.55      | 20.48 | 20.80              |       |
|                 |         | HIGH            | QPSK       | 20.58     | 20.48      | 20.46 | 20.80              |       |
|                 | 50      | LOW             | QPSK       | 20.68     | 20.64      | 20.58 | 20.80              |       |
|                 |         | MID             | QPSK       | 20.74     | 20.66      | 20.59 | 20.80              |       |
|                 |         | HIGH            | QPSK       | 20.67     | 20.67      | 20.55 | 20.80              |       |
|                 | 100     | LOW             | QPSK       | 20.71     | 20.64      | 20.53 | 20.80              |       |
| 20              | 1       | LOW             | Q16        | 20.65     | 20.56      | 20.54 | 20.80              |       |
|                 |         | MID             | Q16        | 20.69     | 20.65      | 20.72 | 20.80              |       |
|                 |         | HIGH            | Q16        | 20.63     | 20.56      | 20.75 | 20.80              |       |
|                 | 50      | LOW             | Q16        | 20.72     | 20.62      | 20.62 | 20.80              |       |
|                 |         | MID             | Q16        | 20.74     | 20.64      | 20.62 | 20.80              |       |
|                 |         | HIGH            | Q16        | 20.65     | 20.68      | 20.60 | 20.80              |       |
|                 | 100     | LOW             | Q16        | 20.68     | 20.63      | 20.61 | 20.80              |       |
|                 |         | LOW             | 64QAM      | 20.57     | 20.37      | 20.40 | 20.80              |       |
| 20              | 1       | MID             | 64QAM      | 20.59     | 20.63      | 20.51 | 20.80              |       |
|                 |         | HIGH            | 64QAM      | 20.71     | 20.48      | 20.60 | 20.80              |       |
|                 |         | LOW             | 64QAM      | 20.64     | 20.46      | 20.48 | 20.80              |       |
|                 | 50      | MID             | 64QAM      | 20.76     | 20.72      | 20.43 | 20.80              |       |
|                 |         | HIGH            | 64QAM      | 20.42     | 20.66      | 20.64 | 20.80              |       |
|                 |         | LOW             | 64QAM      | 20.60     | 20.73      | 20.40 | 20.80              |       |
|                 | 100     | LOW             | 64QAM      | 20.60     | 20.73      | 20.40 | 20.80              |       |

| LTE B7-State 1 -Ant.0(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 24.13 | 24.20 | 23.81 | 24.30              |
|                            |         | MID       | QPSK       | 24.18 | 24.01 | 24.11 | 24.30              |
|                            |         | HIGH      | QPSK       | 23.92 | 24.16 | 23.93 | 24.30              |
|                            | 12      | LOW       | QPSK       | 23.00 | 23.10 | 23.16 | 23.30              |
|                            |         | MID       | QPSK       | 23.14 | 23.30 | 23.15 | 23.30              |
|                            |         | HIGH      | QPSK       | 23.03 | 23.11 | 23.15 | 23.30              |
|                            | 25      | LOW       | QPSK       | 23.25 | 23.11 | 22.98 | 23.30              |
|                            | 5       | LOW       | Q16        | 23.25 | 23.14 | 22.90 | 23.30              |
|                            |         | MID       | Q16        | 23.15 | 23.15 | 23.09 | 23.30              |
|                            |         | HIGH      | Q16        | 23.27 | 23.02 | 22.99 | 23.30              |
|                            |         | LOW       | Q16        | 22.12 | 22.19 | 22.24 | 22.30              |
|                            |         | MID       | Q16        | 22.09 | 22.08 | 22.17 | 22.30              |
|                            |         | HIGH      | Q16        | 21.94 | 22.08 | 22.12 | 22.30              |
| 5                          | 1       | LOW       | 64QAM      | 21.77 | 21.64 | 21.71 | 22.30              |
|                            |         | MID       | 64QAM      | 22.06 | 21.91 | 21.95 | 22.30              |
|                            |         | HIGH      | 64QAM      | 21.96 | 22.19 | 21.74 | 22.30              |
|                            | 12      | LOW       | 64QAM      | 21.26 | 21.15 | 21.19 | 21.30              |
|                            |         | MID       | 64QAM      | 21.07 | 21.16 | 20.78 | 21.30              |
|                            |         | HIGH      | 64QAM      | 21.19 | 21.18 | 20.71 | 21.30              |
|                            | 25      | LOW       | 64QAM      | 21.20 | 20.96 | 21.05 | 21.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 23.96 | 24.20 | 24.10 | 24.30              |
|                            |         | MID       | QPSK       | 24.13 | 24.17 | 23.94 | 24.30              |
|                            |         | HIGH      | QPSK       | 24.17 | 24.28 | 23.83 | 24.30              |
|                            | 25      | LOW       | QPSK       | 23.28 | 23.03 | 23.26 | 23.30              |
|                            |         | MID       | QPSK       | 23.17 | 23.12 | 23.01 | 23.30              |
|                            |         | HIGH      | QPSK       | 23.11 | 23.11 | 23.01 | 23.30              |
| 10                         | 50      | LOW       | QPSK       | 23.01 | 23.20 | 22.98 | 23.30              |
|                            | 1       | LOW       | Q16        | 23.13 | 23.19 | 22.95 | 23.30              |
|                            |         | MID       | Q16        | 23.24 | 23.27 | 23.11 | 23.30              |
|                            |         | HIGH      | Q16        | 23.25 | 23.16 | 22.99 | 23.30              |
|                            | 25      | LOW       | Q16        | 22.19 | 22.21 | 22.11 | 22.30              |
|                            |         | MID       | Q16        | 22.05 | 22.12 | 22.13 | 22.30              |
|                            |         | HIGH      | Q16        | 22.18 | 22.21 | 22.07 | 22.30              |
|                            | 50      | LOW       | Q16        | 22.12 | 22.11 | 22.19 | 22.30              |
| 10                         | 1       | LOW       | 64QAM      | 22.01 | 21.93 | 21.87 | 22.30              |
|                            |         | MID       | 64QAM      | 22.11 | 21.67 | 22.06 | 22.30              |
|                            |         | HIGH      | 64QAM      | 21.98 | 22.21 | 21.87 | 22.30              |
|                            | 25      | LOW       | 64QAM      | 21.05 | 20.94 | 21.23 | 21.30              |
|                            |         | MID       | 64QAM      | 21.00 | 20.97 | 20.65 | 21.30              |
|                            |         | HIGH      | 64QAM      | 21.17 | 21.05 | 20.69 | 21.30              |
|                            | 50      | LOW       | 64QAM      | 21.03 | 20.77 | 20.76 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.16 | 24.11 | 23.86 | 24.30              |
|                 |         | MID       | QPSK       | 24.18 | 24.10 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.12 | 24.30 | 23.83 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.25 | 22.96 | 23.00 | 23.30              |
|                 |         | MID       | QPSK       | 23.23 | 23.18 | 22.94 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.21 | 23.24 | 23.15 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 23.02 | 22.94 | 23.30              |
| 15              | 1       | LOW       | Q16        | 22.99 | 23.14 | 22.84 | 23.30              |
|                 |         | MID       | Q16        | 23.15 | 22.94 | 23.02 | 23.30              |
|                 |         | HIGH      | Q16        | 23.06 | 23.09 | 22.99 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.01 | 22.14 | 22.11 | 22.30              |
|                 |         | MID       | Q16        | 22.27 | 22.15 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.05 | 22.19 | 22.10 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.03 | 22.04 | 22.13 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 21.90 | 21.79 | 21.63 | 22.30              |
|                 |         | MID       | 64QAM      | 22.09 | 21.75 | 22.06 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.87 | 22.21 | 21.78 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.30 | 21.17 | 21.19 | 21.30              |
|                 |         | MID       | 64QAM      | 21.11 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.21 | 21.11 | 20.64 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 20.93 | 20.85 | 20.93 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.23 | 24.18 | 23.98 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.25 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.19 | 24.18 | 24.10 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.23 | 23.22 | 23.21 | 23.30              |
|                 |         | MID       | QPSK       | 23.28 | 23.25 | 23.20 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.26 | 23.24 | 23.17 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.27 | 23.25 | 23.17 | 23.30              |
| 20              | 1       | LOW       | Q16        | 23.13 | 23.07 | 22.95 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 23.20 | 23.09 | 23.30              |
|                 |         | HIGH      | Q16        | 23.18 | 23.14 | 23.11 | 23.30              |
|                 | 50      | LOW       | Q16        | 22.23 | 22.23 | 22.20 | 22.30              |
|                 |         | MID       | Q16        | 22.25 | 22.28 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.18 | 22.28 | 22.14 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.21 | 22.22 | 22.17 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 22.01 | 21.86 | 21.80 | 22.30              |
|                 |         | MID       | 64QAM      | 22.22 | 21.84 | 22.13 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.98 | 22.30 | 21.87 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.22 | 21.09 | 21.17 | 21.30              |
|                 |         | MID       | 64QAM      | 21.13 | 21.16 | 20.88 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.25 | 21.20 | 20.81 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 21.16 | 21.00 | 20.95 | 21.30              |

| LTE B7-State 2 -Ant.0(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 24.13 | 24.20 | 23.81 | 24.30              |
|                            |         | MID       | QPSK       | 24.18 | 24.01 | 24.11 | 24.30              |
|                            |         | HIGH      | QPSK       | 23.92 | 24.16 | 23.93 | 24.30              |
|                            | 12      | LOW       | QPSK       | 23.00 | 23.10 | 23.16 | 23.30              |
|                            |         | MID       | QPSK       | 23.14 | 23.30 | 23.15 | 23.30              |
|                            |         | HIGH      | QPSK       | 23.03 | 23.11 | 23.15 | 23.30              |
|                            | 25      | LOW       | QPSK       | 23.25 | 23.11 | 22.98 | 23.30              |
|                            | 5       | LOW       | Q16        | 23.25 | 23.14 | 22.90 | 23.30              |
|                            |         | MID       | Q16        | 23.15 | 23.15 | 23.09 | 23.30              |
|                            |         | HIGH      | Q16        | 23.27 | 23.02 | 22.99 | 23.30              |
|                            |         | LOW       | Q16        | 22.12 | 22.19 | 22.24 | 22.30              |
|                            |         | MID       | Q16        | 22.09 | 22.08 | 22.17 | 22.30              |
|                            |         | HIGH      | Q16        | 21.94 | 22.08 | 22.12 | 22.30              |
| 5                          | 1       | LOW       | 64QAM      | 21.77 | 21.64 | 21.71 | 22.30              |
|                            |         | MID       | 64QAM      | 22.06 | 21.91 | 21.95 | 22.30              |
|                            |         | HIGH      | 64QAM      | 21.96 | 22.19 | 21.74 | 22.30              |
|                            | 12      | LOW       | 64QAM      | 21.26 | 21.15 | 21.19 | 21.30              |
|                            |         | MID       | 64QAM      | 21.07 | 21.16 | 20.78 | 21.30              |
|                            |         | HIGH      | 64QAM      | 21.19 | 21.18 | 20.71 | 21.30              |
|                            | 25      | LOW       | 64QAM      | 21.20 | 20.96 | 21.05 | 21.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 23.96 | 24.20 | 24.10 | 24.30              |
|                            |         | MID       | QPSK       | 24.13 | 24.17 | 23.94 | 24.30              |
|                            |         | HIGH      | QPSK       | 24.17 | 24.28 | 23.83 | 24.30              |
|                            | 25      | LOW       | QPSK       | 23.28 | 23.03 | 23.26 | 23.30              |
|                            |         | MID       | QPSK       | 23.17 | 23.12 | 23.01 | 23.30              |
|                            |         | HIGH      | QPSK       | 23.11 | 23.11 | 23.01 | 23.30              |
| 10                         | 50      | LOW       | QPSK       | 23.01 | 23.20 | 22.98 | 23.30              |
|                            | 1       | LOW       | Q16        | 23.13 | 23.19 | 22.95 | 23.30              |
|                            |         | MID       | Q16        | 23.24 | 23.27 | 23.11 | 23.30              |
|                            |         | HIGH      | Q16        | 23.25 | 23.16 | 22.99 | 23.30              |
|                            | 25      | LOW       | Q16        | 22.19 | 22.21 | 22.11 | 22.30              |
|                            |         | MID       | Q16        | 22.05 | 22.12 | 22.13 | 22.30              |
|                            |         | HIGH      | Q16        | 22.18 | 22.21 | 22.07 | 22.30              |
|                            | 50      | LOW       | Q16        | 22.12 | 22.11 | 22.19 | 22.30              |
| 10                         | 1       | LOW       | 64QAM      | 22.01 | 21.93 | 21.87 | 22.30              |
|                            |         | MID       | 64QAM      | 22.11 | 21.67 | 22.06 | 22.30              |
|                            |         | HIGH      | 64QAM      | 21.98 | 22.21 | 21.87 | 22.30              |
|                            | 25      | LOW       | 64QAM      | 21.05 | 20.94 | 21.23 | 21.30              |
|                            |         | MID       | 64QAM      | 21.00 | 20.97 | 20.65 | 21.30              |
|                            |         | HIGH      | 64QAM      | 21.17 | 21.05 | 20.69 | 21.30              |
|                            | 50      | LOW       | 64QAM      | 21.03 | 20.77 | 20.76 | 21.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 24.16      | 24.11 | 23.86 | 24.30              |                    |
|                 |                 | MID       | QPSK       | 24.18      | 24.10 | 24.13 | 24.30              |                    |
|                 |                 | HIGH      | QPSK       | 24.12      | 24.30 | 23.83 | 24.30              |                    |
|                 | 36              | LOW       | QPSK       | 23.25      | 22.96 | 23.00 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 23.23      | 23.18 | 22.94 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 23.21      | 23.24 | 23.15 | 23.30              |                    |
|                 | 75              | LOW       | QPSK       | 23.01      | 23.02 | 22.94 | 23.30              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.99 | 23.14 | 22.84              | 23.30              |
|                 |                 |           | MID        | Q16        | 23.15 | 22.94 | 23.02              | 23.30              |
| HIGH            |                 |           | Q16        | 23.06      | 23.09 | 22.99 | 23.30              |                    |
| 36              |                 | LOW       | Q16        | 22.01      | 22.14 | 22.11 | 22.30              |                    |
|                 |                 | MID       | Q16        | 22.27      | 22.15 | 22.15 | 22.30              |                    |
|                 |                 | HIGH      | Q16        | 22.05      | 22.19 | 22.10 | 22.30              |                    |
| 75              |                 | LOW       | Q16        | 22.03      | 22.04 | 22.13 | 22.30              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.90 | 21.79 | 21.63              | 22.30              |
|                 |                 |           | MID        | 64QAM      | 22.09 | 21.75 | 22.06              | 22.30              |
|                 | HIGH            |           | 64QAM      | 21.87      | 22.21 | 21.78 | 22.30              |                    |
|                 | 36              | LOW       | 64QAM      | 21.30      | 21.17 | 21.19 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.11      | 21.16 | 20.65 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 21.21      | 21.11 | 20.64 | 21.30              |                    |
|                 | 75              | LOW       | 64QAM      | 20.93      | 20.85 | 20.93 | 21.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 24.23 | 24.18 | 23.98              | 24.30              |
| MID             |                 |           | QPSK       | 24.30      | 24.25 | 24.13 | 24.30              |                    |
| HIGH            |                 |           | QPSK       | 24.19      | 24.18 | 24.10 | 24.30              |                    |
| 50              |                 | LOW       | QPSK       | 23.23      | 23.22 | 23.21 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 23.28      | 23.25 | 23.20 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 23.26      | 23.24 | 23.17 | 23.30              |                    |
| 100             |                 | LOW       | QPSK       | 23.27      | 23.25 | 23.17 | 23.30              |                    |
| 20              |                 | 1         | LOW        | Q16        | 23.13 | 23.07 | 22.95              | 23.30              |
|                 |                 |           | MID        | Q16        | 23.24 | 23.20 | 23.09              | 23.30              |
|                 | HIGH            |           | Q16        | 23.18      | 23.14 | 23.11 | 23.30              |                    |
|                 | 50              | LOW       | Q16        | 22.23      | 22.23 | 22.20 | 22.30              |                    |
|                 |                 | MID       | Q16        | 22.25      | 22.28 | 22.15 | 22.30              |                    |
|                 |                 | HIGH      | Q16        | 22.18      | 22.28 | 22.14 | 22.30              |                    |
|                 | 100             | LOW       | Q16        | 22.21      | 22.22 | 22.17 | 22.30              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 22.01 | 21.86 | 21.80              | 22.30              |
|                 |                 |           | MID        | 64QAM      | 22.22 | 21.84 | 22.13              | 22.30              |
| HIGH            |                 |           | 64QAM      | 21.98      | 22.30 | 21.87 | 22.30              |                    |
| 50              |                 | LOW       | 64QAM      | 21.22      | 21.09 | 21.17 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.13      | 21.16 | 20.88 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 21.25      | 21.20 | 20.81 | 21.30              |                    |
| 100             |                 | LOW       | 64QAM      | 21.16      | 21.00 | 20.95 | 21.30              |                    |

| LTE B7-State 3 -Ant.0(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 24.13 | 24.20 | 23.81 | 24.30              |
|                            |         | MID       | QPSK       | 24.18 | 24.01 | 24.11 | 24.30              |
|                            |         | HIGH      | QPSK       | 23.92 | 24.16 | 23.93 | 24.30              |
|                            | 12      | LOW       | QPSK       | 23.00 | 23.10 | 23.16 | 23.30              |
|                            |         | MID       | QPSK       | 23.14 | 23.30 | 23.15 | 23.30              |
|                            |         | HIGH      | QPSK       | 23.03 | 23.11 | 23.15 | 23.30              |
|                            | 25      | LOW       | QPSK       | 23.25 | 23.11 | 22.98 | 23.30              |
|                            | 5       | LOW       | Q16        | 23.25 | 23.14 | 22.90 | 23.30              |
|                            |         | MID       | Q16        | 23.15 | 23.15 | 23.09 | 23.30              |
|                            |         | HIGH      | Q16        | 23.27 | 23.02 | 22.99 | 23.30              |
|                            |         | LOW       | Q16        | 22.12 | 22.19 | 22.24 | 22.30              |
|                            |         | MID       | Q16        | 22.09 | 22.08 | 22.17 | 22.30              |
|                            |         | HIGH      | Q16        | 21.94 | 22.08 | 22.12 | 22.30              |
| 5                          | 1       | LOW       | 64QAM      | 21.77 | 21.64 | 21.71 | 22.30              |
|                            |         | MID       | 64QAM      | 22.06 | 21.91 | 21.95 | 22.30              |
|                            |         | HIGH      | 64QAM      | 21.96 | 22.19 | 21.74 | 22.30              |
|                            | 12      | LOW       | 64QAM      | 21.26 | 21.15 | 21.19 | 21.30              |
|                            |         | MID       | 64QAM      | 21.07 | 21.16 | 20.78 | 21.30              |
|                            |         | HIGH      | 64QAM      | 21.19 | 21.18 | 20.71 | 21.30              |
|                            | 25      | LOW       | 64QAM      | 21.20 | 20.96 | 21.05 | 21.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 23.96 | 24.20 | 24.10 | 24.30              |
|                            |         | MID       | QPSK       | 24.13 | 24.17 | 23.94 | 24.30              |
|                            |         | HIGH      | QPSK       | 24.17 | 24.28 | 23.83 | 24.30              |
|                            | 25      | LOW       | QPSK       | 23.28 | 23.03 | 23.26 | 23.30              |
|                            |         | MID       | QPSK       | 23.17 | 23.12 | 23.01 | 23.30              |
|                            |         | HIGH      | QPSK       | 23.11 | 23.11 | 23.01 | 23.30              |
| 10                         | 50      | LOW       | QPSK       | 23.01 | 23.20 | 22.98 | 23.30              |
|                            | 1       | LOW       | Q16        | 23.13 | 23.19 | 22.95 | 23.30              |
|                            |         | MID       | Q16        | 23.24 | 23.27 | 23.11 | 23.30              |
|                            |         | HIGH      | Q16        | 23.25 | 23.16 | 22.99 | 23.30              |
|                            | 25      | LOW       | Q16        | 22.19 | 22.21 | 22.11 | 22.30              |
|                            |         | MID       | Q16        | 22.05 | 22.12 | 22.13 | 22.30              |
|                            |         | HIGH      | Q16        | 22.18 | 22.21 | 22.07 | 22.30              |
|                            | 50      | LOW       | Q16        | 22.12 | 22.11 | 22.19 | 22.30              |
| 10                         | 1       | LOW       | 64QAM      | 22.01 | 21.93 | 21.87 | 22.30              |
|                            |         | MID       | 64QAM      | 22.11 | 21.67 | 22.06 | 22.30              |
|                            |         | HIGH      | 64QAM      | 21.98 | 22.21 | 21.87 | 22.30              |
|                            | 25      | LOW       | 64QAM      | 21.05 | 20.94 | 21.23 | 21.30              |
|                            |         | MID       | 64QAM      | 21.00 | 20.97 | 20.65 | 21.30              |
|                            |         | HIGH      | 64QAM      | 21.17 | 21.05 | 20.69 | 21.30              |
|                            | 50      | LOW       | 64QAM      | 21.03 | 20.77 | 20.76 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.16 | 24.11 | 23.86 | 24.30              |
|                 |         | MID       | QPSK       | 24.18 | 24.10 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.12 | 24.30 | 23.83 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.25 | 22.96 | 23.00 | 23.30              |
|                 |         | MID       | QPSK       | 23.23 | 23.18 | 22.94 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.21 | 23.24 | 23.15 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 23.02 | 22.94 | 23.30              |
| 15              | 1       | LOW       | Q16        | 22.99 | 23.14 | 22.84 | 23.30              |
|                 |         | MID       | Q16        | 23.15 | 22.94 | 23.02 | 23.30              |
|                 |         | HIGH      | Q16        | 23.06 | 23.09 | 22.99 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.01 | 22.14 | 22.11 | 22.30              |
|                 |         | MID       | Q16        | 22.27 | 22.15 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.05 | 22.19 | 22.10 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.03 | 22.04 | 22.13 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 21.90 | 21.79 | 21.63 | 22.30              |
|                 |         | MID       | 64QAM      | 22.09 | 21.75 | 22.06 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.87 | 22.21 | 21.78 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.30 | 21.17 | 21.19 | 21.30              |
|                 |         | MID       | 64QAM      | 21.11 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.21 | 21.11 | 20.64 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 20.93 | 20.85 | 20.93 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.23 | 24.18 | 23.98 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.25 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.19 | 24.18 | 24.10 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.23 | 23.22 | 23.21 | 23.30              |
|                 |         | MID       | QPSK       | 23.28 | 23.25 | 23.20 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.26 | 23.24 | 23.17 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.27 | 23.25 | 23.17 | 23.30              |
| 20              | 1       | LOW       | Q16        | 23.13 | 23.07 | 22.95 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 23.20 | 23.09 | 23.30              |
|                 |         | HIGH      | Q16        | 23.18 | 23.14 | 23.11 | 23.30              |
|                 | 50      | LOW       | Q16        | 22.23 | 22.23 | 22.20 | 22.30              |
|                 |         | MID       | Q16        | 22.25 | 22.28 | 22.15 | 22.30              |
|                 |         | HIGH      | Q16        | 22.18 | 22.28 | 22.14 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.21 | 22.22 | 22.17 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 22.01 | 21.86 | 21.80 | 22.30              |
|                 |         | MID       | 64QAM      | 22.22 | 21.84 | 22.13 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.98 | 22.30 | 21.87 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.22 | 21.09 | 21.17 | 21.30              |
|                 |         | MID       | 64QAM      | 21.13 | 21.16 | 20.88 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.25 | 21.20 | 20.81 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 21.16 | 21.00 | 20.95 | 21.30              |

| LTE B7-State 4 -Ant.0(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 18.93 | 19.14 | 19.02 | 19.30              |
|                            |         | MID       | QPSK       | 19.05 | 19.14 | 19.27 | 19.30              |
|                            |         | HIGH      | QPSK       | 18.99 | 19.06 | 18.97 | 19.30              |
|                            | 12      | LOW       | QPSK       | 18.99 | 18.98 | 19.09 | 19.30              |
|                            |         | MID       | QPSK       | 19.13 | 19.11 | 19.01 | 19.30              |
|                            |         | HIGH      | QPSK       | 19.13 | 19.22 | 18.85 | 19.30              |
|                            | 25      | LOW       | QPSK       | 19.15 | 19.14 | 18.98 | 19.30              |
| 5                          | 1       | LOW       | Q16        | 18.81 | 18.78 | 18.78 | 19.30              |
|                            |         | MID       | Q16        | 19.09 | 19.07 | 19.01 | 19.30              |
|                            |         | HIGH      | Q16        | 19.22 | 19.02 | 18.75 | 19.30              |
|                            | 12      | LOW       | Q16        | 19.19 | 18.98 | 19.16 | 19.30              |
|                            |         | MID       | Q16        | 19.13 | 19.22 | 19.21 | 19.30              |
|                            |         | HIGH      | Q16        | 18.88 | 18.97 | 18.99 | 19.30              |
|                            | 25      | LOW       | Q16        | 19.10 | 19.07 | 18.99 | 19.30              |
| 5                          | 1       | LOW       | 64QAM      | 18.95 | 18.84 | 18.71 | 19.30              |
|                            |         | MID       | 64QAM      | 18.84 | 18.61 | 19.11 | 19.30              |
|                            |         | HIGH      | 64QAM      | 18.79 | 19.23 | 18.86 | 19.30              |
|                            | 12      | LOW       | 64QAM      | 19.11 | 18.77 | 19.15 | 19.30              |
|                            |         | MID       | 64QAM      | 18.92 | 19.07 | 18.76 | 19.30              |
|                            |         | HIGH      | 64QAM      | 19.08 | 18.95 | 18.71 | 19.30              |
|                            | 25      | LOW       | 64QAM      | 18.88 | 18.79 | 18.74 | 19.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 19.14 | 19.20 | 19.02 | 19.30              |
|                            |         | MID       | QPSK       | 19.24 | 19.15 | 19.21 | 19.30              |
|                            |         | HIGH      | QPSK       | 19.11 | 19.20 | 18.95 | 19.30              |
|                            | 25      | LOW       | QPSK       | 19.15 | 19.13 | 19.11 | 19.30              |
|                            |         | MID       | QPSK       | 19.05 | 19.21 | 19.22 | 19.30              |
|                            |         | HIGH      | QPSK       | 19.17 | 18.93 | 19.08 | 19.30              |
| 10                         | 50      | LOW       | QPSK       | 19.21 | 19.24 | 19.25 | 19.30              |
|                            | 1       | LOW       | Q16        | 18.98 | 18.84 | 18.89 | 19.30              |
|                            |         | MID       | Q16        | 18.86 | 19.05 | 18.95 | 19.30              |
|                            |         | HIGH      | Q16        | 19.10 | 19.00 | 18.84 | 19.30              |
|                            | 25      | LOW       | Q16        | 19.23 | 19.11 | 19.09 | 19.30              |
|                            |         | MID       | Q16        | 19.13 | 19.26 | 19.02 | 19.30              |
|                            |         | HIGH      | Q16        | 18.95 | 18.97 | 19.01 | 19.30              |
|                            | 50      | LOW       | Q16        | 18.95 | 18.95 | 18.99 | 19.30              |
| 10                         | 1       | LOW       | 64QAM      | 18.92 | 18.96 | 18.61 | 19.30              |
|                            |         | MID       | 64QAM      | 19.05 | 18.67 | 19.21 | 19.30              |
|                            |         | HIGH      | 64QAM      | 18.79 | 19.15 | 18.84 | 19.30              |
|                            | 25      | LOW       | 64QAM      | 19.20 | 18.77 | 19.21 | 19.30              |
|                            |         | MID       | 64QAM      | 19.05 | 19.14 | 18.65 | 19.30              |
|                            |         | HIGH      | 64QAM      | 19.21 | 18.98 | 18.66 | 19.30              |
|                            | 50      | LOW       | 64QAM      | 18.84 | 18.77 | 18.72 | 19.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 18.85      | 19.16 | 18.96 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 19.26      | 19.29 | 19.27 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.13      | 19.22 | 18.91 | 19.30              |                    |
|                 | 36              | LOW       | QPSK       | 18.99      | 18.92 | 19.09 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 19.05      | 19.29 | 19.08 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.05      | 19.14 | 19.10 | 19.30              |                    |
|                 | 75              | LOW       | QPSK       | 19.14      | 19.15 | 19.11 | 19.30              |                    |
|                 | 15              | 1         | LOW        | Q16        | 18.75 | 18.99 | 18.78              | 19.30              |
|                 |                 |           | MID        | Q16        | 18.86 | 19.03 | 18.92              | 19.30              |
| HIGH            |                 |           | Q16        | 19.16      | 19.02 | 18.71 | 19.30              |                    |
| 36              |                 | LOW       | Q16        | 19.00      | 18.96 | 19.22 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.19      | 19.06 | 19.21 | 19.30              |                    |
|                 |                 | HIGH      | Q16        | 18.99      | 19.18 | 18.84 | 19.30              |                    |
| 75              |                 | LOW       | Q16        | 18.89      | 19.15 | 18.97 | 19.30              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 18.97 | 18.88 | 18.91              | 19.30              |
|                 |                 |           | MID        | 64QAM      | 19.05 | 18.65 | 19.19              | 19.30              |
|                 | HIGH            |           | 64QAM      | 18.68      | 19.07 | 19.03 | 19.30              |                    |
|                 | 36              | LOW       | 64QAM      | 19.09      | 19.06 | 19.09 | 19.30              |                    |
|                 |                 | MID       | 64QAM      | 19.11      | 19.14 | 18.67 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.08      | 19.02 | 18.53 | 19.30              |                    |
|                 | 75              | LOW       | 64QAM      | 19.05      | 18.83 | 18.91 | 19.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 19.04 | 19.16 | 19.06              | 19.30              |
| MID             |                 |           | QPSK       | 19.16      | 19.29 | 19.17 | 19.30              |                    |
| HIGH            |                 |           | QPSK       | 19.03      | 19.12 | 19.08 | 19.30              |                    |
| 50              |                 | LOW       | QPSK       | 19.09      | 19.09 | 19.07 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 19.15      | 19.21 | 19.14 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.07      | 19.14 | 19.04 | 19.30              |                    |
| 100             |                 | LOW       | QPSK       | 19.27      | 19.30 | 19.15 | 19.30              |                    |
| 20              |                 | 1         | LOW        | Q16        | 18.96 | 18.99 | 18.91              | 19.30              |
|                 |                 |           | MID        | Q16        | 19.07 | 19.20 | 19.03              | 19.30              |
|                 | HIGH            |           | Q16        | 19.20      | 19.10 | 18.92 | 19.30              |                    |
|                 | 50              | LOW       | Q16        | 19.19      | 19.11 | 19.28 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.25      | 19.16 | 19.13 | 19.30              |                    |
|                 |                 | HIGH      | Q16        | 19.01      | 19.18 | 18.97 | 19.30              |                    |
|                 | 100             | LOW       | Q16        | 19.06      | 19.05 | 19.05 | 19.30              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 19.03 | 18.88 | 18.82              | 19.30              |
|                 |                 |           | MID        | 64QAM      | 19.03 | 18.82 | 19.21              | 19.30              |
| HIGH            |                 |           | 64QAM      | 18.81      | 19.15 | 18.95 | 19.30              |                    |
| 50              |                 | LOW       | 64QAM      | 19.28      | 18.98 | 19.17 | 19.30              |                    |
|                 |                 | MID       | 64QAM      | 19.05      | 19.26 | 18.69 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.29      | 19.08 | 18.64 | 19.30              |                    |
| 100             |                 | LOW       | 64QAM      | 18.97      | 18.81 | 18.91 | 19.30              |                    |

| LTE B7-State 5 -Ant.0(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 17.75 | 17.67 | 17.53 | 17.80              |
|                            |         | MID       | QPSK       | 17.72 | 17.53 | 17.32 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.55 | 17.58 | 17.38 | 17.80              |
|                            | 12      | LOW       | QPSK       | 17.65 | 17.38 | 17.64 | 17.80              |
|                            |         | MID       | QPSK       | 17.74 | 17.70 | 17.49 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.53 | 17.71 | 17.58 | 17.80              |
|                            | 25      | LOW       | QPSK       | 17.68 | 17.57 | 17.46 | 17.80              |
|                            | 5       | LOW       | Q16        | 17.46 | 17.45 | 17.35 | 17.80              |
|                            |         | MID       | Q16        | 17.44 | 17.62 | 17.31 | 17.80              |
|                            |         | HIGH      | Q16        | 17.59 | 17.52 | 17.70 | 17.80              |
|                            |         | LOW       | Q16        | 17.64 | 17.67 | 17.54 | 17.80              |
|                            |         | MID       | Q16        | 17.37 | 17.70 | 17.70 | 17.80              |
|                            |         | HIGH      | Q16        | 17.62 | 17.52 | 17.48 | 17.80              |
|                            | 25      | LOW       | Q16        | 17.73 | 17.63 | 17.62 | 17.80              |
| 5                          | 1       | LOW       | 64QAM      | 17.32 | 17.47 | 17.16 | 17.80              |
|                            |         | MID       | 64QAM      | 17.57 | 17.33 | 17.47 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.25 | 17.62 | 17.15 | 17.80              |
|                            | 12      | LOW       | 64QAM      | 17.52 | 17.73 | 17.46 | 17.80              |
|                            |         | MID       | 64QAM      | 17.42 | 17.55 | 17.41 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.70 | 17.66 | 17.29 | 17.80              |
|                            | 25      | LOW       | 64QAM      | 17.43 | 17.32 | 17.57 | 17.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 17.63 | 17.47 | 17.37 | 17.80              |
|                            |         | MID       | QPSK       | 17.62 | 17.68 | 17.54 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.50 | 17.72 | 17.38 | 17.80              |
|                            | 25      | LOW       | QPSK       | 17.57 | 17.50 | 17.41 | 17.80              |
|                            |         | MID       | QPSK       | 17.61 | 17.68 | 17.72 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.47 | 17.43 | 17.72 | 17.80              |
| 10                         | 50      | LOW       | QPSK       | 17.80 | 17.69 | 17.39 | 17.80              |
|                            | 1       | LOW       | Q16        | 17.51 | 17.50 | 17.24 | 17.80              |
|                            |         | MID       | Q16        | 17.68 | 17.62 | 17.31 | 17.80              |
|                            |         | HIGH      | Q16        | 17.71 | 17.66 | 17.57 | 17.80              |
|                            | 25      | LOW       | Q16        | 17.47 | 17.65 | 17.36 | 17.80              |
|                            |         | MID       | Q16        | 17.48 | 17.54 | 17.61 | 17.80              |
|                            |         | HIGH      | Q16        | 17.52 | 17.45 | 17.49 | 17.80              |
|                            | 50      | LOW       | Q16        | 17.75 | 17.65 | 17.46 | 17.80              |
|                            | 10      | LOW       | 64QAM      | 17.25 | 17.43 | 16.92 | 17.80              |
|                            |         | MID       | 64QAM      | 17.46 | 17.34 | 17.52 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.29 | 17.57 | 17.27 | 17.80              |
|                            |         | LOW       | 64QAM      | 17.58 | 17.75 | 17.62 | 17.80              |
|                            |         | MID       | 64QAM      | 17.43 | 17.62 | 17.38 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.49 | 17.77 | 17.31 | 17.80              |
|                            | 50      | LOW       | 64QAM      | 17.64 | 17.34 | 17.43 | 17.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 17.59      | 17.45 | 17.62 | 17.80              |                    |
|                 |                 | MID       | QPSK       | 17.74      | 17.55 | 17.30 | 17.80              |                    |
|                 |                 | HIGH      | QPSK       | 17.60      | 17.60 | 17.51 | 17.80              |                    |
|                 | 36              | LOW       | QPSK       | 17.72      | 17.43 | 17.54 | 17.80              |                    |
|                 |                 | MID       | QPSK       | 17.68      | 17.59 | 17.54 | 17.80              |                    |
|                 |                 | HIGH      | QPSK       | 17.46      | 17.64 | 17.70 | 17.80              |                    |
|                 | 75              | LOW       | QPSK       | 17.75      | 17.60 | 17.46 | 17.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 17.40 | 17.69 | 17.26              | 17.80              |
|                 |                 |           | MID        | Q16        | 17.52 | 17.61 | 17.26              | 17.80              |
| HIGH            |                 |           | Q16        | 17.48      | 17.43 | 17.73 | 17.80              |                    |
| 36              |                 | LOW       | Q16        | 17.66      | 17.74 | 17.35 | 17.80              |                    |
|                 |                 | MID       | Q16        | 17.41      | 17.68 | 17.61 | 17.80              |                    |
|                 |                 | HIGH      | Q16        | 17.55      | 17.52 | 17.37 | 17.80              |                    |
| 75              | LOW             | Q16       | 17.76      | 17.72      | 17.44 | 17.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 17.44      | 17.31 | 17.01 | 17.80              |                    |
|                 |                 | MID       | 64QAM      | 17.46      | 17.21 | 17.64 | 17.80              |                    |
|                 |                 | HIGH      | 64QAM      | 17.29      | 17.73 | 17.05 | 17.80              |                    |
|                 | 36              | LOW       | 64QAM      | 17.52      | 17.77 | 17.46 | 17.80              |                    |
|                 |                 | MID       | 64QAM      | 17.38      | 17.75 | 17.45 | 17.80              |                    |
|                 |                 | HIGH      | 64QAM      | 17.59      | 17.64 | 17.10 | 17.80              |                    |
|                 | 75              | LOW       | 64QAM      | 17.57      | 17.41 | 17.45 | 17.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 17.68 | 17.63 | 17.55              | 17.80              |
| MID             |                 |           | QPSK       | 17.76      | 17.73 | 17.49 | 17.80              |                    |
| HIGH            |                 |           | QPSK       | 17.69      | 17.72 | 17.56 | 17.80              |                    |
| 50              |                 | LOW       | QPSK       | 17.77      | 17.54 | 17.59 | 17.80              |                    |
|                 |                 | MID       | QPSK       | 17.79      | 17.61 | 17.68 | 17.80              |                    |
|                 |                 | HIGH      | QPSK       | 17.65      | 17.62 | 17.72 | 17.80              |                    |
| 20              | 100             | LOW       | QPSK       | 17.75      | 17.71 | 17.48 | 17.80              |                    |
|                 |                 | LOW       | Q16        | 17.49      | 17.64 | 17.26 | 17.80              |                    |
|                 |                 | MID       | Q16        | 17.63      | 17.75 | 17.43 | 17.80              |                    |
|                 | 50              | HIGH      | Q16        | 17.66      | 17.59 | 17.68 | 17.80              |                    |
|                 |                 | LOW       | Q16        | 17.66      | 17.69 | 17.54 | 17.80              |                    |
|                 |                 | MID       | Q16        | 17.55      | 17.66 | 17.72 | 17.80              |                    |
| 20              | 1               | HIGH      | Q16        | 17.57      | 17.63 | 17.46 | 17.80              |                    |
|                 |                 | LOW       | Q16        | 17.80      | 17.79 | 17.53 | 17.80              |                    |
|                 |                 | LOW       | 64QAM      | 17.42      | 17.38 | 17.11 | 17.80              |                    |
|                 | 50              | MID       | 64QAM      | 17.53      | 17.31 | 17.59 | 17.80              |                    |
|                 |                 | HIGH      | 64QAM      | 17.39      | 17.73 | 17.20 | 17.80              |                    |
|                 |                 | LOW       | 64QAM      | 17.56      | 17.68 | 17.55 | 17.80              |                    |
| 100             | MID             | 64QAM     | 17.54      | 17.75      | 17.36 | 17.80 |                    |                    |
|                 | HIGH            | 64QAM     | 17.68      | 17.75      | 17.22 | 17.80 |                    |                    |
| 100             | LOW             | 64QAM     | 17.55      | 17.34      | 17.48 | 17.80 |                    |                    |

| LTE B7-State 6 -Ant.0(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 17.75 | 17.67 | 17.53 | 17.80              |
|                            |         | MID       | QPSK       | 17.72 | 17.53 | 17.32 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.55 | 17.58 | 17.38 | 17.80              |
|                            | 12      | LOW       | QPSK       | 17.65 | 17.38 | 17.64 | 17.80              |
|                            |         | MID       | QPSK       | 17.74 | 17.70 | 17.49 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.53 | 17.71 | 17.58 | 17.80              |
|                            | 25      | LOW       | QPSK       | 17.68 | 17.57 | 17.46 | 17.80              |
|                            | 5       | LOW       | Q16        | 17.46 | 17.45 | 17.35 | 17.80              |
|                            |         | MID       | Q16        | 17.44 | 17.62 | 17.31 | 17.80              |
|                            |         | HIGH      | Q16        | 17.59 | 17.52 | 17.70 | 17.80              |
|                            |         | LOW       | Q16        | 17.64 | 17.67 | 17.54 | 17.80              |
|                            |         | MID       | Q16        | 17.37 | 17.70 | 17.70 | 17.80              |
|                            |         | HIGH      | Q16        | 17.62 | 17.52 | 17.48 | 17.80              |
|                            | 25      | LOW       | Q16        | 17.73 | 17.63 | 17.62 | 17.80              |
| 5                          | 1       | LOW       | 64QAM      | 17.32 | 17.47 | 17.16 | 17.80              |
|                            |         | MID       | 64QAM      | 17.57 | 17.33 | 17.47 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.25 | 17.62 | 17.15 | 17.80              |
|                            | 12      | LOW       | 64QAM      | 17.52 | 17.73 | 17.46 | 17.80              |
|                            |         | MID       | 64QAM      | 17.42 | 17.55 | 17.41 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.70 | 17.66 | 17.29 | 17.80              |
|                            | 25      | LOW       | 64QAM      | 17.43 | 17.32 | 17.57 | 17.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 17.63 | 17.47 | 17.37 | 17.80              |
|                            |         | MID       | QPSK       | 17.62 | 17.68 | 17.54 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.50 | 17.72 | 17.38 | 17.80              |
|                            | 25      | LOW       | QPSK       | 17.57 | 17.50 | 17.41 | 17.80              |
|                            |         | MID       | QPSK       | 17.61 | 17.68 | 17.72 | 17.80              |
|                            |         | HIGH      | QPSK       | 17.47 | 17.43 | 17.72 | 17.80              |
| 10                         | 50      | LOW       | QPSK       | 17.80 | 17.69 | 17.39 | 17.80              |
|                            | 1       | LOW       | Q16        | 17.51 | 17.50 | 17.24 | 17.80              |
|                            |         | MID       | Q16        | 17.68 | 17.62 | 17.31 | 17.80              |
|                            |         | HIGH      | Q16        | 17.71 | 17.66 | 17.57 | 17.80              |
|                            | 25      | LOW       | Q16        | 17.47 | 17.65 | 17.36 | 17.80              |
|                            |         | MID       | Q16        | 17.48 | 17.54 | 17.61 | 17.80              |
|                            |         | HIGH      | Q16        | 17.52 | 17.45 | 17.49 | 17.80              |
|                            | 50      | LOW       | Q16        | 17.75 | 17.65 | 17.46 | 17.80              |
|                            | 10      | LOW       | 64QAM      | 17.25 | 17.43 | 16.92 | 17.80              |
|                            |         | MID       | 64QAM      | 17.46 | 17.34 | 17.52 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.29 | 17.57 | 17.27 | 17.80              |
|                            |         | LOW       | 64QAM      | 17.58 | 17.75 | 17.62 | 17.80              |
|                            |         | MID       | 64QAM      | 17.43 | 17.62 | 17.38 | 17.80              |
|                            |         | HIGH      | 64QAM      | 17.49 | 17.77 | 17.31 | 17.80              |
|                            | 50      | LOW       | 64QAM      | 17.64 | 17.34 | 17.43 | 17.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 17.59      | 17.45 | 17.62 | 17.80              |                    |
|                 |                 | MID       | QPSK       | 17.74      | 17.55 | 17.30 | 17.80              |                    |
|                 |                 | HIGH      | QPSK       | 17.60      | 17.60 | 17.51 | 17.80              |                    |
|                 | 36              | LOW       | QPSK       | 17.72      | 17.43 | 17.54 | 17.80              |                    |
|                 |                 | MID       | QPSK       | 17.68      | 17.59 | 17.54 | 17.80              |                    |
|                 |                 | HIGH      | QPSK       | 17.46      | 17.64 | 17.70 | 17.80              |                    |
|                 | 75              | LOW       | QPSK       | 17.75      | 17.60 | 17.46 | 17.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 17.40 | 17.69 | 17.26              | 17.80              |
|                 |                 |           | MID        | Q16        | 17.52 | 17.61 | 17.26              | 17.80              |
| HIGH            |                 |           | Q16        | 17.48      | 17.43 | 17.73 | 17.80              |                    |
| 36              |                 | LOW       | Q16        | 17.66      | 17.74 | 17.35 | 17.80              |                    |
|                 |                 | MID       | Q16        | 17.41      | 17.68 | 17.61 | 17.80              |                    |
|                 |                 | HIGH      | Q16        | 17.55      | 17.52 | 17.37 | 17.80              |                    |
| 75              | LOW             | Q16       | 17.76      | 17.72      | 17.44 | 17.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 17.44      | 17.31 | 17.01 | 17.80              |                    |
|                 |                 | MID       | 64QAM      | 17.46      | 17.21 | 17.64 | 17.80              |                    |
|                 |                 | HIGH      | 64QAM      | 17.29      | 17.73 | 17.05 | 17.80              |                    |
|                 | 36              | LOW       | 64QAM      | 17.52      | 17.77 | 17.46 | 17.80              |                    |
|                 |                 | MID       | 64QAM      | 17.38      | 17.75 | 17.45 | 17.80              |                    |
|                 |                 | HIGH      | 64QAM      | 17.59      | 17.64 | 17.10 | 17.80              |                    |
|                 | 75              | LOW       | 64QAM      | 17.57      | 17.41 | 17.45 | 17.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 17.68 | 17.63 | 17.55              | 17.80              |
| MID             |                 |           | QPSK       | 17.76      | 17.73 | 17.49 | 17.80              |                    |
| HIGH            |                 |           | QPSK       | 17.69      | 17.72 | 17.56 | 17.80              |                    |
| 50              |                 | LOW       | QPSK       | 17.77      | 17.54 | 17.59 | 17.80              |                    |
|                 |                 | MID       | QPSK       | 17.79      | 17.61 | 17.68 | 17.80              |                    |
|                 |                 | HIGH      | QPSK       | 17.65      | 17.62 | 17.72 | 17.80              |                    |
| 20              | 100             | LOW       | QPSK       | 17.75      | 17.71 | 17.48 | 17.80              |                    |
|                 |                 | LOW       | Q16        | 17.49      | 17.64 | 17.26 | 17.80              |                    |
|                 |                 | MID       | Q16        | 17.63      | 17.75 | 17.43 | 17.80              |                    |
|                 | 50              | HIGH      | Q16        | 17.66      | 17.59 | 17.68 | 17.80              |                    |
|                 |                 | LOW       | Q16        | 17.66      | 17.69 | 17.54 | 17.80              |                    |
|                 |                 | MID       | Q16        | 17.55      | 17.66 | 17.72 | 17.80              |                    |
| 20              | 100             | HIGH      | Q16        | 17.57      | 17.63 | 17.46 | 17.80              |                    |
|                 |                 | LOW       | Q16        | 17.80      | 17.79 | 17.53 | 17.80              |                    |
|                 |                 | LOW       | 64QAM      | 17.42      | 17.38 | 17.11 | 17.80              |                    |
|                 | 1               | MID       | 64QAM      | 17.53      | 17.31 | 17.59 | 17.80              |                    |
|                 |                 | HIGH      | 64QAM      | 17.39      | 17.73 | 17.20 | 17.80              |                    |
|                 |                 | LOW       | 64QAM      | 17.56      | 17.68 | 17.55 | 17.80              |                    |
|                 | 50              | MID       | 64QAM      | 17.54      | 17.75 | 17.36 | 17.80              |                    |
|                 |                 | HIGH      | 64QAM      | 17.68      | 17.75 | 17.22 | 17.80              |                    |
|                 |                 | 100       | LOW        | 64QAM      | 17.55 | 17.34 | 17.48              | 17.80              |

| LTE B7-State 1 -Ant.4 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 20.39 | 20.21 | 19.98 | 21.00              |
|                       |         | MID       | QPSK       | 20.38 | 20.22 | 20.16 | 21.00              |
|                       |         | HIGH      | QPSK       | 20.25 | 20.15 | 20.18 | 21.00              |
|                       | 12      | LOW       | QPSK       | 20.06 | 20.20 | 20.14 | 21.00              |
|                       |         | MID       | QPSK       | 20.14 | 20.50 | 20.38 | 21.00              |
|                       |         | HIGH      | QPSK       | 20.08 | 20.12 | 20.16 | 21.00              |
|                       | 25      | LOW       | QPSK       | 19.96 | 20.10 | 20.22 | 21.00              |
| 5                     | 1       | LOW       | Q16        | 20.28 | 20.10 | 20.12 | 21.00              |
|                       |         | MID       | Q16        | 20.52 | 20.32 | 20.22 | 21.00              |
|                       |         | HIGH      | Q16        | 20.20 | 20.28 | 20.30 | 21.00              |
|                       | 12      | LOW       | Q16        | 19.58 | 18.96 | 19.24 | 20.00              |
|                       |         | MID       | Q16        | 19.36 | 19.17 | 19.46 | 20.00              |
|                       |         | HIGH      | Q16        | 19.34 | 19.26 | 19.52 | 20.00              |
|                       | 25      | LOW       | Q16        | 19.30 | 19.24 | 19.17 | 20.00              |
| 5                     | 1       | LOW       | 64QAM      | 19.25 | 19.12 | 19.26 | 20.00              |
|                       |         | MID       | 64QAM      | 19.36 | 19.16 | 19.24 | 20.00              |
|                       |         | HIGH      | 64QAM      | 19.19 | 19.34 | 19.42 | 20.00              |
|                       | 12      | LOW       | 64QAM      | 18.54 | 18.13 | 18.37 | 19.00              |
|                       |         | MID       | 64QAM      | 18.25 | 18.07 | 18.32 | 19.00              |
|                       |         | HIGH      | 64QAM      | 18.22 | 17.93 | 18.36 | 19.00              |
|                       | 25      | LOW       | 64QAM      | 18.57 | 18.17 | 18.26 | 19.00              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 20.35 | 20.37 | 19.96 | 21.00              |
|                       |         | MID       | QPSK       | 20.24 | 20.28 | 20.20 | 21.00              |
|                       |         | HIGH      | QPSK       | 20.35 | 20.15 | 20.00 | 21.00              |
|                       | 25      | LOW       | QPSK       | 20.00 | 20.10 | 20.14 | 21.00              |
|                       |         | MID       | QPSK       | 20.20 | 20.30 | 20.24 | 21.00              |
|                       |         | HIGH      | QPSK       | 20.04 | 20.22 | 20.36 | 21.00              |
|                       | 50      | LOW       | QPSK       | 20.06 | 20.24 | 20.12 | 21.00              |
| 10                    | 1       | LOW       | Q16        | 20.36 | 20.22 | 20.32 | 21.00              |
|                       |         | MID       | Q16        | 20.50 | 20.20 | 20.36 | 21.00              |
|                       |         | HIGH      | Q16        | 19.98 | 20.36 | 20.10 | 21.00              |
|                       | 25      | LOW       | Q16        | 19.62 | 19.04 | 19.18 | 20.00              |
|                       |         | MID       | Q16        | 19.40 | 19.17 | 19.34 | 20.00              |
|                       |         | HIGH      | Q16        | 19.13 | 19.06 | 19.30 | 20.00              |
|                       | 50      | LOW       | Q16        | 19.21 | 19.20 | 19.17 | 20.00              |
| 10                    | 1       | LOW       | 64QAM      | 19.46 | 19.24 | 19.20 | 20.00              |
|                       |         | MID       | 64QAM      | 19.32 | 19.20 | 19.46 | 20.00              |
|                       |         | HIGH      | 64QAM      | 19.44 | 19.42 | 19.34 | 20.00              |
|                       | 25      | LOW       | 64QAM      | 18.37 | 18.15 | 18.46 | 19.00              |
|                       |         | MID       | 64QAM      | 18.40 | 18.20 | 18.33 | 19.00              |
|                       |         | HIGH      | 64QAM      | 18.15 | 18.18 | 18.45 | 19.00              |
|                       | 50      | LOW       | 64QAM      | 18.42 | 18.14 | 18.24 | 19.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 20.15 | 20.11 | 20.18 | 21.00              |
|                 |         | MID       | QPSK       | 20.38 | 20.20 | 20.24 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.07 | 20.27 | 20.26 | 21.00              |
|                 | 36      | LOW       | QPSK       | 20.28 | 20.36 | 20.24 | 21.00              |
|                 |         | MID       | QPSK       | 20.28 | 20.36 | 20.34 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.26 | 20.14 | 20.32 | 21.00              |
|                 | 75      | LOW       | QPSK       | 20.22 | 20.08 | 20.08 | 21.00              |
| 15              | 1       | LOW       | Q16        | 20.22 | 20.04 | 20.26 | 21.00              |
|                 |         | MID       | Q16        | 20.24 | 20.18 | 20.40 | 21.00              |
|                 |         | HIGH      | Q16        | 20.14 | 20.06 | 20.22 | 21.00              |
|                 | 36      | LOW       | Q16        | 19.58 | 18.98 | 19.18 | 20.00              |
|                 |         | MID       | Q16        | 19.42 | 19.32 | 19.40 | 20.00              |
|                 |         | HIGH      | Q16        | 19.09 | 19.14 | 19.25 | 20.00              |
|                 | 75      | LOW       | Q16        | 19.30 | 19.22 | 19.15 | 20.00              |
| 15              | 1       | LOW       | 64QAM      | 19.52 | 19.24 | 19.20 | 20.00              |
|                 |         | MID       | 64QAM      | 19.21 | 19.12 | 19.38 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.34 | 19.22 | 19.38 | 20.00              |
|                 | 36      | LOW       | 64QAM      | 18.56 | 17.99 | 18.52 | 19.00              |
|                 |         | MID       | 64QAM      | 18.44 | 18.20 | 18.44 | 19.00              |
|                 |         | HIGH      | 64QAM      | 18.19 | 18.07 | 18.36 | 19.00              |
|                 | 75      | LOW       | 64QAM      | 18.42 | 18.14 | 18.42 | 19.00              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 20.29 | 20.29 | 20.14 | 21.00              |
|                 |         | MID       | QPSK       | 20.34 | 20.36 | 20.20 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.27 | 20.31 | 20.16 | 21.00              |
|                 | 50      | LOW       | QPSK       | 20.20 | 20.28 | 20.26 | 21.00              |
|                 |         | MID       | QPSK       | 20.32 | 20.40 | 20.34 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.24 | 20.22 | 20.28 | 21.00              |
| 20              | 100     | LOW       | QPSK       | 20.18 | 20.24 | 20.22 | 21.00              |
|                 |         | LOW       | Q16        | 20.36 | 20.12 | 20.26 | 21.00              |
|                 |         | MID       | Q16        | 20.42 | 20.26 | 20.32 | 21.00              |
|                 | 50      | HIGH      | Q16        | 20.16 | 20.28 | 20.30 | 21.00              |
|                 |         | LOW       | Q16        | 19.54 | 19.06 | 19.30 | 20.00              |
|                 |         | MID       | Q16        | 19.34 | 19.38 | 19.38 | 20.00              |
| 20              | 1       | HIGH      | Q16        | 19.28 | 19.16 | 19.42 | 20.00              |
|                 |         | LOW       | Q16        | 19.38 | 19.24 | 19.36 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.44 | 19.18 | 19.18 | 20.00              |
|                 | 50      | MID       | 64QAM      | 19.36 | 19.20 | 19.38 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.34 | 19.32 | 19.44 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.54 | 18.08 | 18.48 | 19.00              |
|                 | 100     | MID       | 64QAM      | 18.38 | 18.27 | 18.50 | 19.00              |
| HIGH            | 64QAM   | 18.26     | 18.09      | 18.38 | 19.00 |       |                    |
| 100             | LOW     | 64QAM     | 18.48      | 18.32 | 18.44 | 19.00 |                    |

| LTE B7-State 2 -Ant.4 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.37 | 19.13 | 19.34 | 20.00              |
|                       |         | MID       | QPSK       | 19.36 | 19.29 | 19.15 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.31 | 19.10 | 18.96 | 20.00              |
|                       | 12      | LOW       | QPSK       | 19.15 | 19.09 | 19.22 | 20.00              |
|                       |         | MID       | QPSK       | 19.02 | 19.43 | 19.30 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.21 | 18.92 | 19.00 | 20.00              |
|                       | 25      | LOW       | QPSK       | 19.09 | 19.11 | 19.17 | 20.00              |
|                       | 5       | LOW       | Q16        | 19.20 | 19.09 | 18.84 | 20.00              |
|                       |         | MID       | Q16        | 19.01 | 19.23 | 19.07 | 20.00              |
|                       |         | HIGH      | Q16        | 19.05 | 19.09 | 18.86 | 20.00              |
|                       |         | LOW       | Q16        | 19.46 | 19.50 | 18.87 | 20.00              |
|                       |         | MID       | Q16        | 19.15 | 19.16 | 19.25 | 20.00              |
|                       |         | HIGH      | Q16        | 19.38 | 19.14 | 19.06 | 20.00              |
|                       | 25      | LOW       | Q16        | 19.40 | 19.38 | 18.97 | 20.00              |
| 5                     | 1       | LOW       | 64QAM      | 18.90 | 19.24 | 18.99 | 20.00              |
|                       |         | MID       | 64QAM      | 19.21 | 19.03 | 18.87 | 20.00              |
|                       |         | HIGH      | 64QAM      | 19.30 | 19.15 | 19.22 | 20.00              |
|                       | 12      | LOW       | 64QAM      | 18.58 | 18.59 | 17.77 | 19.00              |
|                       |         | MID       | 64QAM      | 18.24 | 18.31 | 17.98 | 19.00              |
|                       |         | HIGH      | 64QAM      | 18.20 | 18.13 | 18.14 | 19.00              |
|                       | 25      | LOW       | 64QAM      | 18.20 | 18.13 | 18.21 | 19.00              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 19.33 | 19.17 | 19.20 | 20.00              |
|                       |         | MID       | QPSK       | 19.38 | 19.47 | 19.16 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.23 | 19.14 | 19.25 | 20.00              |
|                       | 25      | LOW       | QPSK       | 18.94 | 19.32 | 19.14 | 20.00              |
|                       |         | MID       | QPSK       | 19.07 | 19.20 | 19.24 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.05 | 19.07 | 19.21 | 20.00              |
| 10                    | 50      | LOW       | QPSK       | 19.18 | 19.34 | 19.30 | 20.00              |
|                       | 1       | LOW       | Q16        | 19.28 | 19.09 | 18.99 | 20.00              |
|                       |         | MID       | Q16        | 18.99 | 19.29 | 19.26 | 20.00              |
|                       |         | HIGH      | Q16        | 19.14 | 18.84 | 18.96 | 20.00              |
|                       | 25      | LOW       | Q16        | 19.28 | 19.54 | 18.76 | 20.00              |
|                       |         | MID       | Q16        | 19.38 | 19.05 | 19.15 | 20.00              |
|                       |         | HIGH      | Q16        | 19.42 | 19.05 | 19.08 | 20.00              |
|                       | 50      | LOW       | Q16        | 19.30 | 19.38 | 18.99 | 20.00              |
|                       | 10      | LOW       | 64QAM      | 18.90 | 19.30 | 19.12 | 20.00              |
|                       |         | MID       | 64QAM      | 19.21 | 19.22 | 18.91 | 20.00              |
|                       |         | HIGH      | 64QAM      | 19.30 | 19.20 | 19.24 | 20.00              |
|                       |         | LOW       | 64QAM      | 18.37 | 18.32 | 17.81 | 19.00              |
|                       |         | MID       | 64QAM      | 18.46 | 18.24 | 18.18 | 19.00              |
|                       |         | HIGH      | 64QAM      | 18.25 | 18.38 | 17.98 | 19.00              |
|                       | 50      | LOW       | 64QAM      | 18.20 | 18.21 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 19.27 | 19.21 | 19.22 | 20.00              |
|                 |         | MID       | QPSK       | 19.28 | 19.27 | 19.38 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.10 | 19.31 | 19.15 | 20.00              |
|                 | 36      | LOW       | QPSK       | 19.13 | 19.11 | 19.05 | 20.00              |
|                 |         | MID       | QPSK       | 19.25 | 19.39 | 19.28 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.15 | 19.09 | 18.98 | 20.00              |
|                 | 75      | LOW       | QPSK       | 19.26 | 19.20 | 19.38 | 20.00              |
| 15              | 1       | LOW       | Q16        | 19.20 | 19.20 | 18.84 | 20.00              |
|                 |         | MID       | Q16        | 19.22 | 19.21 | 19.28 | 20.00              |
|                 |         | HIGH      | Q16        | 19.12 | 18.90 | 18.92 | 20.00              |
|                 | 36      | LOW       | Q16        | 19.21 | 19.46 | 18.64 | 20.00              |
|                 |         | MID       | Q16        | 19.30 | 18.99 | 19.21 | 20.00              |
|                 |         | HIGH      | Q16        | 19.32 | 19.20 | 19.14 | 20.00              |
|                 | 75      | LOW       | Q16        | 19.46 | 19.32 | 18.93 | 20.00              |
| 15              | 1       | LOW       | 64QAM      | 18.91 | 19.21 | 19.24 | 20.00              |
|                 |         | MID       | 64QAM      | 19.46 | 19.03 | 18.98 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.27 | 19.22 | 19.30 | 20.00              |
|                 | 36      | LOW       | 64QAM      | 18.33 | 18.46 | 17.97 | 19.00              |
|                 |         | MID       | 64QAM      | 18.21 | 18.11 | 18.03 | 19.00              |
|                 |         | HIGH      | 64QAM      | 18.31 | 18.20 | 17.96 | 19.00              |
|                 | 75      | LOW       | 64QAM      | 18.18 | 18.10 | 18.21 | 19.00              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 19.31 | 19.21 | 19.24 | 20.00              |
|                 |         | MID       | QPSK       | 19.38 | 19.41 | 19.30 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.23 | 19.27 | 19.17 | 20.00              |
|                 | 50      | LOW       | QPSK       | 19.11 | 19.28 | 19.18 | 20.00              |
|                 |         | MID       | QPSK       | 19.19 | 19.35 | 19.24 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.17 | 19.03 | 19.19 | 20.00              |
| 20              | 100     | LOW       | QPSK       | 19.26 | 19.32 | 19.32 | 20.00              |
|                 |         | LOW       | Q16        | 19.30 | 19.28 | 19.01 | 20.00              |
|                 |         | MID       | Q16        | 19.20 | 19.21 | 19.20 | 20.00              |
|                 | 50      | HIGH      | Q16        | 19.20 | 19.05 | 19.07 | 20.00              |
|                 |         | LOW       | Q16        | 19.38 | 19.46 | 18.85 | 20.00              |
|                 |         | MID       | Q16        | 19.32 | 19.20 | 19.19 | 20.00              |
| 20              | 100     | HIGH      | Q16        | 19.36 | 19.16 | 19.14 | 20.00              |
|                 |         | LOW       | Q16        | 19.42 | 19.48 | 19.14 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.99 | 19.38 | 19.14 | 20.00              |
|                 | 1       | MID       | 64QAM      | 19.40 | 19.22 | 19.08 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.48 | 19.30 | 19.26 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.52 | 18.52 | 17.95 | 19.00              |
| 50              | MID     | 64QAM     | 18.39      | 18.31 | 18.16 | 19.00 |                    |
|                 | HIGH    | 64QAM     | 18.29      | 18.31 | 18.16 | 19.00 |                    |
|                 | 100     | LOW       | 64QAM      | 18.31 | 18.28 | 18.39 | 19.00              |

| LTE B7-State 3 -Ant.4 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.37 | 19.13 | 19.34 | 20.00              |
|                       |         | MID       | QPSK       | 19.36 | 19.29 | 19.15 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.31 | 19.10 | 18.96 | 20.00              |
|                       | 12      | LOW       | QPSK       | 19.15 | 19.09 | 19.22 | 20.00              |
|                       |         | MID       | QPSK       | 19.02 | 19.43 | 19.30 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.21 | 18.92 | 19.00 | 20.00              |
|                       | 25      | LOW       | QPSK       | 19.09 | 19.11 | 19.17 | 20.00              |
| 5                     | 1       | LOW       | Q16        | 19.20 | 19.09 | 18.84 | 20.00              |
|                       |         | MID       | Q16        | 19.01 | 19.23 | 19.07 | 20.00              |
|                       |         | HIGH      | Q16        | 19.05 | 19.09 | 18.86 | 20.00              |
|                       | 12      | LOW       | Q16        | 19.46 | 19.50 | 18.87 | 20.00              |
|                       |         | MID       | Q16        | 19.15 | 19.16 | 19.25 | 20.00              |
|                       |         | HIGH      | Q16        | 19.38 | 19.14 | 19.06 | 20.00              |
|                       | 25      | LOW       | Q16        | 19.40 | 19.38 | 18.97 | 20.00              |
| 5                     | 1       | LOW       | 64QAM      | 18.90 | 19.24 | 18.99 | 20.00              |
|                       |         | MID       | 64QAM      | 19.21 | 19.03 | 18.87 | 20.00              |
|                       |         | HIGH      | 64QAM      | 19.30 | 19.15 | 19.22 | 20.00              |
|                       | 12      | LOW       | 64QAM      | 18.58 | 18.59 | 17.77 | 19.00              |
|                       |         | MID       | 64QAM      | 18.24 | 18.31 | 17.98 | 19.00              |
|                       |         | HIGH      | 64QAM      | 18.20 | 18.13 | 18.14 | 19.00              |
|                       | 25      | LOW       | 64QAM      | 18.20 | 18.13 | 18.21 | 19.00              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 19.33 | 19.17 | 19.20 | 20.00              |
|                       |         | MID       | QPSK       | 19.38 | 19.47 | 19.16 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.23 | 19.14 | 19.25 | 20.00              |
|                       | 25      | LOW       | QPSK       | 18.94 | 19.32 | 19.14 | 20.00              |
|                       |         | MID       | QPSK       | 19.07 | 19.20 | 19.24 | 20.00              |
|                       |         | HIGH      | QPSK       | 19.05 | 19.07 | 19.21 | 20.00              |
| 10                    | 1       | LOW       | Q16        | 19.18 | 19.34 | 19.30 | 20.00              |
|                       |         | MID       | Q16        | 19.28 | 19.09 | 18.99 | 20.00              |
|                       |         | HIGH      | Q16        | 18.99 | 19.29 | 19.26 | 20.00              |
|                       | 25      | LOW       | Q16        | 19.14 | 18.84 | 18.96 | 20.00              |
|                       |         | MID       | Q16        | 19.28 | 19.54 | 18.76 | 20.00              |
|                       |         | HIGH      | Q16        | 19.38 | 19.05 | 19.15 | 20.00              |
|                       | 50      | LOW       | Q16        | 19.42 | 19.05 | 19.08 | 20.00              |
|                       |         | HIGH      | Q16        | 19.30 | 19.38 | 18.99 | 20.00              |
| 10                    |         | 1         | LOW        | 64QAM | 18.90 | 19.30 | 19.12              |
|                       | MID     |           | 64QAM      | 19.21 | 19.22 | 18.91 | 20.00              |
|                       | HIGH    |           | 64QAM      | 19.30 | 19.20 | 19.24 | 20.00              |
|                       | 25      | LOW       | 64QAM      | 18.37 | 18.32 | 17.81 | 19.00              |
|                       |         | MID       | 64QAM      | 18.46 | 18.24 | 18.18 | 19.00              |
|                       |         | HIGH      | 64QAM      | 18.25 | 18.38 | 17.98 | 19.00              |
|                       | 50      | LOW       | 64QAM      | 18.20 | 18.21 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 19.27 | 19.21 | 19.22 | 20.00              |
|                 |         | MID       | QPSK       | 19.28 | 19.27 | 19.38 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.10 | 19.31 | 19.15 | 20.00              |
|                 | 36      | LOW       | QPSK       | 19.13 | 19.11 | 19.05 | 20.00              |
|                 |         | MID       | QPSK       | 19.25 | 19.39 | 19.28 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.15 | 19.09 | 18.98 | 20.00              |
|                 | 75      | LOW       | QPSK       | 19.26 | 19.20 | 19.38 | 20.00              |
| 15              | 1       | LOW       | Q16        | 19.20 | 19.20 | 18.84 | 20.00              |
|                 |         | MID       | Q16        | 19.22 | 19.21 | 19.28 | 20.00              |
|                 |         | HIGH      | Q16        | 19.12 | 18.90 | 18.92 | 20.00              |
|                 | 36      | LOW       | Q16        | 19.21 | 19.46 | 18.64 | 20.00              |
|                 |         | MID       | Q16        | 19.30 | 18.99 | 19.21 | 20.00              |
|                 |         | HIGH      | Q16        | 19.32 | 19.20 | 19.14 | 20.00              |
|                 | 75      | LOW       | Q16        | 19.46 | 19.32 | 18.93 | 20.00              |
| 15              | 1       | LOW       | 64QAM      | 18.91 | 19.21 | 19.24 | 20.00              |
|                 |         | MID       | 64QAM      | 19.46 | 19.03 | 18.98 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.27 | 19.22 | 19.30 | 20.00              |
|                 | 36      | LOW       | 64QAM      | 18.33 | 18.46 | 17.97 | 19.00              |
|                 |         | MID       | 64QAM      | 18.21 | 18.11 | 18.03 | 19.00              |
|                 |         | HIGH      | 64QAM      | 18.31 | 18.20 | 17.96 | 19.00              |
|                 | 75      | LOW       | 64QAM      | 18.18 | 18.10 | 18.21 | 19.00              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 19.31 | 19.21 | 19.24 | 20.00              |
|                 |         | MID       | QPSK       | 19.38 | 19.41 | 19.30 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.23 | 19.27 | 19.17 | 20.00              |
|                 | 50      | LOW       | QPSK       | 19.11 | 19.28 | 19.18 | 20.00              |
|                 |         | MID       | QPSK       | 19.19 | 19.35 | 19.24 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.17 | 19.03 | 19.19 | 20.00              |
| 20              | 100     | LOW       | QPSK       | 19.26 | 19.32 | 19.32 | 20.00              |
|                 |         | LOW       | Q16        | 19.30 | 19.28 | 19.01 | 20.00              |
|                 |         | MID       | Q16        | 19.20 | 19.21 | 19.20 | 20.00              |
|                 | 50      | HIGH      | Q16        | 19.20 | 19.05 | 19.07 | 20.00              |
|                 |         | LOW       | Q16        | 19.38 | 19.46 | 18.85 | 20.00              |
|                 |         | MID       | Q16        | 19.32 | 19.20 | 19.19 | 20.00              |
| 20              | 100     | HIGH      | Q16        | 19.36 | 19.16 | 19.14 | 20.00              |
|                 |         | LOW       | Q16        | 19.42 | 19.48 | 19.14 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.99 | 19.38 | 19.14 | 20.00              |
|                 | 1       | MID       | 64QAM      | 19.40 | 19.22 | 19.08 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.48 | 19.30 | 19.26 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.52 | 18.52 | 17.95 | 19.00              |
| 50              | MID     | 64QAM     | 18.39      | 18.31 | 18.16 | 19.00 |                    |
|                 | HIGH    | 64QAM     | 18.29      | 18.31 | 18.16 | 19.00 |                    |
|                 | 100     | LOW       | 64QAM      | 18.31 | 18.28 | 18.39 | 19.00              |

| LTE B7-State 4 -Ant.4 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 19.83 | 19.55 | 19.58 | 20.50              |
|                       |         | MID       | QPSK       | 19.73 | 19.78 | 19.82 | 20.50              |
|                       |         | HIGH      | QPSK       | 19.63 | 19.59 | 19.64 | 20.50              |
|                       | 12      | LOW       | QPSK       | 19.60 | 19.70 | 19.70 | 20.50              |
|                       |         | MID       | QPSK       | 19.82 | 19.86 | 19.84 | 20.50              |
|                       |         | HIGH      | QPSK       | 19.50 | 19.66 | 19.80 | 20.50              |
|                       | 25      | LOW       | QPSK       | 19.58 | 19.46 | 19.52 | 20.50              |
| 5                     | 1       | LOW       | Q16        | 19.88 | 19.76 | 19.46 | 20.50              |
|                       |         | MID       | Q16        | 19.92 | 19.84 | 19.88 | 20.50              |
|                       |         | HIGH      | Q16        | 19.54 | 19.82 | 19.98 | 20.50              |
|                       | 12      | LOW       | Q16        | 19.40 | 19.06 | 19.42 | 20.00              |
|                       |         | MID       | Q16        | 19.20 | 19.40 | 19.09 | 20.00              |
|                       |         | HIGH      | Q16        | 19.10 | 19.16 | 19.40 | 20.00              |
|                       | 25      | LOW       | Q16        | 19.48 | 19.16 | 19.20 | 20.00              |
| 5                     | 1       | LOW       | 64QAM      | 19.28 | 19.12 | 19.03 | 20.00              |
|                       |         | MID       | 64QAM      | 19.52 | 19.07 | 19.42 | 20.00              |
|                       |         | HIGH      | 64QAM      | 19.46 | 19.19 | 19.22 | 20.00              |
|                       | 12      | LOW       | 64QAM      | 18.39 | 17.88 | 18.37 | 19.00              |
|                       |         | MID       | 64QAM      | 18.23 | 18.09 | 18.30 | 19.00              |
|                       |         | HIGH      | 64QAM      | 17.97 | 17.82 | 18.05 | 19.00              |
|                       | 25      | LOW       | 64QAM      | 18.44 | 17.96 | 18.36 | 19.00              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 19.73 | 19.77 | 19.44 | 20.50              |
|                       |         | MID       | QPSK       | 19.87 | 19.70 | 19.78 | 20.50              |
|                       |         | HIGH      | QPSK       | 19.65 | 19.85 | 19.68 | 20.50              |
|                       | 25      | LOW       | QPSK       | 19.48 | 19.92 | 19.56 | 20.50              |
|                       |         | MID       | QPSK       | 19.70 | 19.92 | 19.72 | 20.50              |
|                       |         | HIGH      | QPSK       | 19.70 | 19.76 | 19.70 | 20.50              |
| 10                    | 50      | LOW       | QPSK       | 19.66 | 19.48 | 19.36 | 20.50              |
|                       | 1       | LOW       | Q16        | 19.88 | 19.78 | 19.64 | 20.50              |
|                       |         | MID       | Q16        | 19.70 | 19.60 | 19.74 | 20.50              |
|                       |         | HIGH      | Q16        | 19.66 | 19.62 | 19.94 | 20.50              |
|                       | 25      | LOW       | Q16        | 19.38 | 18.83 | 19.15 | 20.00              |
|                       |         | MID       | Q16        | 19.10 | 19.23 | 19.13 | 20.00              |
|                       |         | HIGH      | Q16        | 19.05 | 19.16 | 19.28 | 20.00              |
|                       | 50      | LOW       | Q16        | 19.30 | 18.93 | 19.05 | 20.00              |
| 10                    | 1       | LOW       | 64QAM      | 19.34 | 19.24 | 19.05 | 20.00              |
|                       |         | MID       | 64QAM      | 19.52 | 19.03 | 19.21 | 20.00              |
|                       |         | HIGH      | 64QAM      | 19.30 | 19.11 | 19.36 | 20.00              |
|                       | 25      | LOW       | 64QAM      | 18.52 | 17.81 | 18.48 | 19.00              |
|                       |         | MID       | 64QAM      | 18.16 | 17.98 | 18.50 | 19.00              |
|                       |         | HIGH      | 64QAM      | 17.96 | 17.73 | 18.16 | 19.00              |
|                       | 50      | LOW       | 64QAM      | 18.42 | 18.08 | 18.31 | 19.00              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.93      | 19.59 | 19.42 | 20.50              |                    |
|                 |                 | MID       | QPSK       | 19.99      | 19.80 | 19.68 | 20.50              |                    |
|                 |                 | HIGH      | QPSK       | 19.81      | 19.85 | 19.66 | 20.50              |                    |
|                 | 36              | LOW       | QPSK       | 19.68      | 19.60 | 19.70 | 20.50              |                    |
|                 |                 | MID       | QPSK       | 19.68      | 19.90 | 19.72 | 20.50              |                    |
|                 |                 | HIGH      | QPSK       | 19.54      | 19.66 | 19.86 | 20.50              |                    |
|                 | 75              | LOW       | QPSK       | 19.54      | 19.48 | 19.56 | 20.50              |                    |
|                 | 15              | 1         | LOW        | Q16        | 19.72 | 19.80 | 19.74              | 20.50              |
|                 |                 |           | MID        | Q16        | 19.82 | 19.56 | 19.92              | 20.50              |
| HIGH            |                 |           | Q16        | 19.36      | 19.80 | 19.88 | 20.50              |                    |
| 36              |                 | LOW       | Q16        | 19.48      | 18.87 | 19.24 | 20.00              |                    |
|                 |                 | MID       | Q16        | 19.28      | 19.54 | 19.30 | 20.00              |                    |
|                 |                 | HIGH      | Q16        | 19.26      | 19.18 | 19.30 | 20.00              |                    |
| 75              | LOW             | Q16       | 19.22      | 19.01      | 19.20 | 20.00 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 19.20      | 19.16 | 19.14 | 20.00              |                    |
|                 |                 | MID       | 64QAM      | 19.30      | 18.99 | 19.19 | 20.00              |                    |
|                 |                 | HIGH      | 64QAM      | 19.42      | 19.13 | 19.28 | 20.00              |                    |
|                 | 36              | LOW       | 64QAM      | 18.61      | 18.00 | 18.46 | 19.00              |                    |
|                 |                 | MID       | 64QAM      | 18.23      | 17.99 | 18.37 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.92      | 17.75 | 18.27 | 19.00              |                    |
|                 | 75              | LOW       | 64QAM      | 18.37      | 18.17 | 18.20 | 19.00              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 19.87 | 19.75 | 19.62              | 20.50              |
| MID             |                 |           | QPSK       | 19.89      | 19.82 | 19.80 | 20.50              |                    |
| HIGH            |                 |           | QPSK       | 19.73      | 19.77 | 19.68 | 20.50              |                    |
| 50              |                 | LOW       | QPSK       | 19.58      | 19.82 | 19.62 | 20.50              |                    |
|                 |                 | MID       | QPSK       | 19.90      | 19.86 | 19.88 | 20.50              |                    |
|                 |                 | HIGH      | QPSK       | 19.66      | 19.68 | 19.82 | 20.50              |                    |
| 20              | 100             | LOW       | QPSK       | 19.64      | 19.60 | 19.58 | 20.50              |                    |
|                 |                 | LOW       | Q16        | 19.82      | 19.70 | 19.68 | 20.50              |                    |
|                 |                 | MID       | Q16        | 19.86      | 19.78 | 19.88 | 20.50              |                    |
|                 | 50              | LOW       | Q16        | 19.58      | 19.82 | 19.88 | 20.50              |                    |
|                 |                 | HIGH      | Q16        | 19.20      | 19.08 | 19.38 | 20.00              |                    |
|                 |                 | LOW       | Q16        | 19.38      | 19.12 | 19.22 | 20.00              |                    |
| 20              | 1               | LOW       | 64QAM      | 19.30      | 19.14 | 19.22 | 20.00              |                    |
|                 |                 | MID       | 64QAM      | 19.46      | 19.20 | 19.38 | 20.00              |                    |
|                 |                 | HIGH      | 64QAM      | 19.36      | 19.17 | 19.36 | 20.00              |                    |
|                 | 50              | LOW       | 64QAM      | 18.54      | 17.95 | 18.50 | 19.00              |                    |
|                 |                 | MID       | 64QAM      | 18.23      | 18.14 | 18.48 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 18.10      | 17.89 | 18.23 | 19.00              |                    |
|                 | 100             | LOW       | 64QAM      | 18.57      | 18.12 | 18.31 | 19.00              |                    |

| LTE B7-State 5 -Ant.4 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 17.71 | 17.57 | 17.65 | 18.50              |
|                       |         | MID       | QPSK       | 17.80 | 17.78 | 17.57 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.66 | 17.68 | 17.47 | 18.50              |
|                       | 12      | LOW       | QPSK       | 17.34 | 17.59 | 17.32 | 18.50              |
|                       |         | MID       | QPSK       | 17.85 | 17.75 | 17.77 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.41 | 17.50 | 17.50 | 18.50              |
|                       | 25      | LOW       | QPSK       | 17.69 | 17.37 | 17.30 | 18.50              |
| 5                     | 1       | LOW       | Q16        | 17.75 | 17.51 | 17.82 | 18.50              |
|                       |         | MID       | Q16        | 17.72 | 17.80 | 17.82 | 18.50              |
|                       |         | HIGH      | Q16        | 17.49 | 17.59 | 17.63 | 18.50              |
|                       | 12      | LOW       | Q16        | 17.58 | 16.90 | 17.04 | 18.50              |
|                       |         | MID       | Q16        | 17.24 | 17.34 | 17.34 | 18.50              |
|                       |         | HIGH      | Q16        | 17.01 | 16.74 | 17.31 | 18.50              |
|                       | 25      | LOW       | Q16        | 17.04 | 16.92 | 17.10 | 18.50              |
| 5                     | 1       | LOW       | 64QAM      | 17.37 | 17.12 | 17.18 | 18.50              |
|                       |         | MID       | 64QAM      | 17.30 | 17.03 | 17.29 | 18.50              |
|                       |         | HIGH      | 64QAM      | 17.07 | 17.19 | 17.29 | 18.50              |
|                       | 12      | LOW       | 64QAM      | 17.37 | 17.01 | 17.45 | 18.50              |
|                       |         | MID       | 64QAM      | 16.94 | 17.09 | 17.41 | 18.50              |
|                       |         | HIGH      | 64QAM      | 16.79 | 16.87 | 17.01 | 18.50              |
|                       | 25      | LOW       | 64QAM      | 17.48 | 16.78 | 17.49 | 18.50              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 17.66 | 17.75 | 17.65 | 18.50              |
|                       |         | MID       | QPSK       | 17.84 | 17.66 | 17.68 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.61 | 17.63 | 17.57 | 18.50              |
|                       | 25      | LOW       | QPSK       | 17.34 | 17.69 | 17.34 | 18.50              |
|                       |         | MID       | QPSK       | 18.03 | 17.82 | 17.75 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.39 | 17.35 | 17.57 | 18.50              |
| 10                    | 50      | LOW       | QPSK       | 17.46 | 17.54 | 17.54 | 18.50              |
|                       | 1       | LOW       | Q16        | 17.68 | 17.49 | 17.70 | 18.50              |
|                       |         | MID       | Q16        | 17.86 | 17.78 | 17.79 | 18.50              |
|                       |         | HIGH      | Q16        | 17.56 | 17.55 | 17.58 | 18.50              |
|                       | 25      | LOW       | Q16        | 17.58 | 16.97 | 17.11 | 18.50              |
|                       |         | MID       | Q16        | 17.34 | 17.51 | 17.25 | 18.50              |
|                       |         | HIGH      | Q16        | 16.98 | 16.77 | 17.28 | 18.50              |
|                       | 50      | LOW       | Q16        | 17.18 | 16.99 | 17.06 | 18.50              |
| 10                    | 1       | LOW       | 64QAM      | 17.37 | 17.16 | 17.08 | 18.50              |
|                       |         | MID       | 64QAM      | 17.49 | 16.95 | 17.41 | 18.50              |
|                       |         | HIGH      | 64QAM      | 17.33 | 16.96 | 17.27 | 18.50              |
|                       | 25      | LOW       | 64QAM      | 17.43 | 16.93 | 17.26 | 18.50              |
|                       |         | MID       | 64QAM      | 17.06 | 17.01 | 17.64 | 18.50              |
|                       |         | HIGH      | 64QAM      | 16.91 | 16.92 | 17.22 | 18.50              |
|                       | 50      | LOW       | 64QAM      | 17.59 | 16.74 | 17.24 | 18.50              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 17.78      | 17.61 | 17.69 | 18.50              |                    |
|                 |                 | MID       | QPSK       | 17.79      | 17.73 | 17.70 | 18.50              |                    |
|                 |                 | HIGH      | QPSK       | 17.68      | 17.56 | 17.50 | 18.50              |                    |
|                 | 36              | LOW       | QPSK       | 17.44      | 17.60 | 17.37 | 18.50              |                    |
|                 |                 | MID       | QPSK       | 17.88      | 17.70 | 17.88 | 18.50              |                    |
|                 |                 | HIGH      | QPSK       | 17.57      | 17.43 | 17.69 | 18.50              |                    |
|                 | 75              | LOW       | QPSK       | 17.60      | 17.49 | 17.47 | 18.50              |                    |
|                 | 15              | 1         | LOW        | Q16        | 17.61 | 17.59 | 17.72              | 18.50              |
|                 |                 |           | MID        | Q16        | 17.85 | 17.84 | 17.79              | 18.50              |
| HIGH            |                 |           | Q16        | 17.37      | 17.84 | 17.75 | 18.50              |                    |
| 36              |                 | LOW       | Q16        | 17.67      | 16.87 | 16.96 | 18.50              |                    |
|                 |                 | MID       | Q16        | 17.25      | 17.51 | 17.32 | 18.50              |                    |
|                 |                 | HIGH      | Q16        | 16.96      | 16.88 | 17.33 | 18.50              |                    |
| 75              |                 | LOW       | Q16        | 17.26      | 17.09 | 17.08 | 18.50              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 17.22 | 17.17 | 17.20              | 18.50              |
|                 |                 |           | MID        | 64QAM      | 17.44 | 16.93 | 17.38              | 18.50              |
|                 | HIGH            |           | 64QAM      | 17.27      | 17.19 | 17.43 | 18.50              |                    |
|                 | 36              | LOW       | 64QAM      | 17.30      | 16.93 | 17.29 | 18.50              |                    |
|                 |                 | MID       | 64QAM      | 17.01      | 17.06 | 17.62 | 18.50              |                    |
|                 |                 | HIGH      | 64QAM      | 16.93      | 16.87 | 17.06 | 18.50              |                    |
|                 | 75              | LOW       | 64QAM      | 17.48      | 16.83 | 17.38 | 18.50              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 17.71 | 17.77 | 17.60              | 18.50              |
| MID             |                 |           | QPSK       | 17.93      | 17.80 | 17.68 | 18.50              |                    |
| HIGH            |                 |           | QPSK       | 17.75      | 17.68 | 17.59 | 18.50              |                    |
| 50              |                 | LOW       | QPSK       | 17.44      | 17.64 | 17.46 | 18.50              |                    |
|                 |                 | MID       | QPSK       | 17.99      | 17.84 | 17.86 | 18.50              |                    |
|                 |                 | HIGH      | QPSK       | 17.48      | 17.54 | 17.62 | 18.50              |                    |
| 100             |                 | LOW       | QPSK       | 17.60      | 17.56 | 17.49 | 18.50              |                    |
| 20              |                 | 1         | LOW        | Q16        | 17.68 | 17.63 | 17.77              | 18.50              |
|                 |                 |           | MID        | Q16        | 17.81 | 17.82 | 17.77              | 18.50              |
|                 | HIGH            |           | Q16        | 17.51      | 17.75 | 17.70 | 18.50              |                    |
|                 | 50              | LOW       | Q16        | 17.60      | 17.04 | 17.13 | 18.50              |                    |
|                 |                 | MID       | Q16        | 17.27      | 17.53 | 17.25 | 18.50              |                    |
|                 |                 | HIGH      | Q16        | 17.13      | 16.91 | 17.26 | 18.50              |                    |
|                 | 100             | LOW       | Q16        | 17.21      | 17.02 | 17.08 | 18.50              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 17.39 | 17.14 | 17.27              | 18.50              |
|                 |                 |           | MID        | 64QAM      | 17.49 | 17.05 | 17.38              | 18.50              |
| HIGH            |                 |           | 64QAM      | 17.24      | 17.10 | 17.34 | 18.50              |                    |
| 50              |                 | LOW       | 64QAM      | 17.40      | 17.03 | 17.43 | 18.50              |                    |
|                 |                 | MID       | 64QAM      | 17.11      | 17.16 | 17.55 | 18.50              |                    |
|                 |                 | HIGH      | 64QAM      | 16.91      | 16.89 | 17.20 | 18.50              |                    |
| 100             |                 | LOW       | 64QAM      | 17.64      | 16.93 | 17.40 | 18.50              |                    |

| LTE B7-State 6 -Ant.4 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 17.71 | 17.57 | 17.65 | 18.50              |
|                       |         | MID       | QPSK       | 17.80 | 17.78 | 17.57 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.66 | 17.68 | 17.47 | 18.50              |
|                       | 12      | LOW       | QPSK       | 17.34 | 17.59 | 17.32 | 18.50              |
|                       |         | MID       | QPSK       | 17.85 | 17.75 | 17.77 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.41 | 17.50 | 17.50 | 18.50              |
|                       | 25      | LOW       | QPSK       | 17.69 | 17.37 | 17.30 | 18.50              |
| 5                     | 1       | LOW       | Q16        | 17.75 | 17.51 | 17.82 | 18.50              |
|                       |         | MID       | Q16        | 17.72 | 17.80 | 17.82 | 18.50              |
|                       |         | HIGH      | Q16        | 17.49 | 17.59 | 17.63 | 18.50              |
|                       | 12      | LOW       | Q16        | 17.58 | 16.90 | 17.04 | 18.50              |
|                       |         | MID       | Q16        | 17.24 | 17.34 | 17.34 | 18.50              |
|                       |         | HIGH      | Q16        | 17.01 | 16.74 | 17.31 | 18.50              |
|                       | 25      | LOW       | Q16        | 17.04 | 16.92 | 17.10 | 18.50              |
| 5                     | 1       | LOW       | 64QAM      | 17.37 | 17.12 | 17.18 | 18.50              |
|                       |         | MID       | 64QAM      | 17.30 | 17.03 | 17.29 | 18.50              |
|                       |         | HIGH      | 64QAM      | 17.07 | 17.19 | 17.29 | 18.50              |
|                       | 12      | LOW       | 64QAM      | 17.37 | 17.01 | 17.45 | 18.50              |
|                       |         | MID       | 64QAM      | 16.94 | 17.09 | 17.41 | 18.50              |
|                       |         | HIGH      | 64QAM      | 16.79 | 16.87 | 17.01 | 18.50              |
|                       | 25      | LOW       | 64QAM      | 17.48 | 16.78 | 17.49 | 18.50              |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 17.66 | 17.75 | 17.65 | 18.50              |
|                       |         | MID       | QPSK       | 17.84 | 17.66 | 17.68 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.61 | 17.63 | 17.57 | 18.50              |
|                       | 25      | LOW       | QPSK       | 17.34 | 17.69 | 17.34 | 18.50              |
|                       |         | MID       | QPSK       | 18.03 | 17.82 | 17.75 | 18.50              |
|                       |         | HIGH      | QPSK       | 17.39 | 17.35 | 17.57 | 18.50              |
| 10                    | 50      | LOW       | QPSK       | 17.46 | 17.54 | 17.54 | 18.50              |
|                       | 1       | LOW       | Q16        | 17.68 | 17.49 | 17.70 | 18.50              |
|                       |         | MID       | Q16        | 17.86 | 17.78 | 17.79 | 18.50              |
|                       |         | HIGH      | Q16        | 17.56 | 17.55 | 17.58 | 18.50              |
|                       | 25      | LOW       | Q16        | 17.58 | 16.97 | 17.11 | 18.50              |
|                       |         | MID       | Q16        | 17.34 | 17.51 | 17.25 | 18.50              |
|                       |         | HIGH      | Q16        | 16.98 | 16.77 | 17.28 | 18.50              |
|                       | 50      | LOW       | Q16        | 17.18 | 16.99 | 17.06 | 18.50              |
| 10                    | 1       | LOW       | 64QAM      | 17.37 | 17.16 | 17.08 | 18.50              |
|                       |         | MID       | 64QAM      | 17.49 | 16.95 | 17.41 | 18.50              |
|                       |         | HIGH      | 64QAM      | 17.33 | 16.96 | 17.27 | 18.50              |
|                       | 25      | LOW       | 64QAM      | 17.43 | 16.93 | 17.26 | 18.50              |
|                       |         | MID       | 64QAM      | 17.06 | 17.01 | 17.64 | 18.50              |
|                       |         | HIGH      | 64QAM      | 16.91 | 16.92 | 17.22 | 18.50              |
|                       | 50      | LOW       | 64QAM      | 17.59 | 16.74 | 17.24 | 18.50              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |       |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| 15              | 1       | LOW       | QPSK       | 17.78 | 17.61 | 17.69 | 18.50              |       |
|                 |         | MID       | QPSK       | 17.79 | 17.73 | 17.70 | 18.50              |       |
|                 |         | HIGH      | QPSK       | 17.68 | 17.56 | 17.50 | 18.50              |       |
|                 | 36      | LOW       | QPSK       | 17.44 | 17.60 | 17.37 | 18.50              |       |
|                 |         | MID       | QPSK       | 17.88 | 17.70 | 17.88 | 18.50              |       |
|                 |         | HIGH      | QPSK       | 17.57 | 17.43 | 17.69 | 18.50              |       |
|                 | 75      | LOW       | QPSK       | 17.60 | 17.49 | 17.47 | 18.50              |       |
|                 |         | 1         | LOW        | Q16   | 17.61 | 17.59 | 17.72              | 18.50 |
|                 |         |           | MID        | Q16   | 17.85 | 17.84 | 17.79              | 18.50 |
| HIGH            | Q16     |           | 17.37      | 17.84 | 17.75 | 18.50 |                    |       |
| 15              | 36      | LOW       | Q16        | 17.67 | 16.87 | 16.96 | 18.50              |       |
|                 |         | MID       | Q16        | 17.25 | 17.51 | 17.32 | 18.50              |       |
|                 |         | HIGH      | Q16        | 16.96 | 16.88 | 17.33 | 18.50              |       |
|                 | 75      | LOW       | Q16        | 17.26 | 17.09 | 17.08 | 18.50              |       |
|                 |         | 1         | LOW        | 64QAM | 17.22 | 17.17 | 17.20              | 18.50 |
|                 |         |           | MID        | 64QAM | 17.44 | 16.93 | 17.38              | 18.50 |
|                 | HIGH    |           | 64QAM      | 17.27 | 17.19 | 17.43 | 18.50              |       |
|                 | 36      | LOW       | 64QAM      | 17.30 | 16.93 | 17.29 | 18.50              |       |
|                 |         | MID       | 64QAM      | 17.01 | 17.06 | 17.62 | 18.50              |       |
| HIGH            |         | 64QAM     | 16.93      | 16.87 | 17.06 | 18.50 |                    |       |
| 75              | LOW     | 64QAM     | 17.48      | 16.83 | 17.38 | 18.50 |                    |       |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |       |
| 20              | 1       | LOW       | QPSK       | 17.71 | 17.77 | 17.60 | 18.50              |       |
|                 |         | MID       | QPSK       | 17.93 | 17.80 | 17.68 | 18.50              |       |
|                 |         | HIGH      | QPSK       | 17.75 | 17.68 | 17.59 | 18.50              |       |
|                 | 50      | LOW       | QPSK       | 17.44 | 17.64 | 17.46 | 18.50              |       |
|                 |         | MID       | QPSK       | 17.99 | 17.84 | 17.86 | 18.50              |       |
|                 |         | HIGH      | QPSK       | 17.48 | 17.54 | 17.62 | 18.50              |       |
|                 | 100     | LOW       | QPSK       | 17.60 | 17.56 | 17.49 | 18.50              |       |
|                 |         | 1         | LOW        | Q16   | 17.68 | 17.63 | 17.77              | 18.50 |
|                 |         |           | MID        | Q16   | 17.81 | 17.82 | 17.77              | 18.50 |
| HIGH            | Q16     |           | 17.51      | 17.75 | 17.70 | 18.50 |                    |       |
| 20              | 50      | LOW       | Q16        | 17.60 | 17.04 | 17.13 | 18.50              |       |
|                 |         | MID       | Q16        | 17.27 | 17.53 | 17.25 | 18.50              |       |
|                 |         | HIGH      | Q16        | 17.13 | 16.91 | 17.26 | 18.50              |       |
|                 | 100     | LOW       | Q16        | 17.21 | 17.02 | 17.08 | 18.50              |       |
|                 |         | 1         | LOW        | 64QAM | 17.39 | 17.14 | 17.27              | 18.50 |
|                 |         |           | MID        | 64QAM | 17.49 | 17.05 | 17.38              | 18.50 |
|                 | HIGH    |           | 64QAM      | 17.24 | 17.10 | 17.34 | 18.50              |       |
|                 | 50      | LOW       | 64QAM      | 17.40 | 17.03 | 17.43 | 18.50              |       |
|                 |         | MID       | 64QAM      | 17.11 | 17.16 | 17.55 | 18.50              |       |
| HIGH            |         | 64QAM     | 16.91      | 16.89 | 17.20 | 18.50 |                    |       |
| 100             | LOW     | 64QAM     | 17.64      | 16.93 | 17.40 | 18.50 |                    |       |

| LTE B7-State 1 -Ant.4(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 19.37 | 19.13 | 19.34 | 19.80              |
|                            |         | MID       | QPSK       | 19.36 | 19.29 | 19.15 | 19.80              |
|                            |         | HIGH      | QPSK       | 19.31 | 19.10 | 18.96 | 19.80              |
|                            | 12      | LOW       | QPSK       | 19.15 | 19.09 | 19.22 | 19.80              |
|                            |         | MID       | QPSK       | 19.02 | 19.43 | 19.30 | 19.80              |
|                            |         | HIGH      | QPSK       | 19.21 | 18.92 | 19.00 | 19.80              |
|                            | 25      | LOW       | QPSK       | 19.09 | 19.11 | 19.17 | 19.80              |
| 5                          | 1       | LOW       | Q16        | 19.20 | 19.09 | 18.84 | 19.80              |
|                            |         | MID       | Q16        | 19.01 | 19.23 | 19.07 | 19.80              |
|                            |         | HIGH      | Q16        | 19.05 | 19.09 | 18.86 | 19.80              |
|                            | 12      | LOW       | Q16        | 19.46 | 19.50 | 18.87 | 19.80              |
|                            |         | MID       | Q16        | 19.15 | 19.16 | 19.25 | 19.80              |
|                            |         | HIGH      | Q16        | 19.38 | 19.14 | 19.06 | 19.80              |
|                            | 25      | LOW       | Q16        | 19.40 | 19.38 | 18.97 | 19.80              |
| 5                          | 1       | LOW       | 64QAM      | 18.90 | 19.24 | 18.99 | 19.80              |
|                            |         | MID       | 64QAM      | 19.21 | 19.03 | 18.87 | 19.80              |
|                            |         | HIGH      | 64QAM      | 19.30 | 19.15 | 19.22 | 19.80              |
|                            | 12      | LOW       | 64QAM      | 18.58 | 18.59 | 17.77 | 19.30              |
|                            |         | MID       | 64QAM      | 18.24 | 18.31 | 17.98 | 19.30              |
|                            |         | HIGH      | 64QAM      | 18.20 | 18.13 | 18.14 | 19.30              |
|                            | 25      | LOW       | 64QAM      | 18.20 | 18.13 | 18.21 | 19.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 19.33 | 19.17 | 19.20 | 19.80              |
|                            |         | MID       | QPSK       | 19.38 | 19.47 | 19.16 | 19.80              |
|                            |         | HIGH      | QPSK       | 19.23 | 19.14 | 19.25 | 19.80              |
|                            | 25      | LOW       | QPSK       | 18.94 | 19.32 | 19.14 | 19.80              |
|                            |         | MID       | QPSK       | 19.07 | 19.20 | 19.24 | 19.80              |
|                            |         | HIGH      | QPSK       | 19.05 | 19.07 | 19.21 | 19.80              |
| 10                         | 1       | LOW       | Q16        | 19.18 | 19.34 | 19.30 | 19.80              |
|                            |         | LOW       | Q16        | 19.28 | 19.09 | 18.99 | 19.80              |
|                            |         | MID       | Q16        | 18.99 | 19.29 | 19.26 | 19.80              |
|                            | 25      | HIGH      | Q16        | 19.14 | 18.84 | 18.96 | 19.80              |
|                            |         | LOW       | Q16        | 19.28 | 19.54 | 18.76 | 19.80              |
|                            |         | MID       | Q16        | 19.38 | 19.05 | 19.15 | 19.80              |
|                            | 50      | HIGH      | Q16        | 19.42 | 19.05 | 19.08 | 19.80              |
|                            |         | LOW       | Q16        | 19.30 | 19.38 | 18.99 | 19.80              |
| 10                         |         | 1         | LOW        | 64QAM | 18.90 | 19.30 | 19.12              |
|                            | MID     |           | 64QAM      | 19.21 | 19.22 | 18.91 | 19.80              |
|                            | HIGH    |           | 64QAM      | 19.30 | 19.20 | 19.24 | 19.80              |
|                            | 25      | LOW       | 64QAM      | 18.37 | 18.32 | 17.81 | 19.30              |
|                            |         | MID       | 64QAM      | 18.46 | 18.24 | 18.18 | 19.30              |
|                            |         | HIGH      | 64QAM      | 18.25 | 18.38 | 17.98 | 19.30              |
|                            | 50      | LOW       | 64QAM      | 18.20 | 18.21 | 18.37 | 19.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 19.27 | 19.21 | 19.22 | 19.80              |
|                 |         | MID       | QPSK       | 19.28 | 19.27 | 19.38 | 19.80              |
|                 |         | HIGH      | QPSK       | 19.10 | 19.31 | 19.15 | 19.80              |
|                 | 36      | LOW       | QPSK       | 19.13 | 19.11 | 19.05 | 19.80              |
|                 |         | MID       | QPSK       | 19.25 | 19.39 | 19.28 | 19.80              |
|                 |         | HIGH      | QPSK       | 19.15 | 19.09 | 18.98 | 19.80              |
|                 | 75      | LOW       | QPSK       | 19.26 | 19.20 | 19.38 | 19.80              |
| 15              | 1       | LOW       | Q16        | 19.20 | 19.20 | 18.84 | 19.80              |
|                 |         | MID       | Q16        | 19.22 | 19.21 | 19.28 | 19.80              |
|                 |         | HIGH      | Q16        | 19.12 | 18.90 | 18.92 | 19.80              |
|                 | 36      | LOW       | Q16        | 19.21 | 19.46 | 18.64 | 19.80              |
|                 |         | MID       | Q16        | 19.30 | 18.99 | 19.21 | 19.80              |
|                 |         | HIGH      | Q16        | 19.32 | 19.20 | 19.14 | 19.80              |
|                 | 75      | LOW       | Q16        | 19.46 | 19.32 | 18.93 | 19.80              |
| 15              | 1       | LOW       | 64QAM      | 18.91 | 19.21 | 19.24 | 19.80              |
|                 |         | MID       | 64QAM      | 19.46 | 19.03 | 18.98 | 19.80              |
|                 |         | HIGH      | 64QAM      | 19.27 | 19.22 | 19.30 | 19.80              |
|                 | 36      | LOW       | 64QAM      | 18.33 | 18.46 | 17.97 | 19.30              |
|                 |         | MID       | 64QAM      | 18.21 | 18.11 | 18.03 | 19.30              |
|                 |         | HIGH      | 64QAM      | 18.31 | 18.20 | 17.96 | 19.30              |
|                 | 75      | LOW       | 64QAM      | 18.18 | 18.10 | 18.21 | 19.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 19.31 | 19.21 | 19.24 | 19.80              |
|                 |         | MID       | QPSK       | 19.38 | 19.41 | 19.30 | 19.80              |
|                 |         | HIGH      | QPSK       | 19.23 | 19.27 | 19.17 | 19.80              |
|                 | 50      | LOW       | QPSK       | 19.11 | 19.28 | 19.18 | 19.80              |
|                 |         | MID       | QPSK       | 19.19 | 19.35 | 19.24 | 19.80              |
|                 |         | HIGH      | QPSK       | 19.17 | 19.03 | 19.19 | 19.80              |
| 20              | 100     | LOW       | QPSK       | 19.26 | 19.32 | 19.32 | 19.80              |
|                 |         | LOW       | Q16        | 19.30 | 19.28 | 19.01 | 19.80              |
|                 |         | MID       | Q16        | 19.20 | 19.21 | 19.20 | 19.80              |
|                 | 50      | HIGH      | Q16        | 19.20 | 19.05 | 19.07 | 19.80              |
|                 |         | LOW       | Q16        | 19.38 | 19.46 | 18.85 | 19.80              |
|                 |         | MID       | Q16        | 19.32 | 19.20 | 19.19 | 19.80              |
| 20              | 100     | HIGH      | Q16        | 19.36 | 19.16 | 19.14 | 19.80              |
|                 |         | LOW       | Q16        | 19.42 | 19.48 | 19.14 | 19.80              |
|                 |         | LOW       | 64QAM      | 18.99 | 19.38 | 19.14 | 19.80              |
|                 | 1       | MID       | 64QAM      | 19.40 | 19.22 | 19.08 | 19.80              |
|                 |         | HIGH      | 64QAM      | 19.48 | 19.30 | 19.26 | 19.80              |
|                 |         | LOW       | 64QAM      | 18.52 | 18.52 | 17.95 | 19.30              |
| 50              | MID     | 64QAM     | 18.39      | 18.31 | 18.16 | 19.30 |                    |
|                 | HIGH    | 64QAM     | 18.29      | 18.31 | 18.16 | 19.30 |                    |
|                 | 100     | LOW       | 64QAM      | 18.31 | 18.28 | 18.39 | 19.30              |

| LTE B7-State 2 -Ant.4(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 17.71 | 17.57 | 17.65 | 18.30              |
|                            |         | MID       | QPSK       | 17.80 | 17.78 | 17.57 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.66 | 17.68 | 17.47 | 18.30              |
|                            | 12      | LOW       | QPSK       | 17.34 | 17.59 | 17.32 | 18.30              |
|                            |         | MID       | QPSK       | 17.85 | 17.75 | 17.77 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.41 | 17.50 | 17.50 | 18.30              |
|                            | 25      | LOW       | QPSK       | 17.69 | 17.37 | 17.30 | 18.30              |
|                            | 5       | LOW       | Q16        | 17.75 | 17.51 | 17.82 | 18.30              |
|                            |         | MID       | Q16        | 17.72 | 17.80 | 17.82 | 18.30              |
|                            |         | HIGH      | Q16        | 17.49 | 17.59 | 17.63 | 18.30              |
|                            |         | LOW       | Q16        | 17.58 | 16.90 | 17.04 | 18.30              |
|                            |         | MID       | Q16        | 17.24 | 17.34 | 17.34 | 18.30              |
|                            |         | HIGH      | Q16        | 17.01 | 16.74 | 17.31 | 18.30              |
|                            | 25      | LOW       | Q16        | 17.04 | 16.92 | 17.10 | 18.30              |
| 5                          | 1       | LOW       | 64QAM      | 17.37 | 17.12 | 17.18 | 18.30              |
|                            |         | MID       | 64QAM      | 17.30 | 17.03 | 17.29 | 18.30              |
|                            |         | HIGH      | 64QAM      | 17.07 | 17.19 | 17.29 | 18.30              |
|                            | 12      | LOW       | 64QAM      | 17.37 | 17.01 | 17.45 | 18.30              |
|                            |         | MID       | 64QAM      | 16.94 | 17.09 | 17.41 | 18.30              |
|                            |         | HIGH      | 64QAM      | 16.79 | 16.87 | 17.01 | 18.30              |
|                            | 25      | LOW       | 64QAM      | 17.48 | 16.78 | 17.49 | 18.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 17.66 | 17.75 | 17.65 | 18.30              |
|                            |         | MID       | QPSK       | 17.84 | 17.66 | 17.68 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.61 | 17.63 | 17.57 | 18.30              |
|                            | 25      | LOW       | QPSK       | 17.34 | 17.69 | 17.34 | 18.30              |
|                            |         | MID       | QPSK       | 18.03 | 17.82 | 17.75 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.39 | 17.35 | 17.57 | 18.30              |
| 10                         | 50      | LOW       | QPSK       | 17.46 | 17.54 | 17.54 | 18.30              |
|                            | 1       | LOW       | Q16        | 17.68 | 17.49 | 17.70 | 18.30              |
|                            |         | MID       | Q16        | 17.86 | 17.78 | 17.79 | 18.30              |
|                            |         | HIGH      | Q16        | 17.56 | 17.55 | 17.58 | 18.30              |
|                            | 25      | LOW       | Q16        | 17.58 | 16.97 | 17.11 | 18.30              |
|                            |         | MID       | Q16        | 17.34 | 17.51 | 17.25 | 18.30              |
|                            |         | HIGH      | Q16        | 16.98 | 16.77 | 17.28 | 18.30              |
|                            | 50      | LOW       | Q16        | 17.18 | 16.99 | 17.06 | 18.30              |
|                            | 10      | LOW       | 64QAM      | 17.37 | 17.16 | 17.08 | 18.30              |
|                            |         | MID       | 64QAM      | 17.49 | 16.95 | 17.41 | 18.30              |
|                            |         | HIGH      | 64QAM      | 17.33 | 16.96 | 17.27 | 18.30              |
|                            |         | LOW       | 64QAM      | 17.43 | 16.93 | 17.26 | 18.30              |
|                            |         | MID       | 64QAM      | 17.06 | 17.01 | 17.64 | 18.30              |
|                            |         | HIGH      | 64QAM      | 16.91 | 16.92 | 17.22 | 18.30              |
|                            | 50      | LOW       | 64QAM      | 17.59 | 16.74 | 17.24 | 18.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 17.78 | 17.61 | 17.69 | 18.30              |
|                 |         | MID       | QPSK       | 17.79 | 17.73 | 17.70 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.68 | 17.56 | 17.50 | 18.30              |
|                 | 36      | LOW       | QPSK       | 17.44 | 17.60 | 17.37 | 18.30              |
|                 |         | MID       | QPSK       | 17.88 | 17.70 | 17.88 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.57 | 17.43 | 17.69 | 18.30              |
|                 | 75      | LOW       | QPSK       | 17.60 | 17.49 | 17.47 | 18.30              |
| 15              | 1       | LOW       | Q16        | 17.61 | 17.59 | 17.72 | 18.30              |
|                 |         | MID       | Q16        | 17.85 | 17.84 | 17.79 | 18.30              |
|                 |         | HIGH      | Q16        | 17.37 | 17.84 | 17.75 | 18.30              |
|                 | 36      | LOW       | Q16        | 17.67 | 16.87 | 16.96 | 18.30              |
|                 |         | MID       | Q16        | 17.25 | 17.51 | 17.32 | 18.30              |
|                 |         | HIGH      | Q16        | 16.96 | 16.88 | 17.33 | 18.30              |
|                 | 75      | LOW       | Q16        | 17.26 | 17.09 | 17.08 | 18.30              |
| 15              | 1       | LOW       | 64QAM      | 17.22 | 17.17 | 17.20 | 18.30              |
|                 |         | MID       | 64QAM      | 17.44 | 16.93 | 17.38 | 18.30              |
|                 |         | HIGH      | 64QAM      | 17.27 | 17.19 | 17.43 | 18.30              |
|                 | 36      | LOW       | 64QAM      | 17.30 | 16.93 | 17.29 | 18.30              |
|                 |         | MID       | 64QAM      | 17.01 | 17.06 | 17.62 | 18.30              |
|                 |         | HIGH      | 64QAM      | 16.93 | 16.87 | 17.06 | 18.30              |
|                 | 75      | LOW       | 64QAM      | 17.48 | 16.83 | 17.38 | 18.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 17.71 | 17.77 | 17.60 | 18.30              |
|                 |         | MID       | QPSK       | 17.93 | 17.80 | 17.68 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.75 | 17.68 | 17.59 | 18.30              |
|                 | 50      | LOW       | QPSK       | 17.44 | 17.64 | 17.46 | 18.30              |
|                 |         | MID       | QPSK       | 17.99 | 17.84 | 17.86 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.48 | 17.54 | 17.62 | 18.30              |
| 20              | 100     | LOW       | QPSK       | 17.60 | 17.56 | 17.49 | 18.30              |
|                 |         | LOW       | Q16        | 17.68 | 17.63 | 17.77 | 18.30              |
|                 |         | MID       | Q16        | 17.81 | 17.82 | 17.77 | 18.30              |
|                 | 50      | HIGH      | Q16        | 17.51 | 17.75 | 17.70 | 18.30              |
|                 |         | LOW       | Q16        | 17.60 | 17.04 | 17.13 | 18.30              |
|                 |         | MID       | Q16        | 17.27 | 17.53 | 17.25 | 18.30              |
| 20              | 1       | HIGH      | Q16        | 17.13 | 16.91 | 17.26 | 18.30              |
|                 |         | LOW       | Q16        | 17.21 | 17.02 | 17.08 | 18.30              |
|                 |         | LOW       | 64QAM      | 17.39 | 17.14 | 17.27 | 18.30              |
|                 | 50      | MID       | 64QAM      | 17.49 | 17.05 | 17.38 | 18.30              |
|                 |         | HIGH      | 64QAM      | 17.24 | 17.10 | 17.34 | 18.30              |
|                 |         | LOW       | 64QAM      | 17.40 | 17.03 | 17.43 | 18.30              |
| 100             | MID     | 64QAM     | 17.11      | 17.16 | 17.55 | 18.30 |                    |
|                 | HIGH    | 64QAM     | 16.91      | 16.89 | 17.20 | 18.30 |                    |
|                 | LOW     | 64QAM     | 17.64      | 16.93 | 17.40 | 18.30 |                    |

| LTE B7-State 3 -Ant.4(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 17.71 | 17.57 | 17.65 | 18.30              |
|                            |         | MID       | QPSK       | 17.80 | 17.78 | 17.57 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.66 | 17.68 | 17.47 | 18.30              |
|                            | 12      | LOW       | QPSK       | 17.34 | 17.59 | 17.32 | 18.30              |
|                            |         | MID       | QPSK       | 17.85 | 17.75 | 17.77 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.41 | 17.50 | 17.50 | 18.30              |
|                            | 25      | LOW       | QPSK       | 17.69 | 17.37 | 17.30 | 18.30              |
|                            | 5       | LOW       | Q16        | 17.75 | 17.51 | 17.82 | 18.30              |
|                            |         | MID       | Q16        | 17.72 | 17.80 | 17.82 | 18.30              |
|                            |         | HIGH      | Q16        | 17.49 | 17.59 | 17.63 | 18.30              |
|                            |         | LOW       | Q16        | 17.58 | 16.90 | 17.04 | 18.30              |
|                            |         | MID       | Q16        | 17.24 | 17.34 | 17.34 | 18.30              |
|                            |         | HIGH      | Q16        | 17.01 | 16.74 | 17.31 | 18.30              |
|                            | 25      | LOW       | Q16        | 17.04 | 16.92 | 17.10 | 18.30              |
| 5                          | 1       | LOW       | 64QAM      | 17.37 | 17.12 | 17.18 | 18.30              |
|                            |         | MID       | 64QAM      | 17.30 | 17.03 | 17.29 | 18.30              |
|                            |         | HIGH      | 64QAM      | 17.07 | 17.19 | 17.29 | 18.30              |
|                            | 12      | LOW       | 64QAM      | 17.37 | 17.01 | 17.45 | 18.30              |
|                            |         | MID       | 64QAM      | 16.94 | 17.09 | 17.41 | 18.30              |
|                            |         | HIGH      | 64QAM      | 16.79 | 16.87 | 17.01 | 18.30              |
|                            | 25      | LOW       | 64QAM      | 17.48 | 16.78 | 17.49 | 18.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 17.66 | 17.75 | 17.65 | 18.30              |
|                            |         | MID       | QPSK       | 17.84 | 17.66 | 17.68 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.61 | 17.63 | 17.57 | 18.30              |
|                            | 25      | LOW       | QPSK       | 17.34 | 17.69 | 17.34 | 18.30              |
|                            |         | MID       | QPSK       | 18.03 | 17.82 | 17.75 | 18.30              |
|                            |         | HIGH      | QPSK       | 17.39 | 17.35 | 17.57 | 18.30              |
| 10                         | 50      | LOW       | QPSK       | 17.46 | 17.54 | 17.54 | 18.30              |
|                            | 1       | LOW       | Q16        | 17.68 | 17.49 | 17.70 | 18.30              |
|                            |         | MID       | Q16        | 17.86 | 17.78 | 17.79 | 18.30              |
|                            |         | HIGH      | Q16        | 17.56 | 17.55 | 17.58 | 18.30              |
|                            | 25      | LOW       | Q16        | 17.58 | 16.97 | 17.11 | 18.30              |
|                            |         | MID       | Q16        | 17.34 | 17.51 | 17.25 | 18.30              |
|                            |         | HIGH      | Q16        | 16.98 | 16.77 | 17.28 | 18.30              |
|                            | 50      | LOW       | Q16        | 17.18 | 16.99 | 17.06 | 18.30              |
|                            | 10      | LOW       | 64QAM      | 17.37 | 17.16 | 17.08 | 18.30              |
|                            |         | MID       | 64QAM      | 17.49 | 16.95 | 17.41 | 18.30              |
|                            |         | HIGH      | 64QAM      | 17.33 | 16.96 | 17.27 | 18.30              |
|                            |         | LOW       | 64QAM      | 17.43 | 16.93 | 17.26 | 18.30              |
|                            |         | MID       | 64QAM      | 17.06 | 17.01 | 17.64 | 18.30              |
|                            |         | HIGH      | 64QAM      | 16.91 | 16.92 | 17.22 | 18.30              |
|                            | 50      | LOW       | 64QAM      | 17.59 | 16.74 | 17.24 | 18.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 17.78 | 17.61 | 17.69 | 18.30              |
|                 |         | MID       | QPSK       | 17.79 | 17.73 | 17.70 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.68 | 17.56 | 17.50 | 18.30              |
|                 | 36      | LOW       | QPSK       | 17.44 | 17.60 | 17.37 | 18.30              |
|                 |         | MID       | QPSK       | 17.88 | 17.70 | 17.88 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.57 | 17.43 | 17.69 | 18.30              |
|                 | 75      | LOW       | QPSK       | 17.60 | 17.49 | 17.47 | 18.30              |
| 15              | 1       | LOW       | Q16        | 17.61 | 17.59 | 17.72 | 18.30              |
|                 |         | MID       | Q16        | 17.85 | 17.84 | 17.79 | 18.30              |
|                 |         | HIGH      | Q16        | 17.37 | 17.84 | 17.75 | 18.30              |
|                 | 36      | LOW       | Q16        | 17.67 | 16.87 | 16.96 | 18.30              |
|                 |         | MID       | Q16        | 17.25 | 17.51 | 17.32 | 18.30              |
|                 |         | HIGH      | Q16        | 16.96 | 16.88 | 17.33 | 18.30              |
|                 | 75      | LOW       | Q16        | 17.26 | 17.09 | 17.08 | 18.30              |
| 15              | 1       | LOW       | 64QAM      | 17.22 | 17.17 | 17.20 | 18.30              |
|                 |         | MID       | 64QAM      | 17.44 | 16.93 | 17.38 | 18.30              |
|                 |         | HIGH      | 64QAM      | 17.27 | 17.19 | 17.43 | 18.30              |
|                 | 36      | LOW       | 64QAM      | 17.30 | 16.93 | 17.29 | 18.30              |
|                 |         | MID       | 64QAM      | 17.01 | 17.06 | 17.62 | 18.30              |
|                 |         | HIGH      | 64QAM      | 16.93 | 16.87 | 17.06 | 18.30              |
|                 | 75      | LOW       | 64QAM      | 17.48 | 16.83 | 17.38 | 18.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 17.71 | 17.77 | 17.60 | 18.30              |
|                 |         | MID       | QPSK       | 17.93 | 17.80 | 17.68 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.75 | 17.68 | 17.59 | 18.30              |
|                 | 50      | LOW       | QPSK       | 17.44 | 17.64 | 17.46 | 18.30              |
|                 |         | MID       | QPSK       | 17.99 | 17.84 | 17.86 | 18.30              |
|                 |         | HIGH      | QPSK       | 17.48 | 17.54 | 17.62 | 18.30              |
| 20              | 100     | LOW       | QPSK       | 17.60 | 17.56 | 17.49 | 18.30              |
|                 |         | LOW       | Q16        | 17.68 | 17.63 | 17.77 | 18.30              |
|                 |         | MID       | Q16        | 17.81 | 17.82 | 17.77 | 18.30              |
|                 | 50      | HIGH      | Q16        | 17.51 | 17.75 | 17.70 | 18.30              |
|                 |         | LOW       | Q16        | 17.60 | 17.04 | 17.13 | 18.30              |
|                 |         | MID       | Q16        | 17.27 | 17.53 | 17.25 | 18.30              |
| 20              | 1       | HIGH      | Q16        | 17.13 | 16.91 | 17.26 | 18.30              |
|                 |         | LOW       | Q16        | 17.21 | 17.02 | 17.08 | 18.30              |
|                 |         | LOW       | 64QAM      | 17.39 | 17.14 | 17.27 | 18.30              |
|                 | 50      | MID       | 64QAM      | 17.49 | 17.05 | 17.38 | 18.30              |
|                 |         | HIGH      | 64QAM      | 17.24 | 17.10 | 17.34 | 18.30              |
|                 |         | LOW       | 64QAM      | 17.40 | 17.03 | 17.43 | 18.30              |
| 100             | MID     | 64QAM     | 17.11      | 17.16 | 17.55 | 18.30 |                    |
|                 | HIGH    | 64QAM     | 16.91      | 16.89 | 17.20 | 18.30 |                    |
|                 | LOW     | 64QAM     | 17.64      | 16.93 | 17.40 | 18.30 |                    |

| LTE B7-State 4 -Ant.4(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 16.76 | 16.86 | 16.70 | 17.30              |
|                            |         | MID       | QPSK       | 16.79 | 16.83 | 16.63 | 17.30              |
|                            |         | HIGH      | QPSK       | 16.68 | 16.80 | 16.46 | 17.30              |
|                            | 12      | LOW       | QPSK       | 16.19 | 16.57 | 16.33 | 17.30              |
|                            |         | MID       | QPSK       | 16.91 | 16.88 | 16.95 | 17.30              |
|                            |         | HIGH      | QPSK       | 16.23 | 16.49 | 16.47 | 17.30              |
|                            | 25      | LOW       | QPSK       | 16.45 | 16.31 | 16.51 | 17.30              |
|                            | 5       | LOW       | Q16        | 16.78 | 16.34 | 16.87 | 17.30              |
|                            |         | MID       | Q16        | 16.51 | 16.80 | 16.65 | 17.30              |
|                            |         | HIGH      | Q16        | 16.57 | 16.64 | 16.74 | 17.30              |
|                            |         | LOW       | Q16        | 16.44 | 15.85 | 16.00 | 17.30              |
|                            |         | MID       | Q16        | 16.24 | 16.34 | 16.03 | 17.30              |
|                            |         | HIGH      | Q16        | 16.24 | 15.78 | 16.30 | 17.30              |
|                            | 25      | LOW       | Q16        | 16.36 | 16.01 | 15.88 | 17.30              |
| 5                          | 1       | LOW       | 64QAM      | 16.32 | 15.87 | 16.27 | 17.30              |
|                            |         | MID       | 64QAM      | 16.46 | 16.14 | 16.28 | 17.30              |
|                            |         | HIGH      | 64QAM      | 16.00 | 16.04 | 16.35 | 17.30              |
|                            | 12      | LOW       | 64QAM      | 16.38 | 16.11 | 16.13 | 17.30              |
|                            |         | MID       | 64QAM      | 16.00 | 16.21 | 16.45 | 17.30              |
|                            |         | HIGH      | 64QAM      | 15.64 | 15.68 | 16.09 | 17.30              |
|                            | 25      | LOW       | 64QAM      | 16.64 | 15.58 | 16.45 | 17.30              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 16.65 | 16.79 | 16.63 | 17.30              |
|                            |         | MID       | QPSK       | 16.88 | 16.90 | 16.68 | 17.30              |
|                            |         | HIGH      | QPSK       | 16.63 | 16.61 | 16.47 | 17.30              |
|                            | 25      | LOW       | QPSK       | 16.45 | 16.41 | 16.40 | 17.30              |
|                            |         | MID       | QPSK       | 16.89 | 16.78 | 16.78 | 17.30              |
|                            |         | HIGH      | QPSK       | 16.35 | 16.41 | 16.44 | 17.30              |
| 10                         | 50      | LOW       | QPSK       | 16.40 | 16.36 | 16.43 | 17.30              |
|                            | 1       | LOW       | Q16        | 16.60 | 16.43 | 16.82 | 17.30              |
|                            |         | MID       | Q16        | 16.68 | 16.70 | 16.70 | 17.30              |
|                            |         | HIGH      | Q16        | 16.36 | 16.84 | 16.72 | 17.30              |
|                            | 25      | LOW       | Q16        | 16.60 | 15.88 | 15.90 | 17.30              |
|                            |         | MID       | Q16        | 16.22 | 16.25 | 16.16 | 17.30              |
|                            |         | HIGH      | Q16        | 15.98 | 15.80 | 16.14 | 17.30              |
|                            | 50      | LOW       | Q16        | 16.18 | 15.91 | 15.81 | 17.30              |
|                            | 10      | LOW       | 64QAM      | 16.24 | 15.98 | 16.33 | 17.30              |
|                            |         | MID       | 64QAM      | 16.52 | 16.14 | 16.21 | 17.30              |
|                            |         | HIGH      | 64QAM      | 15.90 | 16.01 | 16.44 | 17.30              |
|                            |         | LOW       | 64QAM      | 16.25 | 15.94 | 16.16 | 17.30              |
|                            |         | MID       | 64QAM      | 16.14 | 16.19 | 16.35 | 17.30              |
|                            |         | HIGH      | 64QAM      | 15.81 | 15.87 | 16.03 | 17.30              |
|                            | 50      | LOW       | 64QAM      | 16.48 | 15.77 | 16.29 | 17.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 16.70 | 16.86 | 16.70 | 17.30              |
|                 |         | MID       | QPSK       | 16.96 | 16.73 | 16.58 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.50 | 16.65 | 16.36 | 17.30              |
|                 | 36      | LOW       | QPSK       | 16.32 | 16.59 | 16.45 | 17.30              |
|                 |         | MID       | QPSK       | 16.94 | 16.84 | 16.85 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.23 | 16.42 | 16.40 | 17.30              |
|                 | 75      | LOW       | QPSK       | 16.44 | 16.53 | 16.44 | 17.30              |
| 15              | 1       | LOW       | Q16        | 16.70 | 16.38 | 16.75 | 17.30              |
|                 |         | MID       | Q16        | 16.63 | 16.77 | 16.55 | 17.30              |
|                 |         | HIGH      | Q16        | 16.54 | 16.69 | 16.72 | 17.30              |
|                 | 36      | LOW       | Q16        | 16.52 | 15.78 | 16.00 | 17.30              |
|                 |         | MID       | Q16        | 16.04 | 16.41 | 16.04 | 17.30              |
|                 |         | HIGH      | Q16        | 16.16 | 15.70 | 16.22 | 17.30              |
|                 | 75      | LOW       | Q16        | 16.26 | 16.05 | 15.89 | 17.30              |
| 15              | 1       | LOW       | 64QAM      | 16.39 | 15.96 | 16.38 | 17.30              |
|                 |         | MID       | 64QAM      | 16.34 | 16.01 | 16.28 | 17.30              |
|                 |         | HIGH      | 64QAM      | 15.96 | 16.05 | 16.44 | 17.30              |
|                 | 36      | LOW       | 64QAM      | 16.30 | 15.94 | 16.18 | 17.30              |
|                 |         | MID       | 64QAM      | 16.18 | 16.10 | 16.21 | 17.30              |
|                 |         | HIGH      | 64QAM      | 15.73 | 15.86 | 15.98 | 17.30              |
|                 | 75      | LOW       | 64QAM      | 16.39 | 15.73 | 16.24 | 17.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 16.73 | 16.79 | 16.68 | 17.30              |
|                 |         | MID       | QPSK       | 16.96 | 16.83 | 16.75 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.68 | 16.73 | 16.49 | 17.30              |
|                 | 50      | LOW       | QPSK       | 16.37 | 16.54 | 16.43 | 17.30              |
|                 |         | MID       | QPSK       | 16.96 | 16.81 | 16.88 | 17.30              |
|                 |         | HIGH      | QPSK       | 16.30 | 16.44 | 16.57 | 17.30              |
|                 | 100     | LOW       | QPSK       | 16.52 | 16.46 | 16.46 | 17.30              |
| 20              | 1       | LOW       | Q16        | 16.75 | 16.50 | 16.85 | 17.30              |
|                 |         | MID       | Q16        | 16.63 | 16.72 | 16.62 | 17.30              |
|                 |         | HIGH      | Q16        | 16.54 | 16.77 | 16.72 | 17.30              |
|                 | 50      | LOW       | Q16        | 16.62 | 15.96 | 16.03 | 17.30              |
|                 |         | MID       | Q16        | 16.22 | 16.36 | 16.19 | 17.30              |
|                 |         | HIGH      | Q16        | 16.16 | 15.83 | 16.24 | 17.30              |
|                 | 100     | LOW       | Q16        | 16.29 | 16.07 | 15.94 | 17.30              |
| 20              | 1       | LOW       | 64QAM      | 16.39 | 16.01 | 16.35 | 17.30              |
|                 |         | MID       | 64QAM      | 16.44 | 16.11 | 16.36 | 17.30              |
|                 |         | HIGH      | 64QAM      | 16.06 | 15.99 | 16.42 | 17.30              |
|                 | 50      | LOW       | 64QAM      | 16.30 | 16.08 | 16.31 | 17.30              |
|                 |         | MID       | 64QAM      | 16.16 | 16.16 | 16.37 | 17.30              |
|                 |         | HIGH      | 64QAM      | 15.78 | 15.81 | 16.09 | 17.30              |
|                 | 100     | LOW       | 64QAM      | 16.56 | 15.75 | 16.42 | 17.30              |

| LTE B7-State 5 -Ant.4(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 15.05 | 15.33 | 15.16 | 15.80              |
|                            |         | MID       | QPSK       | 15.32 | 15.24 | 15.08 | 15.80              |
|                            |         | HIGH      | QPSK       | 15.22 | 15.32 | 14.92 | 15.80              |
|                            | 12      | LOW       | QPSK       | 14.97 | 15.05 | 14.88 | 15.80              |
|                            |         | MID       | QPSK       | 15.32 | 15.26 | 15.15 | 15.80              |
|                            |         | HIGH      | QPSK       | 15.02 | 15.03 | 14.95 | 15.80              |
|                            | 25      | LOW       | QPSK       | 14.99 | 15.01 | 14.83 | 15.80              |
|                            | 5       | LOW       | Q16        | 15.03 | 15.01 | 15.20 | 15.80              |
|                            |         | MID       | Q16        | 15.42 | 15.20 | 15.35 | 15.80              |
|                            |         | HIGH      | Q16        | 14.81 | 15.14 | 15.07 | 15.80              |
|                            |         | LOW       | Q16        | 14.87 | 14.67 | 14.77 | 15.80              |
|                            |         | MID       | Q16        | 14.50 | 14.97 | 14.78 | 15.80              |
|                            |         | HIGH      | Q16        | 14.73 | 14.39 | 14.67 | 15.80              |
| 5                          | 1       | LOW       | 64QAM      | 14.80 | 14.51 | 14.52 | 15.80              |
|                            |         | MID       | 64QAM      | 14.94 | 14.42 | 14.69 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.68 | 14.38 | 14.90 | 15.80              |
|                            | 12      | LOW       | 64QAM      | 14.77 | 14.42 | 14.81 | 15.80              |
|                            |         | MID       | 64QAM      | 14.54 | 14.60 | 15.02 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.15 | 14.21 | 14.69 | 15.80              |
|                            | 25      | LOW       | 64QAM      | 14.94 | 14.37 | 14.83 | 15.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 15.16 | 15.18 | 15.01 | 15.80              |
|                            |         | MID       | QPSK       | 15.29 | 15.30 | 15.09 | 15.80              |
|                            |         | HIGH      | QPSK       | 15.05 | 15.18 | 14.97 | 15.80              |
|                            | 25      | LOW       | QPSK       | 15.00 | 15.06 | 14.83 | 15.80              |
|                            |         | MID       | QPSK       | 15.29 | 15.09 | 15.27 | 15.80              |
|                            |         | HIGH      | QPSK       | 14.95 | 14.89 | 14.85 | 15.80              |
| 10                         | 50      | LOW       | QPSK       | 14.86 | 14.85 | 14.93 | 15.80              |
|                            | 1       | LOW       | Q16        | 15.03 | 15.04 | 15.20 | 15.80              |
|                            |         | MID       | Q16        | 15.27 | 15.23 | 15.12 | 15.80              |
|                            |         | HIGH      | Q16        | 14.80 | 15.08 | 15.20 | 15.80              |
|                            | 25      | LOW       | Q16        | 14.89 | 14.46 | 14.54 | 15.80              |
|                            |         | MID       | Q16        | 14.52 | 14.92 | 14.72 | 15.80              |
|                            |         | HIGH      | Q16        | 14.54 | 14.46 | 14.57 | 15.80              |
|                            | 50      | LOW       | Q16        | 14.59 | 14.28 | 14.33 | 15.80              |
| 10                         | 1       | LOW       | 64QAM      | 14.99 | 14.42 | 14.64 | 15.80              |
|                            |         | MID       | 64QAM      | 15.05 | 14.33 | 14.74 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.59 | 14.36 | 14.68 | 15.80              |
|                            | 25      | LOW       | 64QAM      | 14.68 | 14.43 | 14.90 | 15.80              |
|                            |         | MID       | 64QAM      | 14.64 | 14.50 | 14.94 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.27 | 14.11 | 14.76 | 15.80              |
|                            | 50      | LOW       | 64QAM      | 15.02 | 14.36 | 14.80 | 15.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 15.19      | 15.28 | 15.02 | 15.80              |                    |
|                 |                 | MID       | QPSK       | 15.24      | 15.27 | 15.08 | 15.80              |                    |
|                 |                 | HIGH      | QPSK       | 15.02      | 15.34 | 15.05 | 15.80              |                    |
|                 | 36              | LOW       | QPSK       | 14.78      | 14.91 | 14.93 | 15.80              |                    |
|                 |                 | MID       | QPSK       | 15.29      | 15.28 | 15.10 | 15.80              |                    |
|                 |                 | HIGH      | QPSK       | 14.95      | 14.81 | 14.82 | 15.80              |                    |
|                 | 75              | LOW       | QPSK       | 15.02      | 14.90 | 14.78 | 15.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 15.07 | 15.18 | 15.14              | 15.80              |
|                 |                 |           | MID        | Q16        | 15.41 | 15.29 | 15.18              | 15.80              |
| HIGH            |                 |           | Q16        | 14.93      | 15.13 | 15.24 | 15.80              |                    |
| 36              |                 | LOW       | Q16        | 14.92      | 14.51 | 14.67 | 15.80              |                    |
|                 |                 | MID       | Q16        | 14.62      | 14.92 | 14.78 | 15.80              |                    |
|                 |                 | HIGH      | Q16        | 14.74      | 14.46 | 14.70 | 15.80              |                    |
| 75              | LOW             | Q16       | 14.81      | 14.37      | 14.33 | 15.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 14.90      | 14.51 | 14.65 | 15.80              |                    |
|                 |                 | MID       | 64QAM      | 15.04      | 14.52 | 14.77 | 15.80              |                    |
|                 |                 | HIGH      | 64QAM      | 14.52      | 14.51 | 14.76 | 15.80              |                    |
|                 | 36              | LOW       | 64QAM      | 14.81      | 14.50 | 14.80 | 15.80              |                    |
|                 |                 | MID       | 64QAM      | 14.68      | 14.55 | 14.99 | 15.80              |                    |
|                 |                 | HIGH      | 64QAM      | 14.32      | 14.26 | 14.69 | 15.80              |                    |
|                 | 75              | LOW       | 64QAM      | 14.93      | 14.49 | 14.77 | 15.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 15.16 | 15.30 | 15.10              | 15.80              |
| MID             |                 |           | QPSK       | 15.38      | 15.33 | 15.14 | 15.80              |                    |
| HIGH            |                 |           | QPSK       | 15.17      | 15.26 | 14.98 | 15.80              |                    |
| 50              |                 | LOW       | QPSK       | 14.93      | 15.03 | 14.92 | 15.80              |                    |
|                 |                 | MID       | QPSK       | 15.32      | 15.23 | 15.24 | 15.80              |                    |
|                 |                 | HIGH      | QPSK       | 14.99      | 14.96 | 14.95 | 15.80              |                    |
| 100             | LOW             | QPSK      | 14.96      | 14.94      | 14.90 | 15.80 |                    |                    |
| 20              | 1               | LOW       | Q16        | 15.18      | 15.10 | 15.22 | 15.80              |                    |
|                 |                 | MID       | Q16        | 15.36      | 15.23 | 15.29 | 15.80              |                    |
|                 |                 | HIGH      | Q16        | 14.87      | 15.08 | 15.18 | 15.80              |                    |
|                 | 50              | LOW       | Q16        | 14.99      | 14.61 | 14.70 | 15.80              |                    |
|                 |                 | MID       | Q16        | 14.65      | 15.09 | 14.82 | 15.80              |                    |
|                 |                 | HIGH      | Q16        | 14.67      | 14.40 | 14.70 | 15.80              |                    |
| 100             | LOW             | Q16       | 14.75      | 14.37      | 14.43 | 15.80 |                    |                    |
| 20              | 1               | LOW       | 64QAM      | 14.96      | 14.52 | 14.68 | 15.80              |                    |
|                 |                 | MID       | 64QAM      | 15.02      | 14.49 | 14.73 | 15.80              |                    |
|                 |                 | HIGH      | 64QAM      | 14.62      | 14.51 | 14.83 | 15.80              |                    |
|                 | 50              | LOW       | 64QAM      | 14.84      | 14.43 | 14.93 | 15.80              |                    |
|                 |                 | MID       | 64QAM      | 14.61      | 14.56 | 15.05 | 15.80              |                    |
|                 |                 | HIGH      | 64QAM      | 14.28      | 14.25 | 14.69 | 15.80              |                    |
|                 | 100             | LOW       | 64QAM      | 15.02      | 14.50 | 14.80 | 15.80              |                    |

| LTE B7-State 6 -Ant.4(NSA) |         |           |            |       |       |       |                    |
|----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20775 | 21100 | 21425 | Tune-up power(dBm) |
| 5                          | 1       | LOW       | QPSK       | 15.05 | 15.33 | 15.16 | 15.80              |
|                            |         | MID       | QPSK       | 15.32 | 15.24 | 15.08 | 15.80              |
|                            |         | HIGH      | QPSK       | 15.22 | 15.32 | 14.92 | 15.80              |
|                            | 12      | LOW       | QPSK       | 14.97 | 15.05 | 14.88 | 15.80              |
|                            |         | MID       | QPSK       | 15.32 | 15.26 | 15.15 | 15.80              |
|                            |         | HIGH      | QPSK       | 15.02 | 15.03 | 14.95 | 15.80              |
|                            | 25      | LOW       | QPSK       | 14.99 | 15.01 | 14.83 | 15.80              |
|                            | 5       | LOW       | Q16        | 15.03 | 15.01 | 15.20 | 15.80              |
|                            |         | MID       | Q16        | 15.42 | 15.20 | 15.35 | 15.80              |
|                            |         | HIGH      | Q16        | 14.81 | 15.14 | 15.07 | 15.80              |
|                            |         | LOW       | Q16        | 14.87 | 14.67 | 14.77 | 15.80              |
|                            |         | MID       | Q16        | 14.50 | 14.97 | 14.78 | 15.80              |
|                            |         | HIGH      | Q16        | 14.73 | 14.39 | 14.67 | 15.80              |
|                            | 25      | LOW       | Q16        | 14.59 | 14.26 | 14.29 | 15.80              |
| 5                          | 1       | LOW       | 64QAM      | 14.80 | 14.51 | 14.52 | 15.80              |
|                            |         | MID       | 64QAM      | 14.94 | 14.42 | 14.69 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.68 | 14.38 | 14.90 | 15.80              |
|                            | 12      | LOW       | 64QAM      | 14.77 | 14.42 | 14.81 | 15.80              |
|                            |         | MID       | 64QAM      | 14.54 | 14.60 | 15.02 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.15 | 14.21 | 14.69 | 15.80              |
|                            | 25      | LOW       | 64QAM      | 14.94 | 14.37 | 14.83 | 15.80              |
| Bandwidth (MHz)            | RB Size | RB offset | Modulation | 20800 | 21100 | 21400 | Tune-up power(dBm) |
| 10                         | 1       | LOW       | QPSK       | 15.16 | 15.18 | 15.01 | 15.80              |
|                            |         | MID       | QPSK       | 15.29 | 15.30 | 15.09 | 15.80              |
|                            |         | HIGH      | QPSK       | 15.05 | 15.18 | 14.97 | 15.80              |
|                            | 25      | LOW       | QPSK       | 15.00 | 15.06 | 14.83 | 15.80              |
|                            |         | MID       | QPSK       | 15.29 | 15.09 | 15.27 | 15.80              |
|                            |         | HIGH      | QPSK       | 14.95 | 14.89 | 14.85 | 15.80              |
| 10                         | 50      | LOW       | QPSK       | 14.86 | 14.85 | 14.93 | 15.80              |
|                            | 1       | LOW       | Q16        | 15.03 | 15.04 | 15.20 | 15.80              |
|                            |         | MID       | Q16        | 15.27 | 15.23 | 15.12 | 15.80              |
|                            |         | HIGH      | Q16        | 14.80 | 15.08 | 15.20 | 15.80              |
|                            | 25      | LOW       | Q16        | 14.89 | 14.46 | 14.54 | 15.80              |
|                            |         | MID       | Q16        | 14.52 | 14.92 | 14.72 | 15.80              |
|                            |         | HIGH      | Q16        | 14.54 | 14.46 | 14.57 | 15.80              |
|                            | 50      | LOW       | Q16        | 14.59 | 14.28 | 14.33 | 15.80              |
|                            | 10      | LOW       | 64QAM      | 14.99 | 14.42 | 14.64 | 15.80              |
|                            |         | MID       | 64QAM      | 15.05 | 14.33 | 14.74 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.59 | 14.36 | 14.68 | 15.80              |
|                            |         | LOW       | 64QAM      | 14.68 | 14.43 | 14.90 | 15.80              |
|                            |         | MID       | 64QAM      | 14.64 | 14.50 | 14.94 | 15.80              |
|                            |         | HIGH      | 64QAM      | 14.27 | 14.11 | 14.76 | 15.80              |
|                            | 50      | LOW       | 64QAM      | 15.02 | 14.36 | 14.80 | 15.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |       |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| 15              | 1       | LOW       | QPSK       | 15.19 | 15.28 | 15.02 | 15.80              |       |
|                 |         | MID       | QPSK       | 15.24 | 15.27 | 15.08 | 15.80              |       |
|                 |         | HIGH      | QPSK       | 15.02 | 15.34 | 15.05 | 15.80              |       |
|                 | 36      | LOW       | QPSK       | 14.78 | 14.91 | 14.93 | 15.80              |       |
|                 |         | MID       | QPSK       | 15.29 | 15.28 | 15.10 | 15.80              |       |
|                 |         | HIGH      | QPSK       | 14.95 | 14.81 | 14.82 | 15.80              |       |
|                 | 75      | LOW       | QPSK       | 15.02 | 14.90 | 14.78 | 15.80              |       |
|                 |         | 1         | LOW        | Q16   | 15.07 | 15.18 | 15.14              | 15.80 |
|                 |         |           | MID        | Q16   | 15.41 | 15.29 | 15.18              | 15.80 |
| HIGH            | Q16     |           | 14.93      | 15.13 | 15.24 | 15.80 |                    |       |
| 15              | 36      | LOW       | Q16        | 14.92 | 14.51 | 14.67 | 15.80              |       |
|                 |         | MID       | Q16        | 14.62 | 14.92 | 14.78 | 15.80              |       |
|                 |         | HIGH      | Q16        | 14.74 | 14.46 | 14.70 | 15.80              |       |
|                 | 75      | LOW       | Q16        | 14.81 | 14.37 | 14.33 | 15.80              |       |
|                 |         | 1         | LOW        | 64QAM | 14.90 | 14.51 | 14.65              | 15.80 |
|                 |         |           | MID        | 64QAM | 15.04 | 14.52 | 14.77              | 15.80 |
|                 | HIGH    |           | 64QAM      | 14.52 | 14.51 | 14.76 | 15.80              |       |
|                 | 36      | LOW       | 64QAM      | 14.81 | 14.50 | 14.80 | 15.80              |       |
|                 |         | MID       | 64QAM      | 14.68 | 14.55 | 14.99 | 15.80              |       |
| HIGH            |         | 64QAM     | 14.32      | 14.26 | 14.69 | 15.80 |                    |       |
| 75              | LOW     | 64QAM     | 14.93      | 14.49 | 14.77 | 15.80 |                    |       |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |       |
| 20              | 1       | LOW       | QPSK       | 15.16 | 15.30 | 15.10 | 15.80              |       |
|                 |         | MID       | QPSK       | 15.38 | 15.33 | 15.14 | 15.80              |       |
|                 |         | HIGH      | QPSK       | 15.17 | 15.26 | 14.98 | 15.80              |       |
|                 | 50      | LOW       | QPSK       | 14.93 | 15.03 | 14.92 | 15.80              |       |
|                 |         | MID       | QPSK       | 15.32 | 15.23 | 15.24 | 15.80              |       |
|                 |         | HIGH      | QPSK       | 14.99 | 14.96 | 14.95 | 15.80              |       |
|                 | 100     | LOW       | QPSK       | 14.96 | 14.94 | 14.90 | 15.80              |       |
|                 |         | 1         | LOW        | Q16   | 15.18 | 15.10 | 15.22              | 15.80 |
|                 |         |           | MID        | Q16   | 15.36 | 15.23 | 15.29              | 15.80 |
| HIGH            | Q16     |           | 14.87      | 15.08 | 15.18 | 15.80 |                    |       |
| 20              | 50      | LOW       | Q16        | 14.99 | 14.61 | 14.70 | 15.80              |       |
|                 |         | MID       | Q16        | 14.65 | 15.09 | 14.82 | 15.80              |       |
|                 |         | HIGH      | Q16        | 14.67 | 14.40 | 14.70 | 15.80              |       |
|                 | 100     | LOW       | Q16        | 14.75 | 14.37 | 14.43 | 15.80              |       |
|                 |         | 1         | LOW        | 64QAM | 14.96 | 14.52 | 14.68              | 15.80 |
|                 |         |           | MID        | 64QAM | 15.02 | 14.49 | 14.73              | 15.80 |
|                 | HIGH    |           | 64QAM      | 14.62 | 14.51 | 14.83 | 15.80              |       |
|                 | 50      | LOW       | 64QAM      | 14.84 | 14.43 | 14.93 | 15.80              |       |
|                 |         | MID       | 64QAM      | 14.61 | 14.56 | 15.05 | 15.80              |       |
| HIGH            |         | 64QAM     | 14.28      | 14.25 | 14.69 | 15.80 |                    |       |
| 100             | LOW     | 64QAM     | 15.02      | 14.50 | 14.80 | 15.80 |                    |       |

### 8.3.5 LTE Band12 Output Power

BL-SZ2220432-701

| LTE B12-State 1 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 22.26 | 22.64 | 22.05 | 23.80              |
|                        |         | MID       | QPSK       | 22.10 | 22.45 | 22.42 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.31 | 22.20 | 22.48 | 23.80              |
|                        | 3       | LOW       | QPSK       | 23.06 | 23.42 | 23.30 | 23.80              |
|                        |         | MID       | QPSK       | 23.25 | 23.67 | 23.20 | 23.80              |
|                        |         | HIGH      | QPSK       | 23.12 | 22.92 | 23.01 | 23.80              |
|                        | 6       | LOW       | QPSK       | 22.42 | 22.53 | 22.34 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.31 | 22.43 | 21.97 | 23.80              |
|                        |         | MID       | Q16        | 22.09 | 22.40 | 22.17 | 23.80              |
|                        |         | HIGH      | Q16        | 22.60 | 22.91 | 22.07 | 23.80              |
|                        |         | LOW       | Q16        | 22.08 | 22.30 | 22.71 | 23.80              |
|                        |         | MID       | Q16        | 22.37 | 22.30 | 22.26 | 23.80              |
|                        |         | HIGH      | Q16        | 22.41 | 22.13 | 22.27 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.55 | 21.57 | 20.91 | 22.80              |
|                        |         | MID       | 64QAM      | 21.11 | 21.67 | 21.36 | 22.80              |
|                        |         | HIGH      | 64QAM      | 20.93 | 21.58 | 21.09 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.44 | 21.15 | 21.48 | 22.80              |
|                        |         | MID       | 64QAM      | 21.66 | 21.74 | 21.52 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.33 | 21.26 | 21.63 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.42 | 20.64 | 20.62 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 22.17 | 22.64 | 22.09 | 23.80              |
|                        |         | MID       | QPSK       | 22.06 | 22.43 | 22.29 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.13 | 22.42 | 22.21 | 23.80              |
|                        | 8       | LOW       | QPSK       | 22.06 | 22.40 | 22.16 | 23.80              |
|                        |         | MID       | QPSK       | 22.11 | 22.69 | 22.38 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.32 | 22.07 | 21.99 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.33 | 22.55 | 22.61 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.28 | 22.34 | 21.90 | 23.80              |
|                        |         | MID       | Q16        | 22.29 | 22.60 | 22.15 | 23.80              |
|                        |         | HIGH      | Q16        | 22.42 | 22.75 | 21.96 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.18 | 21.41 | 21.74 | 22.80              |
|                        |         | MID       | Q16        | 21.25 | 21.13 | 21.34 | 22.80              |
|                        |         | HIGH      | Q16        | 21.39 | 21.04 | 21.17 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.33 | 21.57 | 21.09 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.76 | 21.60 | 20.83 | 22.80              |
|                        |         | MID       | 64QAM      | 21.26 | 21.93 | 21.38 | 22.80              |
|                        |         | HIGH      | 64QAM      | 20.96 | 21.76 | 21.28 | 22.80              |
|                        |         | LOW       | 64QAM      | 20.36 | 20.11 | 20.56 | 21.80              |
|                        |         | MID       | 64QAM      | 20.70 | 20.58 | 20.56 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.39 | 20.28 | 20.67 | 21.80              |
| 3                      | 15      | LOW       | 64QAM      | 20.48 | 20.68 | 20.40 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23035 | 23095        | 23155 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|--------------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 22.19 | 22.55        | 22.05 | 23.80              |
|                 |         | MID       | QPSK       | 22.17 | 22.52        | 22.17 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.31 | 22.51        | 22.30 | 23.80              |
|                 | 12      | LOW       | QPSK       | 22.06 | 22.22        | 22.16 | 23.80              |
|                 |         | MID       | QPSK       | 22.25 | 22.46        | 22.47 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.03 | 22.27        | 22.07 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.37 | 22.53        | 22.59 | 23.80              |
|                 | 5       | LOW       | Q16        | 22.39 | 22.43        | 21.91 | 23.80              |
|                 |         | MID       | Q16        | 22.02 | 22.53        | 22.11 | 23.80              |
|                 |         | HIGH      | Q16        | 22.44 | 22.68        | 22.00 | 23.80              |
|                 |         | LOW       | Q16        | 20.91 | 21.26        | 21.89 | 22.80              |
|                 |         | MID       | Q16        | 21.14 | 21.42        | 21.41 | 22.80              |
|                 |         | HIGH      | Q16        | 21.45 | 20.91        | 21.12 | 22.80              |
| 5               | 1       | LOW       | Q16        | 21.18 | 21.63        | 21.07 | 22.80              |
|                 |         | LOW       | 64QAM      | 21.72 | 21.47        | 20.91 | 22.80              |
|                 |         | MID       | 64QAM      | 21.16 | 21.69        | 21.60 | 22.80              |
|                 |         | HIGH      | 64QAM      | 20.99 | 21.60        | 21.26 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.42 | 19.99        | 20.25 | 21.80              |
|                 |         | MID       | 64QAM      | 20.70 | 20.45        | 20.64 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.25 | 20.16        | 20.44 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.34 | 20.60        | 20.40 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23060 | 23095        | 23130 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 22.17 | 22.55        | 22.25 | 23.80              |
|                 |         | MID       | QPSK       | 22.28 | <b>22.59</b> | 22.33 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.22 | 22.40        | 22.39 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.04 | 22.44        | 22.34 | 23.80              |
|                 |         | MID       | QPSK       | 22.29 | <b>22.62</b> | 22.38 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.23 | 22.16        | 22.14 | 23.80              |
| 10              | 50      | LOW       | QPSK       | 22.51 | <b>22.62</b> | 22.59 | 23.80              |
|                 | 1       | LOW       | Q16        | 22.35 | 22.59        | 21.86 | 23.80              |
|                 |         | MID       | Q16        | 22.18 | 22.51        | 22.33 | 23.80              |
|                 |         | HIGH      | Q16        | 22.67 | 22.84        | 22.11 | 23.80              |
|                 | 25      | LOW       | Q16        | 21.12 | 21.41        | 21.78 | 22.80              |
|                 |         | MID       | Q16        | 21.31 | 21.36        | 21.32 | 22.80              |
|                 |         | HIGH      | Q16        | 21.39 | 21.02        | 21.23 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.35 | 21.63        | 21.28 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.72 | 21.51        | 20.87 | 22.80              |
|                 |         | MID       | 64QAM      | 21.22 | 21.82        | 21.51 | 22.80              |
|                 |         | HIGH      | 64QAM      | 20.94 | 21.80        | 21.24 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.34 | 20.21        | 20.48 | 21.80              |
|                 |         | MID       | 64QAM      | 20.64 | 20.66        | 20.54 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.29 | 20.36        | 20.63 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.50 | 20.58        | 20.54 | 21.80              |

| LTE B12-State 2 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 21.03 | 21.41 | 21.22 | 22.80              |
|                        |         | MID       | QPSK       | 21.09 | 21.70 | 21.71 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.20 | 21.35 | 21.39 | 22.80              |
|                        | 3       | LOW       | QPSK       | 22.39 | 22.38 | 22.09 | 22.80              |
|                        |         | MID       | QPSK       | 22.34 | 22.74 | 22.34 | 22.80              |
|                        |         | HIGH      | QPSK       | 22.24 | 22.49 | 22.43 | 22.80              |
|                        | 6       | LOW       | QPSK       | 21.35 | 21.30 | 21.20 | 22.80              |
| 1.4                    | 1       | LOW       | Q16        | 21.08 | 21.69 | 21.03 | 22.80              |
|                        |         | MID       | Q16        | 20.99 | 21.16 | 21.00 | 22.80              |
|                        |         | HIGH      | Q16        | 21.60 | 21.78 | 20.88 | 22.80              |
|                        | 3       | LOW       | Q16        | 22.10 | 22.24 | 22.61 | 22.80              |
|                        |         | MID       | Q16        | 22.42 | 22.23 | 22.36 | 22.80              |
|                        |         | HIGH      | Q16        | 22.18 | 21.83 | 22.14 | 22.80              |
|                        | 6       | LOW       | Q16        | 21.44 | 21.43 | 20.99 | 22.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.03 | 21.53 | 20.89 | 22.80              |
|                        |         | MID       | 64QAM      | 21.14 | 21.40 | 21.10 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.33 | 21.58 | 21.15 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.42 | 20.89 | 21.34 | 22.80              |
|                        |         | MID       | 64QAM      | 21.54 | 21.36 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.35 | 21.26 | 21.33 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.28 | 20.48 | 20.30 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 20.97 | 21.24 | 21.14 | 22.80              |
|                        |         | MID       | QPSK       | 21.23 | 21.58 | 21.49 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.14 | 21.39 | 21.32 | 22.80              |
|                        | 8       | LOW       | QPSK       | 21.37 | 21.23 | 21.28 | 22.80              |
|                        |         | MID       | QPSK       | 21.44 | 21.50 | 21.60 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.30 | 21.47 | 21.18 | 22.80              |
|                        | 15      | LOW       | QPSK       | 21.35 | 21.22 | 21.39 | 22.80              |
| 3                      | 1       | LOW       | Q16        | 20.87 | 21.49 | 21.26 | 22.80              |
|                        |         | MID       | Q16        | 21.18 | 21.21 | 20.87 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70 | 21.56 | 20.90 | 22.80              |
|                        | 8       | LOW       | Q16        | 20.95 | 21.30 | 21.67 | 22.80              |
|                        |         | MID       | Q16        | 21.50 | 21.38 | 21.40 | 22.80              |
|                        |         | HIGH      | Q16        | 21.22 | 20.81 | 21.25 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.56 | 21.56 | 21.29 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.14 | 21.51 | 20.98 | 22.80              |
|                        |         | MID       | 64QAM      | 21.29 | 21.44 | 21.29 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.26 | 21.80 | 21.01 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.32 | 19.95 | 20.56 | 21.80              |
|                        |         | MID       | 64QAM      | 20.58 | 20.48 | 20.33 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.29 | 20.26 | 20.23 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.38 | 20.66 | 20.44 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 23035      | 23095        | 23155 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|--------------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 21.26      | 21.32        | 21.16 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.17      | 21.70        | 21.54 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.18      | 21.33        | 21.22 | 22.80              |                    |
|                 | 12              | LOW       | QPSK       | 21.44      | 21.31        | 21.23 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.44      | 21.60        | 21.51 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.17      | 21.21        | 21.24 | 22.80              |                    |
|                 | 25              | LOW       | QPSK       | 21.31      | 21.34        | 21.24 | 22.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 21.06        | 21.69 | 20.99              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.01        | 21.21 | 20.93              | 22.80              |
| HIGH            |                 |           | Q16        | 21.75      | 21.54        | 21.01 | 22.80              |                    |
| 12              |                 | LOW       | Q16        | 20.93      | 21.37        | 21.81 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.59      | 21.23        | 21.30 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.26      | 20.83        | 21.16 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.61      | 21.21        | 21.16 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.26        | 21.46 | 20.85              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.18        | 21.42 | 21.04              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.14      | 21.78        | 21.05 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.16      | 20.21        | 20.44 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.58      | 20.36        | 20.56 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.13      | 20.26        | 20.39 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.20      | 20.66        | 20.22 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 23060        | 23095 | 23130              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 21.20        | 21.45 | 21.35              | 22.80              |
| MID             |                 |           | QPSK       | 21.32      | <b>21.64</b> | 21.60 | 22.80              |                    |
| HIGH            |                 |           | QPSK       | 21.29      | 21.33        | 21.41 | 22.80              |                    |
| 25              |                 | LOW       | QPSK       | 21.35      | 21.44        | 21.32 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.40      | <b>21.67</b> | 21.51 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.41      | 21.38        | 21.37 | 22.80              |                    |
| 50              |                 | LOW       | QPSK       | 21.29      | <b>21.43</b> | 21.41 | 22.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 21.10        | 21.58 | 21.18              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.14        | 21.40 | 21.08              | 22.80              |
|                 | HIGH            |           | Q16        | 21.66      | 21.71        | 21.09 | 22.80              |                    |
|                 | 25              | LOW       | Q16        | 21.08      | 21.39        | 21.74 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.59      | 21.34        | 21.49 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.18      | 21.00        | 21.29 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.50      | 21.45        | 21.18 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.18        | 21.42 | 21.04              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.29        | 21.42 | 21.27              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.35      | 21.71        | 21.09 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.34      | 20.11        | 20.50 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.68      | 20.44        | 20.56 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.33      | 20.36        | 20.45 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.36      | 20.58        | 20.40 | 21.80              |                    |

| LTE B12-State 3 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 21.03 | 21.41 | 21.22 | 22.80              |
|                        |         | MID       | QPSK       | 21.09 | 21.70 | 21.71 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.20 | 21.35 | 21.39 | 22.80              |
|                        | 3       | LOW       | QPSK       | 22.39 | 22.38 | 22.09 | 22.80              |
|                        |         | MID       | QPSK       | 22.34 | 22.74 | 22.34 | 22.80              |
|                        |         | HIGH      | QPSK       | 22.24 | 22.49 | 22.43 | 22.80              |
|                        | 6       | LOW       | QPSK       | 21.35 | 21.30 | 21.20 | 22.80              |
| 1.4                    | 1       | LOW       | Q16        | 21.08 | 21.69 | 21.03 | 22.80              |
|                        |         | MID       | Q16        | 20.99 | 21.16 | 21.00 | 22.80              |
|                        |         | HIGH      | Q16        | 21.60 | 21.78 | 20.88 | 22.80              |
|                        | 3       | LOW       | Q16        | 22.10 | 22.24 | 22.61 | 22.80              |
|                        |         | MID       | Q16        | 22.42 | 22.23 | 22.36 | 22.80              |
|                        |         | HIGH      | Q16        | 22.18 | 21.83 | 22.14 | 22.80              |
|                        | 6       | LOW       | Q16        | 21.44 | 21.43 | 20.99 | 22.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.03 | 21.53 | 20.89 | 22.80              |
|                        |         | MID       | 64QAM      | 21.14 | 21.40 | 21.10 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.33 | 21.58 | 21.15 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.42 | 20.89 | 21.34 | 22.80              |
|                        |         | MID       | 64QAM      | 21.54 | 21.36 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.35 | 21.26 | 21.33 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.28 | 20.48 | 20.30 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 20.97 | 21.24 | 21.14 | 22.80              |
|                        |         | MID       | QPSK       | 21.23 | 21.58 | 21.49 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.14 | 21.39 | 21.32 | 22.80              |
|                        | 8       | LOW       | QPSK       | 21.37 | 21.23 | 21.28 | 22.80              |
|                        |         | MID       | QPSK       | 21.44 | 21.50 | 21.60 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.30 | 21.47 | 21.18 | 22.80              |
|                        | 15      | LOW       | QPSK       | 21.35 | 21.22 | 21.39 | 22.80              |
| 3                      | 1       | LOW       | Q16        | 20.87 | 21.49 | 21.26 | 22.80              |
|                        |         | MID       | Q16        | 21.18 | 21.21 | 20.87 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70 | 21.56 | 20.90 | 22.80              |
|                        | 8       | LOW       | Q16        | 20.95 | 21.30 | 21.67 | 22.80              |
|                        |         | MID       | Q16        | 21.50 | 21.38 | 21.40 | 22.80              |
|                        |         | HIGH      | Q16        | 21.22 | 20.81 | 21.25 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.56 | 21.56 | 21.29 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.14 | 21.51 | 20.98 | 22.80              |
|                        |         | MID       | 64QAM      | 21.29 | 21.44 | 21.29 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.26 | 21.80 | 21.01 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.32 | 19.95 | 20.56 | 21.80              |
|                        |         | MID       | 64QAM      | 20.58 | 20.48 | 20.33 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.29 | 20.26 | 20.23 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.38 | 20.66 | 20.44 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 23035      | 23095        | 23155 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|--------------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 21.26      | 21.32        | 21.16 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.17      | 21.70        | 21.54 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.18      | 21.33        | 21.22 | 22.80              |                    |
|                 | 12              | LOW       | QPSK       | 21.44      | 21.31        | 21.23 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.44      | 21.60        | 21.51 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.17      | 21.21        | 21.24 | 22.80              |                    |
|                 | 25              | LOW       | QPSK       | 21.31      | 21.34        | 21.24 | 22.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 21.06        | 21.69 | 20.99              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.01        | 21.21 | 20.93              | 22.80              |
| HIGH            |                 |           | Q16        | 21.75      | 21.54        | 21.01 | 22.80              |                    |
| 12              |                 | LOW       | Q16        | 20.93      | 21.37        | 21.81 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.59      | 21.23        | 21.30 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.26      | 20.83        | 21.16 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.61      | 21.21        | 21.16 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.26        | 21.46 | 20.85              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.18        | 21.42 | 21.04              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.14      | 21.78        | 21.05 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.16      | 20.21        | 20.44 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.58      | 20.36        | 20.56 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.13      | 20.26        | 20.39 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.20      | 20.66        | 20.22 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 23060        | 23095 | 23130              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 21.20        | 21.45 | 21.35              | 22.80              |
| MID             |                 |           | QPSK       | 21.32      | <b>21.64</b> | 21.60 | 22.80              |                    |
| HIGH            |                 |           | QPSK       | 21.29      | 21.33        | 21.41 | 22.80              |                    |
| 25              |                 | LOW       | QPSK       | 21.35      | 21.44        | 21.32 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.40      | <b>21.67</b> | 21.51 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.41      | 21.38        | 21.37 | 22.80              |                    |
| 50              |                 | LOW       | QPSK       | 21.29      | <b>21.43</b> | 21.41 | 22.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 21.10        | 21.58 | 21.18              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.14        | 21.40 | 21.08              | 22.80              |
|                 | HIGH            |           | Q16        | 21.66      | 21.71        | 21.09 | 22.80              |                    |
|                 | 25              | LOW       | Q16        | 21.08      | 21.39        | 21.74 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.59      | 21.34        | 21.49 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.18      | 21.00        | 21.29 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.50      | 21.45        | 21.18 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.18        | 21.42 | 21.04              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.29        | 21.42 | 21.27              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.35      | 21.71        | 21.09 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.34      | 20.11        | 20.50 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.68      | 20.44        | 20.56 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.33      | 20.36        | 20.45 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.36      | 20.58        | 20.40 | 21.80              |                    |

| LTE B12-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.27 | 23.31 | 23.13 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.43 | 23.29 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.64 | 23.37 | 23.64 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.40 | 23.53 | 23.29 | 24.80              |
|                        |         | MID       | QPSK       | 23.51 | 23.44 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.36 | 23.54 | 23.53 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.35 | 22.34 | 22.54 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.53 | 22.59 | 22.37 | 23.80              |
|                        |         | MID       | Q16        | 22.42 | 22.69 | 22.40 | 23.80              |
|                        |         | HIGH      | Q16        | 22.47 | 22.94 | 22.67 | 23.80              |
|                        |         | LOW       | Q16        | 22.40 | 22.43 | 22.59 | 23.80              |
|                        |         | MID       | Q16        | 22.42 | 22.31 | 22.58 | 23.80              |
|                        |         | HIGH      | Q16        | 22.40 | 22.39 | 22.46 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.71 | 21.99 | 21.17 | 22.80              |
|                        |         | MID       | 64QAM      | 21.28 | 21.82 | 21.61 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.43 | 21.93 | 21.59 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.55 | 21.51 | 21.45 | 22.80              |
|                        |         | MID       | 64QAM      | 21.46 | 21.44 | 21.85 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.50 | 21.43 | 21.63 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.66 | 20.48 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.46 | 23.43 | 23.08 | 24.80              |
|                        |         | MID       | QPSK       | 23.38 | 23.55 | 23.53 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.45 | 23.29 | 23.41 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.38 | 22.49 | 22.36 | 23.80              |
|                        |         | MID       | QPSK       | 22.69 | 22.37 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.36 | 22.30 | 22.24 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.46 | 22.36 | 22.29 | 23.80              |
|                        |         | LOW       | Q16        | 22.57 | 22.86 | 22.24 | 23.80              |
|                        |         | MID       | Q16        | 22.56 | 22.85 | 22.31 | 23.80              |
|                        | 8       | HIGH      | Q16        | 22.52 | 22.76 | 22.31 | 23.80              |
|                        |         | LOW       | Q16        | 21.66 | 21.45 | 21.67 | 22.80              |
|                        |         | MID       | Q16        | 21.48 | 21.39 | 21.71 | 22.80              |
|                        |         | HIGH      | Q16        | 21.53 | 21.34 | 21.53 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.60 | 21.31 | 21.54 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.48 | 21.83 | 21.21 | 22.80              |
| 3                      | 1       | MID       | 64QAM      | 21.48 | 22.06 | 21.31 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.18 | 21.77 | 21.66 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.73 | 20.47 | 20.41 | 21.80              |
|                        |         | MID       | 64QAM      | 20.52 | 20.39 | 20.71 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.56 | 20.51 | 20.63 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.74 | 20.58 | 20.82 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 23035        | 23095 | 23155 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|--------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.39        | 23.33 | 23.34 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.26        | 23.29 | 23.55 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.71        | 23.62 | 23.36 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.47        | 22.24 | 22.57 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.58        | 22.42 | 22.47 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.38        | 22.39 | 22.38 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.53        | 22.34 | 22.59 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16          | 22.48 | 22.73 | 22.26              | 23.80              |
|                 |                 |           | MID        | Q16          | 22.56 | 22.58 | 22.49              | 23.80              |
| HIGH            |                 |           | Q16        | 22.52        | 22.92 | 22.56 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.59        | 21.60 | 21.41 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.72        | 21.56 | 21.49 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.63        | 21.36 | 21.40 | 22.80              |                    |
| 25              | LOW             | Q16       | 21.45      | 21.40        | 21.41 | 22.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 21.54        | 21.75 | 21.04 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.30        | 22.15 | 21.56 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.26        | 21.88 | 21.55 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.65        | 20.61 | 20.47 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.39        | 20.70 | 20.66 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.62        | 20.59 | 20.72 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.72        | 20.68 | 20.76 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation   | 23060 | 23095 | 23130              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK         | 23.53 | 23.38 | 23.34              | 24.80              |
| MID             |                 |           | QPSK       | 23.52        | 23.48 | 23.48 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | <b>23.59</b> | 23.53 | 23.55 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.49        | 22.42 | 22.52 | 23.80              |                    |
|                 |                 | MID       | QPSK       | <b>22.58</b> | 22.46 | 22.54 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.56        | 22.43 | 22.49 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | <b>22.60</b> | 22.45 | 22.54 | 23.80              |                    |
| 10              | 1               | LOW       | Q16        | 22.46        | 22.75 | 22.35 | 23.80              |                    |
|                 |                 | MID       | Q16        | 22.49        | 22.83 | 22.54 | 23.80              |                    |
|                 |                 | HIGH      | Q16        | 22.45        | 22.92 | 22.56 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.55        | 21.49 | 21.65 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.61        | 21.50 | 21.62 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.57        | 21.45 | 21.57 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.56        | 21.44 | 21.56 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM        | 21.65 | 21.90 | 21.25              | 22.80              |
|                 |                 |           | MID        | 64QAM        | 21.52 | 22.04 | 21.50              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.39        | 21.86 | 21.55 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.65        | 20.59 | 20.64 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.58        | 20.60 | 20.83 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.58        | 20.59 | 20.78 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.72        | 20.58 | 20.72 | 21.80              |                    |

| LTE B12-State 5 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.27 | 23.31 | 23.13 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.43 | 23.29 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.64 | 23.37 | 23.64 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.40 | 23.53 | 23.29 | 24.80              |
|                        |         | MID       | QPSK       | 23.51 | 23.44 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.36 | 23.54 | 23.53 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.35 | 22.34 | 22.54 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.53 | 22.59 | 22.37 | 23.80              |
|                        |         | MID       | Q16        | 22.42 | 22.69 | 22.40 | 23.80              |
|                        |         | HIGH      | Q16        | 22.47 | 22.94 | 22.67 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.40 | 22.43 | 22.59 | 23.80              |
|                        |         | MID       | Q16        | 22.42 | 22.31 | 22.58 | 23.80              |
|                        |         | HIGH      | Q16        | 22.40 | 22.39 | 22.46 | 23.80              |
|                        | 6       | LOW       | Q16        | 21.37 | 21.33 | 21.54 | 22.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.71 | 21.99 | 21.17 | 22.80              |
|                        |         | MID       | 64QAM      | 21.28 | 21.82 | 21.61 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.43 | 21.93 | 21.59 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.55 | 21.51 | 21.45 | 22.80              |
|                        |         | MID       | 64QAM      | 21.46 | 21.44 | 21.85 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.50 | 21.43 | 21.63 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.66 | 20.48 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.46 | 23.43 | 23.08 | 24.80              |
|                        |         | MID       | QPSK       | 23.38 | 23.55 | 23.53 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.45 | 23.29 | 23.41 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.38 | 22.49 | 22.36 | 23.80              |
|                        |         | MID       | QPSK       | 22.69 | 22.37 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.36 | 22.30 | 22.24 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.46 | 22.36 | 22.29 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.57 | 22.86 | 22.24 | 23.80              |
|                        |         | MID       | Q16        | 22.56 | 22.85 | 22.31 | 23.80              |
|                        |         | HIGH      | Q16        | 22.52 | 22.76 | 22.31 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.66 | 21.45 | 21.67 | 22.80              |
|                        |         | MID       | Q16        | 21.48 | 21.39 | 21.71 | 22.80              |
|                        |         | HIGH      | Q16        | 21.53 | 21.34 | 21.53 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.60 | 21.31 | 21.54 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.48 | 21.83 | 21.21 | 22.80              |
|                        |         | MID       | 64QAM      | 21.48 | 22.06 | 21.31 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.18 | 21.77 | 21.66 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.73 | 20.47 | 20.41 | 21.80              |
|                        |         | MID       | 64QAM      | 20.52 | 20.39 | 20.71 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.56 | 20.51 | 20.63 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.74 | 20.58 | 20.82 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 23035        | 23095 | 23155 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|--------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.39        | 23.33 | 23.34 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.26        | 23.29 | 23.55 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.71        | 23.62 | 23.36 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.47        | 22.24 | 22.57 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.58        | 22.42 | 22.47 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.38        | 22.39 | 22.38 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.53        | 22.34 | 22.59 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16          | 22.48 | 22.73 | 22.26              | 23.80              |
|                 |                 |           | MID        | Q16          | 22.56 | 22.58 | 22.49              | 23.80              |
| HIGH            |                 |           | Q16        | 22.52        | 22.92 | 22.56 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.59        | 21.60 | 21.41 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.72        | 21.56 | 21.49 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.63        | 21.36 | 21.40 | 22.80              |                    |
| 25              | LOW             | Q16       | 21.45      | 21.40        | 21.41 | 22.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 21.54        | 21.75 | 21.04 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.30        | 22.15 | 21.56 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.26        | 21.88 | 21.55 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.65        | 20.61 | 20.47 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.39        | 20.70 | 20.66 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.62        | 20.59 | 20.72 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.72        | 20.68 | 20.76 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation   | 23060 | 23095 | 23130              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK         | 23.53 | 23.38 | 23.34              | 24.80              |
| MID             |                 |           | QPSK       | 23.52        | 23.48 | 23.48 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | <b>23.59</b> | 23.53 | 23.55 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | <b>22.49</b> | 22.42 | 22.52 | 23.80              |                    |
|                 |                 | MID       | QPSK       | <b>22.58</b> | 22.46 | 22.54 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.56        | 22.43 | 22.49 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | <b>22.60</b> | 22.45 | 22.54 | 23.80              |                    |
| 10              | 1               | LOW       | Q16        | 22.46        | 22.75 | 22.35 | 23.80              |                    |
|                 |                 | MID       | Q16        | 22.49        | 22.83 | 22.54 | 23.80              |                    |
|                 |                 | HIGH      | Q16        | 22.45        | 22.92 | 22.56 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.55        | 21.49 | 21.65 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.61        | 21.50 | 21.62 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.57        | 21.45 | 21.57 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.56        | 21.44 | 21.56 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM        | 21.65 | 21.90 | 21.25              | 22.80              |
|                 |                 |           | MID        | 64QAM        | 21.52 | 22.04 | 21.50              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.39        | 21.86 | 21.55 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.65        | 20.59 | 20.64 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.58        | 20.60 | 20.83 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.58        | 20.59 | 20.78 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.72        | 20.58 | 20.72 | 21.80              |                    |

| LTE B12-State 6 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.27 | 23.31 | 23.13 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.43 | 23.29 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.64 | 23.37 | 23.64 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.40 | 23.53 | 23.29 | 24.80              |
|                        |         | MID       | QPSK       | 23.51 | 23.44 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.36 | 23.54 | 23.53 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.35 | 22.34 | 22.54 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.53 | 22.59 | 22.37 | 23.80              |
|                        |         | MID       | Q16        | 22.42 | 22.69 | 22.40 | 23.80              |
|                        |         | HIGH      | Q16        | 22.47 | 22.94 | 22.67 | 23.80              |
|                        |         | LOW       | Q16        | 22.40 | 22.43 | 22.59 | 23.80              |
|                        |         | MID       | Q16        | 22.42 | 22.31 | 22.58 | 23.80              |
|                        |         | HIGH      | Q16        | 22.40 | 22.39 | 22.46 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.71 | 21.99 | 21.17 | 22.80              |
|                        |         | MID       | 64QAM      | 21.28 | 21.82 | 21.61 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.43 | 21.93 | 21.59 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.55 | 21.51 | 21.45 | 22.80              |
|                        |         | MID       | 64QAM      | 21.46 | 21.44 | 21.85 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.50 | 21.43 | 21.63 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.66 | 20.48 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.46 | 23.43 | 23.08 | 24.80              |
|                        |         | MID       | QPSK       | 23.38 | 23.55 | 23.53 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.45 | 23.29 | 23.41 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.38 | 22.49 | 22.36 | 23.80              |
|                        |         | MID       | QPSK       | 22.69 | 22.37 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.36 | 22.30 | 22.24 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.46 | 22.36 | 22.29 | 23.80              |
|                        |         | LOW       | Q16        | 22.57 | 22.86 | 22.24 | 23.80              |
|                        |         | MID       | Q16        | 22.56 | 22.85 | 22.31 | 23.80              |
|                        | 8       | HIGH      | Q16        | 22.52 | 22.76 | 22.31 | 23.80              |
|                        |         | LOW       | Q16        | 21.66 | 21.45 | 21.67 | 22.80              |
|                        |         | MID       | Q16        | 21.48 | 21.39 | 21.71 | 22.80              |
|                        |         | HIGH      | Q16        | 21.53 | 21.34 | 21.53 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.60 | 21.31 | 21.54 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.48 | 21.83 | 21.21 | 22.80              |
| 3                      | 1       | MID       | 64QAM      | 21.48 | 22.06 | 21.31 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.18 | 21.77 | 21.66 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.73 | 20.47 | 20.41 | 21.80              |
|                        |         | MID       | 64QAM      | 20.52 | 20.39 | 20.71 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.56 | 20.51 | 20.63 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.74 | 20.58 | 20.82 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23035        | 23095 | 23155 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.39        | 23.33 | 23.34 | 24.80              |
|                 |         | MID       | QPSK       | 23.26        | 23.29 | 23.55 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.71        | 23.62 | 23.36 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.47        | 22.24 | 22.57 | 23.80              |
|                 |         | MID       | QPSK       | 22.58        | 22.42 | 22.47 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.38        | 22.39 | 22.38 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.53        | 22.34 | 22.59 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.48        | 22.73 | 22.26 | 23.80              |
|                 |         | MID       | Q16        | 22.56        | 22.58 | 22.49 | 23.80              |
|                 |         | HIGH      | Q16        | 22.52        | 22.92 | 22.56 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.59        | 21.60 | 21.41 | 22.80              |
|                 |         | MID       | Q16        | 21.72        | 21.56 | 21.49 | 22.80              |
|                 |         | HIGH      | Q16        | 21.63        | 21.36 | 21.40 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.45        | 21.40 | 21.41 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.54        | 21.75 | 21.04 | 22.80              |
|                 |         | MID       | 64QAM      | 21.30        | 22.15 | 21.56 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.26        | 21.88 | 21.55 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.65        | 20.61 | 20.47 | 21.80              |
|                 |         | MID       | 64QAM      | 20.39        | 20.70 | 20.66 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.62        | 20.59 | 20.72 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.72        | 20.68 | 20.76 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23060        | 23095 | 23130 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.53        | 23.38 | 23.34 | 24.80              |
|                 |         | MID       | QPSK       | 23.52        | 23.48 | 23.48 | 24.80              |
|                 |         | HIGH      | QPSK       | <b>23.59</b> | 23.53 | 23.55 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.49        | 22.42 | 22.52 | 23.80              |
|                 |         | MID       | QPSK       | <b>22.58</b> | 22.46 | 22.54 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.56        | 22.43 | 22.49 | 23.80              |
| 10              | 50      | LOW       | QPSK       | <b>22.60</b> | 22.45 | 22.54 | 23.80              |
|                 |         | LOW       | Q16        | 22.46        | 22.75 | 22.35 | 23.80              |
|                 |         | MID       | Q16        | 22.49        | 22.83 | 22.54 | 23.80              |
|                 | 1       | HIGH      | Q16        | 22.45        | 22.92 | 22.56 | 23.80              |
|                 |         | LOW       | Q16        | 21.55        | 21.49 | 21.65 | 22.80              |
|                 | 25      | MID       | Q16        | 21.61        | 21.50 | 21.62 | 22.80              |
|                 |         | HIGH      | Q16        | 21.57        | 21.45 | 21.57 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.56        | 21.44 | 21.56 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.65        | 21.90 | 21.25 | 22.80              |
|                 |         | MID       | 64QAM      | 21.52        | 22.04 | 21.50 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.39        | 21.86 | 21.55 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.65        | 20.59 | 20.64 | 21.80              |
|                 |         | MID       | 64QAM      | 20.58        | 20.60 | 20.83 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.58        | 20.59 | 20.78 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.72        | 20.58 | 20.72 | 21.80              |

| LTE B12-State 1 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.63 | 23.37 | 23.47 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.72 | 23.50 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.73 | 23.53 | 23.59 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.57 | 23.60 | 23.53 | 24.80              |
|                        |         | MID       | QPSK       | 23.55 | 23.58 | 23.67 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.63 | 23.62 | 23.52 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.77 | 22.47 | 22.75 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.44 | 22.89 | 22.36 | 23.80              |
|                        |         | MID       | Q16        | 22.76 | 22.91 | 22.52 | 23.80              |
|                        |         | HIGH      | Q16        | 22.38 | 23.18 | 22.82 | 23.80              |
| 1.4                    | 1       | LOW       | Q16        | 22.82 | 22.73 | 22.84 | 23.80              |
|                        |         | MID       | Q16        | 22.78 | 22.58 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.62 | 22.53 | 23.80              |
|                        | 3       | LOW       | Q16        | 21.85 | 21.54 | 21.47 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.52 | 21.66 | 21.67 | 22.80              |
|                        |         | MID       | 64QAM      | 21.56 | 21.99 | 21.51 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.64 | 22.22 | 21.43 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 21.73 | 21.70 | 21.73 | 22.80              |
|                        |         | MID       | 64QAM      | 21.97 | 21.68 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.74 | 21.60 | 21.62 | 22.80              |
| 1.4                    | 6       | LOW       | 64QAM      | 20.46 | 20.52 | 20.77 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.49 | 23.67 | 23.40 | 24.80              |
|                        |         | MID       | QPSK       | 23.50 | 23.75 | 23.55 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.79 | 23.86 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.80 | 22.44 | 22.48 | 23.80              |
|                        |         | MID       | QPSK       | 22.64 | 22.60 | 22.67 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.65 | 22.62 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.66 | 22.45 | 22.75 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.76 | 22.82 | 22.64 | 23.80              |
|                        |         | MID       | Q16        | 22.60 | 23.12 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.65 | 23.20 | 22.75 | 23.80              |
| 3                      | 1       | LOW       | Q16        | 21.56 | 21.40 | 21.86 | 22.80              |
|                        |         | MID       | Q16        | 21.67 | 21.73 | 21.62 | 22.80              |
|                        |         | HIGH      | Q16        | 21.87 | 21.51 | 21.56 | 22.80              |
|                        | 8       | LOW       | Q16        | 21.52 | 21.59 | 21.82 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.33 | 21.94 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.50 | 22.10 | 21.40 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 22.26 | 21.60 | 22.80              |
|                        | 15      | LOW       | 64QAM      | 20.52 | 20.70 | 20.84 | 21.80              |
|                        |         | MID       | 64QAM      | 20.84 | 20.64 | 20.60 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.54 | 20.79 | 21.80              |
| 3                      | 15      | LOW       | 64QAM      | 20.53 | 20.62 | 20.68 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.49 | 23.46 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.57 | 23.39 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.61 | 23.86 | 23.64 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.64 | 22.53 | 22.46 | 23.80              |
|                 |         | MID       | QPSK       | 22.48 | 22.49 | 22.49 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.54 | 22.55 | 22.70 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.72 | 22.52 | 22.66 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.53 | 22.89 | 22.70 | 23.80              |
|                 |         | MID       | Q16        | 22.78 | 23.07 | 22.74 | 23.80              |
|                 |         | HIGH      | Q16        | 22.38 | 22.99 | 22.70 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.63 | 21.70 | 21.78 | 22.80              |
|                 |         | MID       | Q16        | 21.82 | 21.40 | 21.66 | 22.80              |
|                 |         | HIGH      | Q16        | 21.63 | 21.53 | 21.66 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.78 | 21.59 | 21.64 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.48 | 21.66 | 21.43 | 22.80              |
|                 |         | MID       | 64QAM      | 21.43 | 22.17 | 21.58 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.62 | 22.13 | 21.69 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.54 | 20.74 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.76 | 20.70 | 20.80 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.58 | 20.36 | 20.83 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.59 | 20.74 | 20.85 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23060 | 23095 | 23130 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.75 | 23.58 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.71 | 23.63 | 23.67 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.78 | 23.74 | 23.76 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.71 | 22.58 | 22.71 | 23.80              |
|                 |         | MID       | QPSK       | 22.73 | 22.65 | 22.67 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.74 | 22.62 | 22.63 | 23.80              |
| 10              | 50      | LOW       | QPSK       | 22.77 | 22.63 | 22.73 | 23.80              |
|                 |         | LOW       | Q16        | 22.67 | 22.96 | 22.59 | 23.80              |
|                 |         | MID       | Q16        | 22.67 | 23.05 | 22.72 | 23.80              |
|                 | 1       | HIGH      | Q16        | 22.63 | 23.11 | 22.77 | 23.80              |
|                 |         | LOW       | Q16        | 21.78 | 21.64 | 21.82 | 22.80              |
|                 | 25      | MID       | Q16        | 21.80 | 21.64 | 21.75 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.64 | 21.73 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.74 | 21.63 | 21.71 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.52 | 21.90 | 21.58 | 22.80              |
|                 |         | MID       | 64QAM      | 21.52 | 22.10 | 21.62 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.53 | 22.33 | 21.67 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.71 | 20.80 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.97 | 20.74 | 20.70 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.66 | 20.50 | 20.79 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.67 | 20.64 | 20.83 | 21.80              |

| LTE B12-State 2 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.63 | 23.37 | 23.47 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.72 | 23.50 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.73 | 23.53 | 23.59 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.57 | 23.60 | 23.53 | 24.80              |
|                        |         | MID       | QPSK       | 23.55 | 23.58 | 23.67 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.63 | 23.62 | 23.52 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.77 | 22.47 | 22.75 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.44 | 22.89 | 22.36 | 23.80              |
|                        |         | MID       | Q16        | 22.76 | 22.91 | 22.52 | 23.80              |
|                        |         | HIGH      | Q16        | 22.38 | 23.18 | 22.82 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.82 | 22.73 | 22.84 | 23.80              |
|                        |         | MID       | Q16        | 22.78 | 22.58 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.62 | 22.53 | 23.80              |
|                        | 6       | LOW       | Q16        | 21.85 | 21.54 | 21.47 | 22.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.52 | 21.66 | 21.67 | 22.80              |
|                        |         | MID       | 64QAM      | 21.56 | 21.99 | 21.51 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.64 | 22.22 | 21.43 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.73 | 21.70 | 21.73 | 22.80              |
|                        |         | MID       | 64QAM      | 21.97 | 21.68 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.74 | 21.60 | 21.62 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.46 | 20.52 | 20.77 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.49 | 23.67 | 23.40 | 24.80              |
|                        |         | MID       | QPSK       | 23.50 | 23.75 | 23.55 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.79 | 23.86 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.80 | 22.44 | 22.48 | 23.80              |
|                        |         | MID       | QPSK       | 22.64 | 22.60 | 22.67 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.65 | 22.62 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.66 | 22.45 | 22.75 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.76 | 22.82 | 22.64 | 23.80              |
|                        |         | MID       | Q16        | 22.60 | 23.12 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.65 | 23.20 | 22.75 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.56 | 21.40 | 21.86 | 22.80              |
|                        |         | MID       | Q16        | 21.67 | 21.73 | 21.62 | 22.80              |
|                        |         | HIGH      | Q16        | 21.87 | 21.51 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.52 | 21.59 | 21.82 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.33 | 21.94 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.50 | 22.10 | 21.40 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 22.26 | 21.60 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.52 | 20.70 | 20.84 | 21.80              |
|                        |         | MID       | 64QAM      | 20.84 | 20.64 | 20.60 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.54 | 20.79 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.53 | 20.62 | 20.68 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.49 | 23.46 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.57 | 23.39 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.61 | 23.86 | 23.64 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.64 | 22.53 | 22.46 | 23.80              |
|                 |         | MID       | QPSK       | 22.48 | 22.49 | 22.49 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.54 | 22.55 | 22.70 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.72 | 22.52 | 22.66 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.53 | 22.89 | 22.70 | 23.80              |
|                 |         | MID       | Q16        | 22.78 | 23.07 | 22.74 | 23.80              |
|                 |         | HIGH      | Q16        | 22.38 | 22.99 | 22.70 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.63 | 21.70 | 21.78 | 22.80              |
|                 |         | MID       | Q16        | 21.82 | 21.40 | 21.66 | 22.80              |
|                 |         | HIGH      | Q16        | 21.63 | 21.53 | 21.66 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.78 | 21.59 | 21.64 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.48 | 21.66 | 21.43 | 22.80              |
|                 |         | MID       | 64QAM      | 21.43 | 22.17 | 21.58 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.62 | 22.13 | 21.69 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.54 | 20.74 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.76 | 20.70 | 20.80 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.58 | 20.36 | 20.83 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.59 | 20.74 | 20.85 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23060 | 23095 | 23130 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.75 | 23.58 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.71 | 23.63 | 23.67 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.78 | 23.74 | 23.76 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.71 | 22.58 | 22.71 | 23.80              |
|                 |         | MID       | QPSK       | 22.73 | 22.65 | 22.67 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.74 | 22.62 | 22.63 | 23.80              |
| 10              | 50      | LOW       | QPSK       | 22.77 | 22.63 | 22.73 | 23.80              |
|                 |         | LOW       | Q16        | 22.67 | 22.96 | 22.59 | 23.80              |
|                 |         | MID       | Q16        | 22.67 | 23.05 | 22.72 | 23.80              |
|                 | 1       | HIGH      | Q16        | 22.63 | 23.11 | 22.77 | 23.80              |
|                 |         | LOW       | Q16        | 21.78 | 21.64 | 21.82 | 22.80              |
|                 | 25      | MID       | Q16        | 21.80 | 21.64 | 21.75 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.64 | 21.73 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.74 | 21.63 | 21.71 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.52 | 21.90 | 21.58 | 22.80              |
|                 |         | MID       | 64QAM      | 21.52 | 22.10 | 21.62 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.53 | 22.33 | 21.67 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.71 | 20.80 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.97 | 20.74 | 20.70 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.66 | 20.50 | 20.79 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.67 | 20.64 | 20.83 | 21.80              |

| LTE B12-State 3 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.63 | 23.37 | 23.47 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.72 | 23.50 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.73 | 23.53 | 23.59 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.57 | 23.60 | 23.53 | 24.80              |
|                        |         | MID       | QPSK       | 23.55 | 23.58 | 23.67 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.63 | 23.62 | 23.52 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.77 | 22.47 | 22.75 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.44 | 22.89 | 22.36 | 23.80              |
|                        |         | MID       | Q16        | 22.76 | 22.91 | 22.52 | 23.80              |
|                        |         | HIGH      | Q16        | 22.38 | 23.18 | 22.82 | 23.80              |
|                        |         | LOW       | Q16        | 22.82 | 22.73 | 22.84 | 23.80              |
|                        |         | MID       | Q16        | 22.78 | 22.58 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.62 | 22.53 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.52 | 21.66 | 21.67 | 22.80              |
|                        |         | MID       | 64QAM      | 21.56 | 21.99 | 21.51 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.64 | 22.22 | 21.43 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.73 | 21.70 | 21.73 | 22.80              |
|                        |         | MID       | 64QAM      | 21.97 | 21.68 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.74 | 21.60 | 21.62 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.46 | 20.52 | 20.77 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.49 | 23.67 | 23.40 | 24.80              |
|                        |         | MID       | QPSK       | 23.50 | 23.75 | 23.55 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.79 | 23.86 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.80 | 22.44 | 22.48 | 23.80              |
|                        |         | MID       | QPSK       | 22.64 | 22.60 | 22.67 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.65 | 22.62 | 22.61 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.66 | 22.45 | 22.75 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.76 | 22.82 | 22.64 | 23.80              |
|                        |         | MID       | Q16        | 22.60 | 23.12 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.65 | 23.20 | 22.75 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.56 | 21.40 | 21.86 | 22.80              |
|                        |         | MID       | Q16        | 21.67 | 21.73 | 21.62 | 22.80              |
|                        |         | HIGH      | Q16        | 21.87 | 21.51 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.52 | 21.59 | 21.82 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.33 | 21.94 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.50 | 22.10 | 21.40 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 22.26 | 21.60 | 22.80              |
|                        |         | LOW       | 64QAM      | 20.52 | 20.70 | 20.84 | 21.80              |
|                        |         | MID       | 64QAM      | 20.84 | 20.64 | 20.60 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.54 | 20.79 | 21.80              |
| 3                      | 15      | LOW       | 64QAM      | 20.53 | 20.62 | 20.68 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 23035      | 23095 | 23155 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.49      | 23.46 | 23.54 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.57      | 23.39 | 23.72 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.61      | 23.86 | 23.64 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.64      | 22.53 | 22.46 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.48      | 22.49 | 22.49 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.54      | 22.55 | 22.70 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.72      | 22.52 | 22.66 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.53 | 22.89 | 22.70              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.78 | 23.07 | 22.74              | 23.80              |
| HIGH            |                 |           | Q16        | 22.38      | 22.99 | 22.70 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.63      | 21.70 | 21.78 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.82      | 21.40 | 21.66 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.63      | 21.53 | 21.66 | 22.80              |                    |
| 25              | LOW             | Q16       | 21.78      | 21.59      | 21.64 | 22.80 |                    |                    |
| 5               | 1               | LOW       | 64QAM      | 21.48      | 21.66 | 21.43 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.43      | 22.17 | 21.58 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.62      | 22.13 | 21.69 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.54      | 20.74 | 20.88 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.70 | 20.80 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.58      | 20.36 | 20.83 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.59      | 20.74 | 20.85 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 23060 | 23095 | 23130              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.75 | 23.58 | 23.54              | 24.80              |
| MID             |                 |           | QPSK       | 23.71      | 23.63 | 23.67 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.78      | 23.74 | 23.76 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.71      | 22.58 | 22.71 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.73      | 22.65 | 22.67 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.74      | 22.62 | 22.63 | 23.80              |                    |
| 10              | 50              | LOW       | QPSK       | 22.77      | 22.63 | 22.73 | 23.80              |                    |
|                 |                 | LOW       | Q16        | 22.67      | 22.96 | 22.59 | 23.80              |                    |
|                 |                 | MID       | Q16        | 22.67      | 23.05 | 22.72 | 23.80              |                    |
|                 |                 | HIGH      | Q16        | 22.63      | 23.11 | 22.77 | 23.80              |                    |
|                 |                 | LOW       | Q16        | 21.78      | 21.64 | 21.82 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.80      | 21.64 | 21.75 | 22.80              |                    |
|                 | 25              | HIGH      | Q16        | 21.78      | 21.64 | 21.73 | 22.80              |                    |
|                 |                 | LOW       | Q16        | 21.74      | 21.63 | 21.71 | 22.80              |                    |
| 10              | 1               | LOW       | 64QAM      | 21.52      | 21.90 | 21.58 | 22.80              |                    |
|                 |                 | MID       | 64QAM      | 21.52      | 22.10 | 21.62 | 22.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.53      | 22.33 | 21.67 | 22.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.71      | 20.80 | 20.88 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.97      | 20.74 | 20.70 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.66      | 20.50 | 20.79 | 21.80              |                    |
|                 | 50              | LOW       | 64QAM      | 20.67      | 20.64 | 20.83 | 21.80              |                    |

| LTE B12-State 4 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.63 | 23.37 | 23.47 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.72 | 23.50 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.73 | 23.53 | 23.59 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.57 | 23.60 | 23.53 | 24.80              |
|                        |         | MID       | QPSK       | 23.55 | 23.58 | 23.67 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.63 | 23.62 | 23.52 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.77 | 22.47 | 22.75 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.44 | 22.89 | 22.36 | 23.80              |
|                        |         | MID       | Q16        | 22.76 | 22.91 | 22.52 | 23.80              |
|                        |         | HIGH      | Q16        | 22.38 | 23.18 | 22.82 | 23.80              |
| 1.4                    | 1       | LOW       | Q16        | 22.82 | 22.73 | 22.84 | 23.80              |
|                        |         | MID       | Q16        | 22.78 | 22.58 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.62 | 22.53 | 23.80              |
|                        | 6       | LOW       | Q16        | 21.85 | 21.54 | 21.47 | 22.80              |
|                        | 1.4     | LOW       | 64QAM      | 21.52 | 21.66 | 21.67 | 22.80              |
|                        |         | MID       | 64QAM      | 21.56 | 21.99 | 21.51 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.64 | 22.22 | 21.43 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.73 | 21.70 | 21.73 | 22.80              |
|                        |         | MID       | 64QAM      | 21.97 | 21.68 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.74 | 21.60 | 21.62 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.46 | 20.52 | 20.77 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.49 | 23.67 | 23.40 | 24.80              |
|                        |         | MID       | QPSK       | 23.50 | 23.75 | 23.55 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.79 | 23.86 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.80 | 22.44 | 22.48 | 23.80              |
|                        |         | MID       | QPSK       | 22.64 | 22.60 | 22.67 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.65 | 22.62 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.66 | 22.45 | 22.75 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.76 | 22.82 | 22.64 | 23.80              |
|                        |         | MID       | Q16        | 22.60 | 23.12 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.65 | 23.20 | 22.75 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.56 | 21.40 | 21.86 | 22.80              |
|                        |         | MID       | Q16        | 21.67 | 21.73 | 21.62 | 22.80              |
|                        |         | HIGH      | Q16        | 21.87 | 21.51 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.52 | 21.59 | 21.82 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.33 | 21.94 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.50 | 22.10 | 21.40 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 22.26 | 21.60 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.52 | 20.70 | 20.84 | 21.80              |
|                        |         | MID       | 64QAM      | 20.84 | 20.64 | 20.60 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.54 | 20.79 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.53 | 20.62 | 20.68 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.49 | 23.46 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.57 | 23.39 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.61 | 23.86 | 23.64 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.64 | 22.53 | 22.46 | 23.80              |
|                 |         | MID       | QPSK       | 22.48 | 22.49 | 22.49 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.54 | 22.55 | 22.70 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.72 | 22.52 | 22.66 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.53 | 22.89 | 22.70 | 23.80              |
|                 |         | MID       | Q16        | 22.78 | 23.07 | 22.74 | 23.80              |
|                 |         | HIGH      | Q16        | 22.38 | 22.99 | 22.70 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.63 | 21.70 | 21.78 | 22.80              |
|                 |         | MID       | Q16        | 21.82 | 21.40 | 21.66 | 22.80              |
|                 |         | HIGH      | Q16        | 21.63 | 21.53 | 21.66 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.78 | 21.59 | 21.64 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.48 | 21.66 | 21.43 | 22.80              |
|                 |         | MID       | 64QAM      | 21.43 | 22.17 | 21.58 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.62 | 22.13 | 21.69 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.54 | 20.74 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.76 | 20.70 | 20.80 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.58 | 20.36 | 20.83 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.59 | 20.74 | 20.85 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23060 | 23095 | 23130 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.75 | 23.58 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.71 | 23.63 | 23.67 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.78 | 23.74 | 23.76 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.71 | 22.58 | 22.71 | 23.80              |
|                 |         | MID       | QPSK       | 22.73 | 22.65 | 22.67 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.74 | 22.62 | 22.63 | 23.80              |
| 10              | 50      | LOW       | QPSK       | 22.77 | 22.63 | 22.73 | 23.80              |
|                 |         | LOW       | Q16        | 22.67 | 22.96 | 22.59 | 23.80              |
|                 |         | MID       | Q16        | 22.67 | 23.05 | 22.72 | 23.80              |
|                 | 1       | HIGH      | Q16        | 22.63 | 23.11 | 22.77 | 23.80              |
|                 |         | LOW       | Q16        | 21.78 | 21.64 | 21.82 | 22.80              |
|                 | 25      | MID       | Q16        | 21.80 | 21.64 | 21.75 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.64 | 21.73 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.74 | 21.63 | 21.71 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.52 | 21.90 | 21.58 | 22.80              |
|                 |         | MID       | 64QAM      | 21.52 | 22.10 | 21.62 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.53 | 22.33 | 21.67 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.71 | 20.80 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.97 | 20.74 | 20.70 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.66 | 20.50 | 20.79 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.67 | 20.64 | 20.83 | 21.80              |

| LTE B12-State 5 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.63 | 23.37 | 23.47 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.72 | 23.50 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.73 | 23.53 | 23.59 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.57 | 23.60 | 23.53 | 24.80              |
|                        |         | MID       | QPSK       | 23.55 | 23.58 | 23.67 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.63 | 23.62 | 23.52 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.77 | 22.47 | 22.75 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.44 | 22.89 | 22.36 | 23.80              |
|                        |         | MID       | Q16        | 22.76 | 22.91 | 22.52 | 23.80              |
|                        |         | HIGH      | Q16        | 22.38 | 23.18 | 22.82 | 23.80              |
| 1.4                    | 1       | LOW       | Q16        | 22.82 | 22.73 | 22.84 | 23.80              |
|                        |         | MID       | Q16        | 22.78 | 22.58 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.62 | 22.53 | 23.80              |
|                        | 6       | LOW       | Q16        | 21.85 | 21.54 | 21.47 | 22.80              |
|                        | 1.4     | LOW       | 64QAM      | 21.52 | 21.66 | 21.67 | 22.80              |
|                        |         | MID       | 64QAM      | 21.56 | 21.99 | 21.51 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.64 | 22.22 | 21.43 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.73 | 21.70 | 21.73 | 22.80              |
|                        |         | MID       | 64QAM      | 21.97 | 21.68 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.74 | 21.60 | 21.62 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.46 | 20.52 | 20.77 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.49 | 23.67 | 23.40 | 24.80              |
|                        |         | MID       | QPSK       | 23.50 | 23.75 | 23.55 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.79 | 23.86 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.80 | 22.44 | 22.48 | 23.80              |
|                        |         | MID       | QPSK       | 22.64 | 22.60 | 22.67 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.65 | 22.62 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.66 | 22.45 | 22.75 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.76 | 22.82 | 22.64 | 23.80              |
|                        |         | MID       | Q16        | 22.60 | 23.12 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.65 | 23.20 | 22.75 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.56 | 21.40 | 21.86 | 22.80              |
|                        |         | MID       | Q16        | 21.67 | 21.73 | 21.62 | 22.80              |
|                        |         | HIGH      | Q16        | 21.87 | 21.51 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.52 | 21.59 | 21.82 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.33 | 21.94 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.50 | 22.10 | 21.40 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 22.26 | 21.60 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.52 | 20.70 | 20.84 | 21.80              |
|                        |         | MID       | 64QAM      | 20.84 | 20.64 | 20.60 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.54 | 20.79 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.53 | 20.62 | 20.68 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.49 | 23.46 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.57 | 23.39 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.61 | 23.86 | 23.64 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.64 | 22.53 | 22.46 | 23.80              |
|                 |         | MID       | QPSK       | 22.48 | 22.49 | 22.49 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.54 | 22.55 | 22.70 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.72 | 22.52 | 22.66 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.53 | 22.89 | 22.70 | 23.80              |
|                 |         | MID       | Q16        | 22.78 | 23.07 | 22.74 | 23.80              |
|                 |         | HIGH      | Q16        | 22.38 | 22.99 | 22.70 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.63 | 21.70 | 21.78 | 22.80              |
|                 |         | MID       | Q16        | 21.82 | 21.40 | 21.66 | 22.80              |
|                 |         | HIGH      | Q16        | 21.63 | 21.53 | 21.66 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.78 | 21.59 | 21.64 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.48 | 21.66 | 21.43 | 22.80              |
|                 |         | MID       | 64QAM      | 21.43 | 22.17 | 21.58 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.62 | 22.13 | 21.69 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.54 | 20.74 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.76 | 20.70 | 20.80 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.58 | 20.36 | 20.83 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.59 | 20.74 | 20.85 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23060 | 23095 | 23130 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.75 | 23.58 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.71 | 23.63 | 23.67 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.78 | 23.74 | 23.76 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.71 | 22.58 | 22.71 | 23.80              |
|                 |         | MID       | QPSK       | 22.73 | 22.65 | 22.67 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.74 | 22.62 | 22.63 | 23.80              |
| 10              | 50      | LOW       | QPSK       | 22.77 | 22.63 | 22.73 | 23.80              |
|                 |         | LOW       | Q16        | 22.67 | 22.96 | 22.59 | 23.80              |
|                 |         | MID       | Q16        | 22.67 | 23.05 | 22.72 | 23.80              |
|                 | 1       | HIGH      | Q16        | 22.63 | 23.11 | 22.77 | 23.80              |
|                 |         | LOW       | Q16        | 21.78 | 21.64 | 21.82 | 22.80              |
|                 | 25      | MID       | Q16        | 21.80 | 21.64 | 21.75 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.64 | 21.73 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.74 | 21.63 | 21.71 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.52 | 21.90 | 21.58 | 22.80              |
|                 |         | MID       | 64QAM      | 21.52 | 22.10 | 21.62 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.53 | 22.33 | 21.67 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.71 | 20.80 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.97 | 20.74 | 20.70 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.66 | 20.50 | 20.79 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.67 | 20.64 | 20.83 | 21.80              |

| LTE B12-State 6 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.63 | 23.37 | 23.47 | 24.80              |
|                        |         | MID       | QPSK       | 23.64 | 23.72 | 23.50 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.73 | 23.53 | 23.59 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.57 | 23.60 | 23.53 | 24.80              |
|                        |         | MID       | QPSK       | 23.55 | 23.58 | 23.67 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.63 | 23.62 | 23.52 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.77 | 22.47 | 22.75 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.44 | 22.89 | 22.36 | 23.80              |
|                        |         | MID       | Q16        | 22.76 | 22.91 | 22.52 | 23.80              |
|                        |         | HIGH      | Q16        | 22.38 | 23.18 | 22.82 | 23.80              |
| 1.4                    | 1       | LOW       | Q16        | 22.82 | 22.73 | 22.84 | 23.80              |
|                        |         | MID       | Q16        | 22.78 | 22.58 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.62 | 22.53 | 23.80              |
|                        | 3       | LOW       | Q16        | 21.85 | 21.54 | 21.47 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.52 | 21.66 | 21.67 | 22.80              |
|                        |         | MID       | 64QAM      | 21.56 | 21.99 | 21.51 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.64 | 22.22 | 21.43 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.73 | 21.70 | 21.73 | 22.80              |
|                        |         | MID       | 64QAM      | 21.97 | 21.68 | 21.60 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.74 | 21.60 | 21.62 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.46 | 20.52 | 20.77 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.49 | 23.67 | 23.40 | 24.80              |
|                        |         | MID       | QPSK       | 23.50 | 23.75 | 23.55 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.79 | 23.86 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.80 | 22.44 | 22.48 | 23.80              |
|                        |         | MID       | QPSK       | 22.64 | 22.60 | 22.67 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.65 | 22.62 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.66 | 22.45 | 22.75 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.76 | 22.82 | 22.64 | 23.80              |
|                        |         | MID       | Q16        | 22.60 | 23.12 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.65 | 23.20 | 22.75 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.56 | 21.40 | 21.86 | 22.80              |
|                        |         | MID       | Q16        | 21.67 | 21.73 | 21.62 | 22.80              |
|                        |         | HIGH      | Q16        | 21.87 | 21.51 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.52 | 21.59 | 21.82 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.33 | 21.94 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.50 | 22.10 | 21.40 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 22.26 | 21.60 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.52 | 20.70 | 20.84 | 21.80              |
|                        |         | MID       | 64QAM      | 20.84 | 20.64 | 20.60 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.54 | 20.79 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.53 | 20.62 | 20.68 | 21.80              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 5               | 1       | LOW       | QPSK       | 23.49 | 23.46 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.57 | 23.39 | 23.72 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.61 | 23.86 | 23.64 | 24.80              |
|                 | 12      | LOW       | QPSK       | 22.64 | 22.53 | 22.46 | 23.80              |
|                 |         | MID       | QPSK       | 22.48 | 22.49 | 22.49 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.54 | 22.55 | 22.70 | 23.80              |
|                 | 25      | LOW       | QPSK       | 22.72 | 22.52 | 22.66 | 23.80              |
| 5               | 1       | LOW       | Q16        | 22.53 | 22.89 | 22.70 | 23.80              |
|                 |         | MID       | Q16        | 22.78 | 23.07 | 22.74 | 23.80              |
|                 |         | HIGH      | Q16        | 22.38 | 22.99 | 22.70 | 23.80              |
|                 | 12      | LOW       | Q16        | 21.63 | 21.70 | 21.78 | 22.80              |
|                 |         | MID       | Q16        | 21.82 | 21.40 | 21.66 | 22.80              |
|                 |         | HIGH      | Q16        | 21.63 | 21.53 | 21.66 | 22.80              |
|                 | 25      | LOW       | Q16        | 21.78 | 21.59 | 21.64 | 22.80              |
| 5               | 1       | LOW       | 64QAM      | 21.48 | 21.66 | 21.43 | 22.80              |
|                 |         | MID       | 64QAM      | 21.43 | 22.17 | 21.58 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.62 | 22.13 | 21.69 | 22.80              |
|                 | 12      | LOW       | 64QAM      | 20.54 | 20.74 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.76 | 20.70 | 20.80 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.58 | 20.36 | 20.83 | 21.80              |
|                 | 25      | LOW       | 64QAM      | 20.59 | 20.74 | 20.85 | 21.80              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 23060 | 23095 | 23130 | Tune-up power(dBm) |
| 10              | 1       | LOW       | QPSK       | 23.75 | 23.58 | 23.54 | 24.80              |
|                 |         | MID       | QPSK       | 23.71 | 23.63 | 23.67 | 24.80              |
|                 |         | HIGH      | QPSK       | 23.78 | 23.74 | 23.76 | 24.80              |
|                 | 25      | LOW       | QPSK       | 22.71 | 22.58 | 22.71 | 23.80              |
|                 |         | MID       | QPSK       | 22.73 | 22.65 | 22.67 | 23.80              |
|                 |         | HIGH      | QPSK       | 22.74 | 22.62 | 22.63 | 23.80              |
| 10              | 50      | LOW       | QPSK       | 22.77 | 22.63 | 22.73 | 23.80              |
|                 |         | LOW       | Q16        | 22.67 | 22.96 | 22.59 | 23.80              |
|                 |         | MID       | Q16        | 22.67 | 23.05 | 22.72 | 23.80              |
|                 | 1       | HIGH      | Q16        | 22.63 | 23.11 | 22.77 | 23.80              |
|                 |         | LOW       | Q16        | 21.78 | 21.64 | 21.82 | 22.80              |
|                 | 25      | MID       | Q16        | 21.80 | 21.64 | 21.75 | 22.80              |
|                 |         | HIGH      | Q16        | 21.78 | 21.64 | 21.73 | 22.80              |
|                 | 50      | LOW       | Q16        | 21.74 | 21.63 | 21.71 | 22.80              |
| 10              | 1       | LOW       | 64QAM      | 21.52 | 21.90 | 21.58 | 22.80              |
|                 |         | MID       | 64QAM      | 21.52 | 22.10 | 21.62 | 22.80              |
|                 |         | HIGH      | 64QAM      | 21.53 | 22.33 | 21.67 | 22.80              |
|                 | 25      | LOW       | 64QAM      | 20.71 | 20.80 | 20.88 | 21.80              |
|                 |         | MID       | 64QAM      | 20.97 | 20.74 | 20.70 | 21.80              |
|                 |         | HIGH      | 64QAM      | 20.66 | 20.50 | 20.79 | 21.80              |
|                 | 50      | LOW       | 64QAM      | 20.67 | 20.64 | 20.83 | 21.80              |

### 8.3.6 LTE Band17 Output Power

BL-SZ2220432-701

| LTE B17-State 1 -Ant.1 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.51        | 23.38 | 23.13 | 24.80              |
|                        |         | MID       | QPSK       | 23.52        | 23.46 | 23.23 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.59        | 23.54 | 23.40 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.54        | 22.49 | 22.18 | 23.80              |
|                        |         | MID       | QPSK       | 22.45        | 22.28 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.51        | 22.49 | 22.35 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.53        | 22.44 | 22.41 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.68        | 22.10 | 22.53 | 23.80              |
|                        |         | MID       | Q16        | 22.69        | 22.35 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.73        | 22.24 | 22.69 | 23.80              |
|                        |         | LOW       | Q16        | 21.75        | 21.40 | 21.62 | 22.80              |
|                        |         | MID       | Q16        | 21.48        | 21.32 | 21.47 | 22.80              |
|                        |         | HIGH      | Q16        | 21.69        | 21.33 | 21.60 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.52        | 21.45 | 21.44 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.56        | 21.42 | 21.69 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79        | 21.67 | 22.01 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.88        | 21.36 | 21.87 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.68        | 20.73 | 20.41 | 21.80              |
|                        |         | MID       | 64QAM      | 20.73        | 20.57 | 20.43 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66        | 20.39 | 20.72 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.28        | 20.51 | 20.58 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.51        | 23.40 | 23.39 | 24.80              |
|                        |         | MID       | QPSK       | <b>23.61</b> | 23.46 | 23.49 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57        | 23.47 | 23.52 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.56        | 22.51 | 22.36 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.65</b> | 22.46 | 22.45 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.53        | 22.49 | 22.42 | 23.80              |
| 10                     | 50      | LOW       | QPSK       | <b>22.58</b> | 22.51 | 22.57 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.61        | 22.32 | 22.73 | 23.80              |
|                        |         | MID       | Q16        | 22.74        | 22.44 | 22.87 | 23.80              |
|                        |         | HIGH      | Q16        | 22.78        | 22.42 | 22.90 | 23.80              |
|                        | 25      | LOW       | Q16        | 21.66        | 21.53 | 21.60 | 22.80              |
|                        |         | MID       | Q16        | 21.63        | 21.49 | 21.49 | 22.80              |
|                        |         | HIGH      | Q16        | 21.65        | 21.52 | 21.51 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.58        | 21.51 | 21.55 | 22.80              |
| 10                     | 1       | LOW       | 64QAM      | 21.60        | 21.53 | 21.63 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79        | 21.56 | 21.92 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.97        | 21.30 | 22.00 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.72        | 20.65 | 20.64 | 21.80              |
|                        |         | MID       | 64QAM      | 20.71        | 20.63 | 20.55 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.64        | 20.51 | 20.70 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.46        | 20.55 | 20.56 | 21.80              |

| LTE B17-State 2 -Ant.1 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 22.12        | 22.44 | 21.99 | 23.80              |
|                        |         | MID       | QPSK       | 22.54        | 22.30 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.66        | 22.42 | 22.27 | 23.80              |
|                        | 12      | LOW       | QPSK       | 22.01        | 21.96 | 21.96 | 23.80              |
|                        |         | MID       | QPSK       | 22.36        | 22.39 | 22.62 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.31        | 22.46 | 22.25 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.35        | 22.60 | 22.00 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.27        | 22.38 | 22.33 | 23.80              |
|                        |         | MID       | Q16        | 22.60        | 22.30 | 22.65 | 23.80              |
|                        |         | HIGH      | Q16        | 22.49        | 22.53 | 22.62 | 23.80              |
|                        |         | LOW       | Q16        | 21.50        | 21.17 | 21.32 | 22.80              |
|                        |         | MID       | Q16        | 21.37        | 21.49 | 21.37 | 22.80              |
|                        |         | HIGH      | Q16        | 21.22        | 21.35 | 21.43 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.26        | 21.37 | 21.29 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.69        | 21.14 | 21.35 | 22.80              |
|                        |         | MID       | 64QAM      | 21.42        | 21.02 | 21.87 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.93        | 21.24 | 21.74 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.47        | 20.60 | 20.58 | 21.80              |
|                        |         | MID       | 64QAM      | 20.57        | 20.75 | 20.61 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.23        | 20.61 | 20.76 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.58        | 20.21 | 20.15 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 22.28        | 22.42 | 22.14 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.63</b> | 22.53 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.59        | 22.58 | 22.43 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.17        | 22.20 | 22.20 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.54</b> | 22.46 | 22.53 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.44        | 22.44 | 22.43 | 23.80              |
| 10                     | 50      | LOW       | QPSK       | <b>22.58</b> | 22.49 | 22.16 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.34        | 22.47 | 22.40 | 23.80              |
|                        |         | MID       | Q16        | 22.58        | 22.28 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.69        | 22.44 | 22.85 | 23.80              |
|                        | 25      | LOW       | Q16        | 21.61        | 21.34 | 21.45 | 22.80              |
|                        |         | MID       | Q16        | 21.48        | 21.62 | 21.41 | 22.80              |
|                        |         | HIGH      | Q16        | 21.37        | 21.54 | 21.49 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.41        | 21.31 | 21.51 | 22.80              |
|                        | 10      | LOW       | 64QAM      | 21.60        | 21.29 | 21.52 | 22.80              |
|                        |         | MID       | 64QAM      | 21.51        | 21.17 | 21.85 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.86        | 21.28 | 21.87 | 22.80              |
|                        |         | LOW       | 64QAM      | 20.43        | 20.50 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.71        | 20.65 | 20.57 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.37        | 20.57 | 20.74 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.52        | 20.29 | 20.33 | 21.80              |

| LTE B17-State 3 -Ant.1 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 22.12        | 22.44 | 21.99 | 23.80              |
|                        |         | MID       | QPSK       | 22.54        | 22.30 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.66        | 22.42 | 22.27 | 23.80              |
|                        | 12      | LOW       | QPSK       | 22.01        | 21.96 | 21.96 | 23.80              |
|                        |         | MID       | QPSK       | 22.36        | 22.39 | 22.62 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.31        | 22.46 | 22.25 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.35        | 22.60 | 22.00 | 23.80              |
| 5                      | 1       | LOW       | Q16        | 22.27        | 22.38 | 22.33 | 23.80              |
|                        |         | MID       | Q16        | 22.60        | 22.30 | 22.65 | 23.80              |
|                        |         | HIGH      | Q16        | 22.49        | 22.53 | 22.62 | 23.80              |
|                        | 12      | LOW       | Q16        | 21.50        | 21.17 | 21.32 | 22.80              |
|                        |         | MID       | Q16        | 21.37        | 21.49 | 21.37 | 22.80              |
|                        |         | HIGH      | Q16        | 21.22        | 21.35 | 21.43 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.26        | 21.37 | 21.29 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.69        | 21.14 | 21.35 | 22.80              |
|                        |         | MID       | 64QAM      | 21.42        | 21.02 | 21.87 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.93        | 21.24 | 21.74 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.47        | 20.60 | 20.58 | 21.80              |
|                        |         | MID       | 64QAM      | 20.57        | 20.75 | 20.61 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.23        | 20.61 | 20.76 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.58        | 20.21 | 20.15 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 22.28        | 22.42 | 22.14 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.63</b> | 22.53 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.59        | 22.58 | 22.43 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.17        | 22.20 | 22.20 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.54</b> | 22.46 | 22.53 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.44        | 22.44 | 22.43 | 23.80              |
| 10                     | 50      | LOW       | QPSK       | <b>22.58</b> | 22.49 | 22.16 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.34        | 22.47 | 22.40 | 23.80              |
|                        |         | MID       | Q16        | 22.58        | 22.28 | 22.56 | 23.80              |
|                        |         | HIGH      | Q16        | 22.69        | 22.44 | 22.85 | 23.80              |
|                        | 25      | LOW       | Q16        | 21.61        | 21.34 | 21.45 | 22.80              |
|                        |         | MID       | Q16        | 21.48        | 21.62 | 21.41 | 22.80              |
|                        |         | HIGH      | Q16        | 21.37        | 21.54 | 21.49 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.41        | 21.31 | 21.51 | 22.80              |
| 10                     | 1       | LOW       | 64QAM      | 21.60        | 21.29 | 21.52 | 22.80              |
|                        |         | MID       | 64QAM      | 21.51        | 21.17 | 21.85 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.86        | 21.28 | 21.87 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.43        | 20.50 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.71        | 20.65 | 20.57 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.37        | 20.57 | 20.74 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.52        | 20.29 | 20.33 | 21.80              |

| LTE B17-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755 | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.51 | 23.38 | 23.13 | 24.80              |
|                        |         | MID       | QPSK       | 23.52 | 23.46 | 23.23 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.59 | 23.54 | 23.40 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.54 | 22.49 | 22.18 | 23.80              |
|                        |         | MID       | QPSK       | 22.45 | 22.28 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.51 | 22.49 | 22.35 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.53 | 22.44 | 22.41 | 23.80              |
| 5                      | 1       | LOW       | Q16        | 22.68 | 22.10 | 22.53 | 23.80              |
|                        |         | MID       | Q16        | 22.69 | 22.35 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.73 | 22.24 | 22.69 | 23.80              |
|                        | 12      | LOW       | Q16        | 21.75 | 21.40 | 21.62 | 22.80              |
|                        |         | MID       | Q16        | 21.48 | 21.32 | 21.47 | 22.80              |
|                        |         | HIGH      | Q16        | 21.69 | 21.33 | 21.60 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.52 | 21.45 | 21.44 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.56 | 21.42 | 21.69 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79 | 21.67 | 22.01 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.88 | 21.36 | 21.87 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.68 | 20.73 | 20.41 | 21.80              |
|                        |         | MID       | 64QAM      | 20.73 | 20.57 | 20.43 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.39 | 20.72 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.28 | 20.51 | 20.58 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780 | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.51 | 23.40 | 23.39 | 24.80              |
|                        |         | MID       | QPSK       | 23.61 | 23.46 | 23.49 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.47 | 23.52 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.56 | 22.51 | 22.36 | 23.80              |
|                        |         | MID       | QPSK       | 22.65 | 22.46 | 22.45 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.53 | 22.49 | 22.42 | 23.80              |
|                        | 50      | LOW       | QPSK       | 22.58 | 22.51 | 22.57 | 23.80              |
| 10                     | 1       | LOW       | Q16        | 22.61 | 22.32 | 22.73 | 23.80              |
|                        |         | MID       | Q16        | 22.74 | 22.44 | 22.87 | 23.80              |
|                        |         | HIGH      | Q16        | 22.78 | 22.42 | 22.90 | 23.80              |
|                        | 25      | LOW       | Q16        | 21.66 | 21.53 | 21.60 | 22.80              |
|                        |         | MID       | Q16        | 21.63 | 21.49 | 21.49 | 22.80              |
|                        |         | HIGH      | Q16        | 21.65 | 21.52 | 21.51 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.58 | 21.51 | 21.55 | 22.80              |
| 10                     | 1       | LOW       | 64QAM      | 21.60 | 21.53 | 21.63 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79 | 21.56 | 21.92 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.97 | 21.30 | 22.00 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.72 | 20.65 | 20.64 | 21.80              |
|                        |         | MID       | 64QAM      | 20.71 | 20.63 | 20.55 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.64 | 20.51 | 20.70 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.46 | 20.55 | 20.56 | 21.80              |

| LTE B17-State 5 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755 | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.51 | 23.38 | 23.13 | 24.80              |
|                        |         | MID       | QPSK       | 23.52 | 23.46 | 23.23 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.59 | 23.54 | 23.40 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.54 | 22.49 | 22.18 | 23.80              |
|                        |         | MID       | QPSK       | 22.45 | 22.28 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.51 | 22.49 | 22.35 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.53 | 22.44 | 22.41 | 23.80              |
| 5                      | 1       | LOW       | Q16        | 22.68 | 22.10 | 22.53 | 23.80              |
|                        |         | MID       | Q16        | 22.69 | 22.35 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.73 | 22.24 | 22.69 | 23.80              |
|                        | 12      | LOW       | Q16        | 21.75 | 21.40 | 21.62 | 22.80              |
|                        |         | MID       | Q16        | 21.48 | 21.32 | 21.47 | 22.80              |
|                        |         | HIGH      | Q16        | 21.69 | 21.33 | 21.60 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.52 | 21.45 | 21.44 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.56 | 21.42 | 21.69 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79 | 21.67 | 22.01 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.88 | 21.36 | 21.87 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.68 | 20.73 | 20.41 | 21.80              |
|                        |         | MID       | 64QAM      | 20.73 | 20.57 | 20.43 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.39 | 20.72 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.28 | 20.51 | 20.58 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780 | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.51 | 23.40 | 23.39 | 24.80              |
|                        |         | MID       | QPSK       | 23.61 | 23.46 | 23.49 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.47 | 23.52 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.56 | 22.51 | 22.36 | 23.80              |
|                        |         | MID       | QPSK       | 22.65 | 22.46 | 22.45 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.53 | 22.49 | 22.42 | 23.80              |
|                        | 50      | LOW       | QPSK       | 22.58 | 22.51 | 22.57 | 23.80              |
| 10                     | 1       | LOW       | Q16        | 22.61 | 22.32 | 22.73 | 23.80              |
|                        |         | MID       | Q16        | 22.74 | 22.44 | 22.87 | 23.80              |
|                        |         | HIGH      | Q16        | 22.78 | 22.42 | 22.90 | 23.80              |
|                        | 25      | LOW       | Q16        | 21.66 | 21.53 | 21.60 | 22.80              |
|                        |         | MID       | Q16        | 21.63 | 21.49 | 21.49 | 22.80              |
|                        |         | HIGH      | Q16        | 21.65 | 21.52 | 21.51 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.58 | 21.51 | 21.55 | 22.80              |
| 10                     | 1       | LOW       | 64QAM      | 21.60 | 21.53 | 21.63 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79 | 21.56 | 21.92 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.97 | 21.30 | 22.00 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.72 | 20.65 | 20.64 | 21.80              |
|                        |         | MID       | 64QAM      | 20.71 | 20.63 | 20.55 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.64 | 20.51 | 20.70 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.46 | 20.55 | 20.56 | 21.80              |

| LTE B17-State 6 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755 | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.51 | 23.38 | 23.13 | 24.80              |
|                        |         | MID       | QPSK       | 23.52 | 23.46 | 23.23 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.59 | 23.54 | 23.40 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.54 | 22.49 | 22.18 | 23.80              |
|                        |         | MID       | QPSK       | 22.45 | 22.28 | 22.47 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.51 | 22.49 | 22.35 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.53 | 22.44 | 22.41 | 23.80              |
| 5                      | 1       | LOW       | Q16        | 22.68 | 22.10 | 22.53 | 23.80              |
|                        |         | MID       | Q16        | 22.69 | 22.35 | 22.64 | 23.80              |
|                        |         | HIGH      | Q16        | 22.73 | 22.24 | 22.69 | 23.80              |
|                        | 12      | LOW       | Q16        | 21.75 | 21.40 | 21.62 | 22.80              |
|                        |         | MID       | Q16        | 21.48 | 21.32 | 21.47 | 22.80              |
|                        |         | HIGH      | Q16        | 21.69 | 21.33 | 21.60 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.52 | 21.45 | 21.44 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.56 | 21.42 | 21.69 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79 | 21.67 | 22.01 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.88 | 21.36 | 21.87 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.68 | 20.73 | 20.41 | 21.80              |
|                        |         | MID       | 64QAM      | 20.73 | 20.57 | 20.43 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.66 | 20.39 | 20.72 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.28 | 20.51 | 20.58 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780 | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.51 | 23.40 | 23.39 | 24.80              |
|                        |         | MID       | QPSK       | 23.61 | 23.46 | 23.49 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.57 | 23.47 | 23.52 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.56 | 22.51 | 22.36 | 23.80              |
|                        |         | MID       | QPSK       | 22.65 | 22.46 | 22.45 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.53 | 22.49 | 22.42 | 23.80              |
|                        | 50      | LOW       | QPSK       | 22.58 | 22.51 | 22.57 | 23.80              |
| 10                     | 1       | LOW       | Q16        | 22.61 | 22.32 | 22.73 | 23.80              |
|                        |         | MID       | Q16        | 22.74 | 22.44 | 22.87 | 23.80              |
|                        |         | HIGH      | Q16        | 22.78 | 22.42 | 22.90 | 23.80              |
|                        | 25      | LOW       | Q16        | 21.66 | 21.53 | 21.60 | 22.80              |
|                        |         | MID       | Q16        | 21.63 | 21.49 | 21.49 | 22.80              |
|                        |         | HIGH      | Q16        | 21.65 | 21.52 | 21.51 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.58 | 21.51 | 21.55 | 22.80              |
| 10                     | 1       | LOW       | 64QAM      | 21.60 | 21.53 | 21.63 | 22.80              |
|                        |         | MID       | 64QAM      | 21.79 | 21.56 | 21.92 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.97 | 21.30 | 22.00 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.72 | 20.65 | 20.64 | 21.80              |
|                        |         | MID       | 64QAM      | 20.71 | 20.63 | 20.55 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.64 | 20.51 | 20.70 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.46 | 20.55 | 20.56 | 21.80              |

| LTE B17-State 1 -Ant.0 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.52        | 23.36 | 23.51 | 24.80              |
|                        |         | MID       | QPSK       | 23.54        | 23.59 | 23.80 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.88        | 23.53 | 23.69 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.61        | 22.66 | 22.78 | 23.80              |
|                        |         | MID       | QPSK       | 22.58        | 22.59 | 22.76 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.60        | 22.72 | 22.46 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.54        | 22.57 | 22.51 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.73        | 22.63 | 23.11 | 23.80              |
|                        |         | MID       | Q16        | 22.89        | 22.56 | 23.12 | 23.80              |
|                        |         | HIGH      | Q16        | 23.02        | 22.48 | 22.99 | 23.80              |
|                        |         | LOW       | Q16        | 21.89        | 21.64 | 21.89 | 22.80              |
|                        |         | MID       | Q16        | 21.71        | 21.51 | 21.78 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70        | 21.54 | 21.39 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.73        | 21.52 | 21.50 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.59        | 21.41 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.22        | 21.73 | 22.15 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.92        | 21.71 | 22.25 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.73        | 20.71 | 20.57 | 21.80              |
|                        |         | MID       | 64QAM      | 20.62        | 20.44 | 20.92 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.93        | 20.33 | 20.54 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.64        | 20.39 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.69        | 23.62 | 23.60 | 24.80              |
|                        |         | MID       | QPSK       | <b>23.80</b> | 23.68 | 23.68 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76        | 23.70 | 23.76 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.70        | 22.66 | 22.71 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.72</b> | 22.66 | 22.65 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69        | 22.65 | 22.60 | 23.80              |
|                        | 50      | LOW       | QPSK       | <b>22.79</b> | 22.68 | 22.69 | 23.80              |
|                        | 10      | LOW       | Q16        | 22.78        | 22.58 | 23.02 | 23.80              |
|                        |         | MID       | Q16        | 22.94        | 22.63 | 23.07 | 23.80              |
|                        |         | HIGH      | Q16        | 22.91        | 22.66 | 23.13 | 23.80              |
|                        |         | LOW       | Q16        | 21.85        | 21.68 | 21.78 | 22.80              |
|                        |         | MID       | Q16        | 21.82        | 21.68 | 21.69 | 22.80              |
|                        |         | HIGH      | Q16        | 21.83        | 21.63 | 21.63 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.80        | 21.67 | 21.70 | 22.80              |
| 10                     | 1       | LOW       | 64QAM      | 21.74        | 21.63 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.13        | 21.71 | 22.08 | 22.80              |
|                        |         | HIGH      | 64QAM      | 22.10        | 21.78 | 22.25 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.73        | 20.67 | 20.71 | 21.80              |
|                        |         | MID       | 64QAM      | 20.72        | 20.54 | 20.88 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.89        | 20.56 | 20.60 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.83        | 20.55 | 20.67 | 21.80              |

| LTE B17-State 2 -Ant.0 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.52        | 23.36 | 23.51 | 24.80              |
|                        |         | MID       | QPSK       | 23.54        | 23.59 | 23.80 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.88        | 23.53 | 23.69 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.61        | 22.66 | 22.78 | 23.80              |
|                        |         | MID       | QPSK       | 22.58        | 22.59 | 22.76 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.60        | 22.72 | 22.46 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.54        | 22.57 | 22.51 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.73        | 22.63 | 23.11 | 23.80              |
|                        |         | MID       | Q16        | 22.89        | 22.56 | 23.12 | 23.80              |
|                        |         | HIGH      | Q16        | 23.02        | 22.48 | 22.99 | 23.80              |
|                        |         | LOW       | Q16        | 21.89        | 21.64 | 21.89 | 22.80              |
|                        |         | MID       | Q16        | 21.71        | 21.51 | 21.78 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70        | 21.54 | 21.39 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.73        | 21.52 | 21.50 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.59        | 21.41 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.22        | 21.73 | 22.15 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.92        | 21.71 | 22.25 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.73        | 20.71 | 20.57 | 21.80              |
|                        |         | MID       | 64QAM      | 20.62        | 20.44 | 20.92 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.93        | 20.33 | 20.54 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.64        | 20.39 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.69        | 23.62 | 23.60 | 24.80              |
|                        |         | MID       | QPSK       | <b>23.80</b> | 23.68 | 23.68 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76        | 23.70 | 23.76 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.70        | 22.66 | 22.71 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.72</b> | 22.66 | 22.65 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69        | 22.65 | 22.60 | 23.80              |
| 10                     | 50      | LOW       | QPSK       | <b>22.79</b> | 22.68 | 22.69 | 23.80              |
|                        |         | LOW       | Q16        | 22.78        | 22.58 | 23.02 | 23.80              |
|                        |         | MID       | Q16        | 22.94        | 22.63 | 23.07 | 23.80              |
|                        | 1       | HIGH      | Q16        | 22.91        | 22.66 | 23.13 | 23.80              |
|                        |         | LOW       | Q16        | 21.85        | 21.68 | 21.78 | 22.80              |
|                        |         | MID       | Q16        | 21.82        | 21.68 | 21.69 | 22.80              |
|                        |         | HIGH      | Q16        | 21.83        | 21.63 | 21.63 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.80        | 21.67 | 21.70 | 22.80              |
|                        | 10      | LOW       | 64QAM      | 21.74        | 21.63 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.13        | 21.71 | 22.08 | 22.80              |
|                        |         | HIGH      | 64QAM      | 22.10        | 21.78 | 22.25 | 22.80              |
|                        |         | LOW       | 64QAM      | 20.73        | 20.67 | 20.71 | 21.80              |
|                        |         | MID       | 64QAM      | 20.72        | 20.54 | 20.88 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.89        | 20.56 | 20.60 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.83        | 20.55 | 20.67 | 21.80              |

| LTE B17-State 3 -Ant.0 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.52        | 23.36 | 23.51 | 24.80              |
|                        |         | MID       | QPSK       | 23.54        | 23.59 | 23.80 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.88        | 23.53 | 23.69 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.61        | 22.66 | 22.78 | 23.80              |
|                        |         | MID       | QPSK       | 22.58        | 22.59 | 22.76 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.60        | 22.72 | 22.46 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.54        | 22.57 | 22.51 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.73        | 22.63 | 23.11 | 23.80              |
|                        |         | MID       | Q16        | 22.89        | 22.56 | 23.12 | 23.80              |
|                        |         | HIGH      | Q16        | 23.02        | 22.48 | 22.99 | 23.80              |
|                        |         | LOW       | Q16        | 21.89        | 21.64 | 21.89 | 22.80              |
|                        |         | MID       | Q16        | 21.71        | 21.51 | 21.78 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70        | 21.54 | 21.39 | 22.80              |
|                        | 25      | LOW       | Q16        | 21.73        | 21.52 | 21.50 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.59        | 21.41 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.22        | 21.73 | 22.15 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.92        | 21.71 | 22.25 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.73        | 20.71 | 20.57 | 21.80              |
|                        |         | MID       | 64QAM      | 20.62        | 20.44 | 20.92 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.93        | 20.33 | 20.54 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.64        | 20.39 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.69        | 23.62 | 23.60 | 24.80              |
|                        |         | MID       | QPSK       | <b>23.80</b> | 23.68 | 23.68 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76        | 23.70 | 23.76 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.70        | 22.66 | 22.71 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.72</b> | 22.66 | 22.65 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69        | 22.65 | 22.60 | 23.80              |
| 10                     | 50      | LOW       | QPSK       | <b>22.79</b> | 22.68 | 22.69 | 23.80              |
|                        |         | LOW       | Q16        | 22.78        | 22.58 | 23.02 | 23.80              |
|                        |         | MID       | Q16        | 22.94        | 22.63 | 23.07 | 23.80              |
|                        | 1       | HIGH      | Q16        | 22.91        | 22.66 | 23.13 | 23.80              |
|                        |         | LOW       | Q16        | 21.85        | 21.68 | 21.78 | 22.80              |
|                        |         | MID       | Q16        | 21.82        | 21.68 | 21.69 | 22.80              |
|                        |         | HIGH      | Q16        | 21.83        | 21.63 | 21.63 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.80        | 21.67 | 21.70 | 22.80              |
|                        | 10      | LOW       | 64QAM      | 21.74        | 21.63 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.13        | 21.71 | 22.08 | 22.80              |
|                        |         | HIGH      | 64QAM      | 22.10        | 21.78 | 22.25 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.73        | 20.67 | 20.71 | 21.80              |
|                        |         | MID       | 64QAM      | 20.72        | 20.54 | 20.88 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.89        | 20.56 | 20.60 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.83        | 20.55 | 20.67 | 21.80              |

| LTE B17-State 4 -Ant.0 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.52        | 23.36 | 23.51 | 24.80              |
|                        |         | MID       | QPSK       | 23.54        | 23.59 | 23.80 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.88        | 23.53 | 23.69 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.61        | 22.66 | 22.78 | 23.80              |
|                        |         | MID       | QPSK       | 22.58        | 22.59 | 22.76 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.60        | 22.72 | 22.46 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.54        | 22.57 | 22.51 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.73        | 22.63 | 23.11 | 23.80              |
|                        |         | MID       | Q16        | 22.89        | 22.56 | 23.12 | 23.80              |
|                        |         | HIGH      | Q16        | 23.02        | 22.48 | 22.99 | 23.80              |
|                        |         | LOW       | Q16        | 21.89        | 21.64 | 21.89 | 22.80              |
|                        |         | MID       | Q16        | 21.71        | 21.51 | 21.78 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70        | 21.54 | 21.39 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.59        | 21.41 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.22        | 21.73 | 22.15 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.92        | 21.71 | 22.25 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.73        | 20.71 | 20.57 | 21.80              |
|                        |         | MID       | 64QAM      | 20.62        | 20.44 | 20.92 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.93        | 20.33 | 20.54 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.64        | 20.39 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.69        | 23.62 | 23.60 | 24.80              |
|                        |         | MID       | QPSK       | <b>23.80</b> | 23.68 | 23.68 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76        | 23.70 | 23.76 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.70        | 22.66 | 22.71 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.72</b> | 22.66 | 22.65 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69        | 22.65 | 22.60 | 23.80              |
|                        | 50      | LOW       | QPSK       | <b>22.79</b> | 22.68 | 22.69 | 23.80              |
|                        | 10      | LOW       | Q16        | 22.78        | 22.58 | 23.02 | 23.80              |
|                        |         | MID       | Q16        | 22.94        | 22.63 | 23.07 | 23.80              |
|                        |         | HIGH      | Q16        | 22.91        | 22.66 | 23.13 | 23.80              |
|                        |         | LOW       | Q16        | 21.85        | 21.68 | 21.78 | 22.80              |
|                        |         | MID       | Q16        | 21.82        | 21.68 | 21.69 | 22.80              |
|                        |         | HIGH      | Q16        | 21.83        | 21.63 | 21.63 | 22.80              |
| 10                     | 1       | LOW       | Q16        | 21.80        | 21.67 | 21.70 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.74        | 21.63 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.13        | 21.71 | 22.08 | 22.80              |
|                        |         | HIGH      | 64QAM      | 22.10        | 21.78 | 22.25 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.73        | 20.67 | 20.71 | 21.80              |
|                        |         | MID       | 64QAM      | 20.72        | 20.54 | 20.88 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.89        | 20.56 | 20.60 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.83        | 20.55 | 20.67 | 21.80              |

| LTE B17-State 5 -Ant.0 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.52        | 23.36 | 23.51 | 24.80              |
|                        |         | MID       | QPSK       | 23.54        | 23.59 | 23.80 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.88        | 23.53 | 23.69 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.61        | 22.66 | 22.78 | 23.80              |
|                        |         | MID       | QPSK       | 22.58        | 22.59 | 22.76 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.60        | 22.72 | 22.46 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.54        | 22.57 | 22.51 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.73        | 22.63 | 23.11 | 23.80              |
|                        |         | MID       | Q16        | 22.89        | 22.56 | 23.12 | 23.80              |
|                        |         | HIGH      | Q16        | 23.02        | 22.48 | 22.99 | 23.80              |
|                        |         | LOW       | Q16        | 21.89        | 21.64 | 21.89 | 22.80              |
|                        |         | MID       | Q16        | 21.71        | 21.51 | 21.78 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70        | 21.54 | 21.39 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.59        | 21.41 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.22        | 21.73 | 22.15 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.92        | 21.71 | 22.25 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.73        | 20.71 | 20.57 | 21.80              |
|                        |         | MID       | 64QAM      | 20.62        | 20.44 | 20.92 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.93        | 20.33 | 20.54 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.64        | 20.39 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.69        | 23.62 | 23.60 | 24.80              |
|                        |         | MID       | QPSK       | <b>23.80</b> | 23.68 | 23.68 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76        | 23.70 | 23.76 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.70        | 22.66 | 22.71 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.72</b> | 22.66 | 22.65 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69        | 22.65 | 22.60 | 23.80              |
| 10                     | 50      | LOW       | QPSK       | <b>22.79</b> | 22.68 | 22.69 | 23.80              |
|                        |         | LOW       | Q16        | 22.78        | 22.58 | 23.02 | 23.80              |
|                        |         | MID       | Q16        | 22.94        | 22.63 | 23.07 | 23.80              |
|                        | 1       | HIGH      | Q16        | 22.91        | 22.66 | 23.13 | 23.80              |
|                        |         | LOW       | Q16        | 21.85        | 21.68 | 21.78 | 22.80              |
|                        |         | MID       | Q16        | 21.82        | 21.68 | 21.69 | 22.80              |
|                        |         | HIGH      | Q16        | 21.83        | 21.63 | 21.63 | 22.80              |
|                        | 50      | LOW       | Q16        | 21.80        | 21.67 | 21.70 | 22.80              |
| 10                     | 1       | LOW       | 64QAM      | 21.74        | 21.63 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.13        | 21.71 | 22.08 | 22.80              |
|                        |         | HIGH      | 64QAM      | 22.10        | 21.78 | 22.25 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.73        | 20.67 | 20.71 | 21.80              |
|                        |         | MID       | 64QAM      | 20.72        | 20.54 | 20.88 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.89        | 20.56 | 20.60 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.83        | 20.55 | 20.67 | 21.80              |

| LTE B17-State 6 -Ant.0 |         |           |            |              |       |       |                    |
|------------------------|---------|-----------|------------|--------------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23755        | 23790 | 23825 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.52        | 23.36 | 23.51 | 24.80              |
|                        |         | MID       | QPSK       | 23.54        | 23.59 | 23.80 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.88        | 23.53 | 23.69 | 24.80              |
|                        | 12      | LOW       | QPSK       | 22.61        | 22.66 | 22.78 | 23.80              |
|                        |         | MID       | QPSK       | 22.58        | 22.59 | 22.76 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.60        | 22.72 | 22.46 | 23.80              |
|                        | 25      | LOW       | QPSK       | 22.54        | 22.57 | 22.51 | 23.80              |
|                        | 5       | LOW       | Q16        | 22.73        | 22.63 | 23.11 | 23.80              |
|                        |         | MID       | Q16        | 22.89        | 22.56 | 23.12 | 23.80              |
|                        |         | HIGH      | Q16        | 23.02        | 22.48 | 22.99 | 23.80              |
|                        |         | LOW       | Q16        | 21.89        | 21.64 | 21.89 | 22.80              |
|                        |         | MID       | Q16        | 21.71        | 21.51 | 21.78 | 22.80              |
|                        |         | HIGH      | Q16        | 21.70        | 21.54 | 21.39 | 22.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.59        | 21.41 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.22        | 21.73 | 22.15 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.92        | 21.71 | 22.25 | 22.80              |
|                        | 12      | LOW       | 64QAM      | 20.73        | 20.71 | 20.57 | 21.80              |
|                        |         | MID       | 64QAM      | 20.62        | 20.44 | 20.92 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.93        | 20.33 | 20.54 | 21.80              |
|                        | 25      | LOW       | 64QAM      | 20.64        | 20.39 | 20.55 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 23780        | 23790 | 23800 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.69        | 23.62 | 23.60 | 24.80              |
|                        |         | MID       | QPSK       | <b>23.80</b> | 23.68 | 23.68 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76        | 23.70 | 23.76 | 24.80              |
|                        | 25      | LOW       | QPSK       | 22.70        | 22.66 | 22.71 | 23.80              |
|                        |         | MID       | QPSK       | <b>22.72</b> | 22.66 | 22.65 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69        | 22.65 | 22.60 | 23.80              |
|                        | 50      | LOW       | QPSK       | <b>22.79</b> | 22.68 | 22.69 | 23.80              |
|                        | 10      | LOW       | Q16        | 22.78        | 22.58 | 23.02 | 23.80              |
|                        |         | MID       | Q16        | 22.94        | 22.63 | 23.07 | 23.80              |
|                        |         | HIGH      | Q16        | 22.91        | 22.66 | 23.13 | 23.80              |
|                        |         | LOW       | Q16        | 21.85        | 21.68 | 21.78 | 22.80              |
|                        |         | MID       | Q16        | 21.82        | 21.68 | 21.69 | 22.80              |
|                        |         | HIGH      | Q16        | 21.83        | 21.63 | 21.63 | 22.80              |
| 10                     | 1       | LOW       | Q16        | 21.80        | 21.67 | 21.70 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.74        | 21.63 | 21.94 | 22.80              |
|                        |         | MID       | 64QAM      | 22.13        | 21.71 | 22.08 | 22.80              |
|                        |         | HIGH      | 64QAM      | 22.10        | 21.78 | 22.25 | 22.80              |
|                        | 25      | LOW       | 64QAM      | 20.73        | 20.67 | 20.71 | 21.80              |
|                        |         | MID       | 64QAM      | 20.72        | 20.54 | 20.88 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.89        | 20.56 | 20.60 | 21.80              |
|                        | 50      | LOW       | 64QAM      | 20.83        | 20.55 | 20.67 | 21.80              |

### 8.3.7 LTE Band26 Output Power

BL-SZ2220432-701

| LTE B26-State 1 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 21.61 | 21.38 | 21.57 | 22.80              |
|                        |         | MID       | QPSK       | 21.68 | 21.47 | 21.17 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.18 | 21.62 | 21.29 | 22.80              |
|                        | 3       | LOW       | QPSK       | 22.43 | 22.44 | 22.46 | 22.80              |
|                        |         | MID       | QPSK       | 22.47 | 22.21 | 22.10 | 22.80              |
|                        |         | HIGH      | QPSK       | 22.36 | 22.41 | 22.56 | 22.80              |
|                        | 6       | LOW       | QPSK       | 21.65 | 21.27 | 21.40 | 22.80              |
| 1.4                    | 1       | LOW       | Q16        | 21.43 | 21.48 | 21.42 | 22.80              |
|                        |         | MID       | Q16        | 21.60 | 21.87 | 21.54 | 22.80              |
|                        |         | HIGH      | Q16        | 21.07 | 21.59 | 21.50 | 22.80              |
|                        | 3       | LOW       | Q16        | 22.57 | 22.28 | 22.39 | 22.80              |
|                        |         | MID       | Q16        | 22.41 | 22.45 | 22.09 | 22.80              |
|                        |         | HIGH      | Q16        | 22.24 | 22.62 | 22.54 | 22.80              |
|                        | 6       | LOW       | Q16        | 21.78 | 21.22 | 21.26 | 22.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.33 | 21.25 | 21.36 | 22.80              |
|                        |         | MID       | 64QAM      | 21.67 | 21.65 | 21.66 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.10 | 21.41 | 21.90 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.34 | 21.73 | 21.60 | 22.80              |
|                        |         | MID       | 64QAM      | 21.57 | 21.27 | 21.11 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.75 | 21.80 | 21.54 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.68 | 20.33 | 20.29 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 21.44 | 21.38 | 21.29 | 22.80              |
|                        |         | MID       | QPSK       | 21.55 | 21.54 | 21.41 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.53 | 21.77 | 21.49 | 22.80              |
|                        | 8       | LOW       | QPSK       | 21.50 | 21.44 | 21.66 | 22.80              |
|                        |         | MID       | QPSK       | 21.58 | 21.38 | 21.18 | 22.80              |
|                        |         | HIGH      | QPSK       | 21.38 | 21.31 | 21.67 | 22.80              |
|                        | 15      | LOW       | QPSK       | 21.57 | 21.48 | 21.36 | 22.80              |
| 3                      | 1       | LOW       | Q16        | 21.52 | 21.27 | 21.51 | 22.80              |
|                        |         | MID       | Q16        | 21.71 | 21.63 | 21.83 | 22.80              |
|                        |         | HIGH      | Q16        | 21.37 | 21.68 | 21.46 | 22.80              |
|                        | 8       | LOW       | Q16        | 21.64 | 21.48 | 21.37 | 22.80              |
|                        |         | MID       | Q16        | 21.74 | 21.49 | 21.43 | 22.80              |
|                        |         | HIGH      | Q16        | 21.30 | 21.49 | 21.39 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.63 | 21.33 | 21.20 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.46 | 21.42 | 21.38 | 22.80              |
|                        |         | MID       | 64QAM      | 21.65 | 21.70 | 21.81 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.24 | 21.56 | 21.66 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.47 | 20.50 | 20.50 | 21.80              |
|                        |         | MID       | 64QAM      | 20.67 | 20.21 | 20.11 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.98 | 20.49 | 20.58 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.84 | 20.54 | 20.15 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 21.48      | 21.42 | 21.42 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.55      | 21.62 | 21.32 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.18      | 21.57 | 21.47 | 22.80              |                    |
|                 | 12              | LOW       | QPSK       | 21.56      | 21.40 | 21.42 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.60      | 21.31 | 21.35 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.64      | 21.46 | 21.56 | 22.80              |                    |
|                 | 25              | LOW       | QPSK       | 21.68      | 21.40 | 21.32 | 22.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 21.52 | 21.44 | 21.72              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.63 | 21.81 | 21.85              | 22.80              |
| HIGH            |                 |           | Q16        | 21.28      | 21.48 | 21.56 | 22.80              |                    |
| 12              |                 | LOW       | Q16        | 21.49      | 21.35 | 21.33 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.57      | 21.26 | 21.13 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.21      | 21.64 | 21.54 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.63      | 21.33 | 21.15 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.56 | 21.22 | 21.64              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.72 | 21.83 | 21.70              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.42      | 21.64 | 21.57 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.61      | 20.69 | 20.56 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.59      | 20.35 | 20.03 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.71      | 20.49 | 20.54 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.78      | 20.36 | 20.21 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 21.65 | 21.25 | 21.42              | 22.80              |
| MID             |                 |           | QPSK       | 21.60      | 21.36 | 21.17 | 22.80              |                    |
| HIGH            |                 |           | QPSK       | 21.53      | 21.70 | 21.36 | 22.80              |                    |
| 25              |                 | LOW       | QPSK       | 21.35      | 21.32 | 21.57 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.47      | 21.27 | 21.35 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.61      | 21.31 | 21.67 | 22.80              |                    |
| 50              |                 | LOW       | QPSK       | 21.55      | 21.33 | 21.40 | 22.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 21.54 | 21.20 | 21.66              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.56 | 21.65 | 21.67              | 22.80              |
|                 | HIGH            |           | Q16        | 21.15      | 21.79 | 21.58 | 22.80              |                    |
|                 | 25              | LOW       | Q16        | 21.34      | 21.41 | 21.29 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.74      | 21.41 | 21.15 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.45      | 21.62 | 21.39 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.74      | 21.15 | 21.28 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.59 | 21.42 | 21.64              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.74 | 21.91 | 21.66              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.33      | 21.60 | 21.72 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.34      | 20.65 | 20.31 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.48      | 20.41 | 20.11 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.88      | 20.53 | 20.72 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.86      | 20.58 | 20.13 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 21.59 | 21.40 | 21.48              | 22.80              |
|                 | MID             |           | QPSK       | 21.77      | 21.58 | 21.32 | 22.80              |                    |
|                 | HIGH            |           | QPSK       | 21.42      | 21.66 | 21.51 | 22.80              |                    |
|                 | 36              | LOW       | QPSK       | 21.54      | 21.38 | 21.55 | 22.80              |                    |
|                 |                 | MID       | QPSK       | 21.67      | 21.40 | 21.33 | 22.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.55      | 21.50 | 21.56 | 22.80              |                    |
|                 | 75              | LOW       | QPSK       | 21.59      | 21.44 | 21.38 | 22.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 21.58 | 21.44 | 21.66              | 22.80              |
|                 |                 |           | MID        | Q16        | 21.67 | 21.85 | 21.74              | 22.80              |
| HIGH            |                 |           | Q16        | 21.26      | 21.72 | 21.52 | 22.80              |                    |
| 36              |                 | LOW       | Q16        | 21.53      | 21.52 | 21.35 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.63      | 21.45 | 21.32 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.45      | 21.53 | 21.52 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.76      | 21.39 | 21.26 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.50 | 21.46 | 21.60              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.74 | 21.87 | 21.81              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.33      | 21.58 | 21.81 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.57      | 20.69 | 20.54 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.71      | 20.41 | 20.25 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.92      | 20.70 | 20.64 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.80      | 20.54 | 20.33 | 21.80              |                    |

| LTE B26-State 2 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 20.37 | 20.06 | 20.32 | 21.80              |
|                        |         | MID       | QPSK       | 20.69 | 20.56 | 20.36 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.58 | 20.51 | 20.47 | 21.80              |
|                        | 3       | LOW       | QPSK       | 20.38 | 20.20 | 20.33 | 21.80              |
|                        |         | MID       | QPSK       | 20.75 | 20.40 | 20.05 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.14 | 20.46 | 20.15 | 21.80              |
|                        | 6       | LOW       | QPSK       | 20.63 | 20.38 | 20.44 | 21.80              |
|                        | 1.4     | LOW       | Q16        | 20.49 | 20.29 | 20.56 | 21.80              |
|                        |         | MID       | Q16        | 20.61 | 20.60 | 20.52 | 21.80              |
|                        |         | HIGH      | Q16        | 19.94 | 20.82 | 20.52 | 21.80              |
|                        |         | LOW       | Q16        | 20.40 | 20.56 | 20.21 | 21.80              |
|                        |         | MID       | Q16        | 20.71 | 20.55 | 19.92 | 21.80              |
|                        |         | HIGH      | Q16        | 20.28 | 20.53 | 20.50 | 21.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 20.46 | 20.10 | 20.39 | 21.80              |
|                        |         | MID       | 64QAM      | 20.64 | 20.89 | 20.40 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.07 | 20.50 | 20.16 | 21.80              |
|                        | 3       | LOW       | 64QAM      | 20.77 | 20.65 | 20.50 | 21.80              |
|                        |         | MID       | 64QAM      | 20.49 | 20.25 | 20.17 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.76 | 20.64 | 20.50 | 21.80              |
|                        | 6       | LOW       | 64QAM      | 20.82 | 20.60 | 20.45 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 20.37 | 20.22 | 20.30 | 21.80              |
|                        |         | MID       | QPSK       | 20.79 | 20.54 | 20.12 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.46 | 20.37 | 20.32 | 21.80              |
|                        | 8       | LOW       | QPSK       | 20.25 | 20.04 | 20.57 | 21.80              |
|                        |         | MID       | QPSK       | 20.63 | 20.26 | 19.97 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.24 | 20.48 | 20.13 | 21.80              |
|                        | 15      | LOW       | QPSK       | 20.47 | 20.32 | 20.34 | 21.80              |
|                        | 3       | LOW       | Q16        | 20.60 | 20.54 | 20.49 | 21.80              |
|                        |         | MID       | Q16        | 20.49 | 20.47 | 20.39 | 21.80              |
|                        |         | HIGH      | Q16        | 20.10 | 20.74 | 20.60 | 21.80              |
|                        |         | LOW       | Q16        | 20.12 | 20.60 | 20.27 | 21.80              |
|                        |         | MID       | Q16        | 20.61 | 20.47 | 19.94 | 21.80              |
|                        |         | HIGH      | Q16        | 20.39 | 20.23 | 20.26 | 21.80              |
| 3                      | 1       | LOW       | Q16        | 20.61 | 20.43 | 20.00 | 21.80              |
|                        |         | LOW       | 64QAM      | 20.56 | 20.10 | 20.33 | 21.80              |
|                        |         | MID       | 64QAM      | 20.74 | 20.66 | 20.31 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.15 | 20.60 | 20.18 | 21.80              |
|                        | 8       | LOW       | 64QAM      | 20.75 | 20.47 | 20.28 | 21.80              |
|                        |         | MID       | 64QAM      | 20.43 | 20.19 | 20.15 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.80 | 20.66 | 20.68 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.82 | 20.48 | 20.29 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 20.51      | 20.36 | 20.54 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.83      | 20.27 | 20.36 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.36      | 20.35 | 20.34 | 21.80              |                    |
|                 | 12              | LOW       | QPSK       | 20.48      | 20.12 | 20.45 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.50      | 20.46 | 20.25 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.42      | 20.38 | 20.17 | 21.80              |                    |
|                 | 25              | LOW       | QPSK       | 20.34      | 20.40 | 20.30 | 21.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 20.58 | 20.56 | 20.68              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.53 | 20.68 | 20.54              | 21.80              |
| HIGH            |                 |           | Q16        | 19.94      | 20.61 | 20.39 | 21.80              |                    |
| 12              |                 | LOW       | Q16        | 20.10      | 20.50 | 20.19 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.50      | 20.43 | 19.94 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.41      | 20.35 | 20.22 | 21.80              |                    |
| 25              |                 | LOW       | Q16        | 20.41      | 20.45 | 20.14 | 21.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 20.40 | 20.10 | 20.39              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.78 | 20.70 | 20.62              | 21.80              |
|                 | HIGH            |           | 64QAM      | 20.19      | 20.62 | 20.24 | 21.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.57      | 20.37 | 20.40 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.47      | 20.13 | 20.25 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.78      | 20.76 | 20.62 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.88      | 20.39 | 20.45 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 20.35 | 20.18 | 20.44              | 21.80              |
| MID             |                 |           | QPSK       | 20.85      | 20.32 | 20.38 | 21.80              |                    |
| HIGH            |                 |           | QPSK       | 20.52      | 20.51 | 20.41 | 21.80              |                    |
| 25              |                 | LOW       | QPSK       | 20.52      | 20.14 | 20.37 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.81      | 20.28 | 20.01 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.36      | 20.25 | 20.35 | 21.80              |                    |
| 50              |                 | LOW       | QPSK       | 20.55      | 20.54 | 20.42 | 21.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 20.72 | 20.50 | 20.74              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.40 | 20.49 | 20.56              | 21.80              |
|                 | HIGH            |           | Q16        | 20.24      | 20.86 | 20.42 | 21.80              |                    |
|                 | 25              | LOW       | Q16        | 20.18      | 20.58 | 20.15 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.77      | 20.29 | 20.06 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.47      | 20.41 | 20.48 | 21.80              |                    |
|                 | 50              | LOW       | Q16        | 20.49      | 20.33 | 19.96 | 21.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 20.31 | 20.10 | 20.29              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.51 | 20.72 | 20.48              | 21.80              |
| HIGH            |                 |           | 64QAM      | 20.15      | 20.52 | 20.20 | 21.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.53      | 20.63 | 20.46 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.45      | 20.33 | 20.35 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 20.54 | 20.62 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.72      | 20.60 | 20.39 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 20.43 | 20.28 | 20.46              | 21.80              |
|                 | MID             |           | QPSK       | 20.79      | 20.50 | 20.28 | 21.80              |                    |
|                 | HIGH            |           | QPSK       | 20.48      | 20.47 | 20.55 | 21.80              |                    |
|                 | 36              | LOW       | QPSK       | 20.48      | 20.18 | 20.49 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.73      | 20.40 | 20.17 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.32      | 20.48 | 20.33 | 21.80              |                    |
|                 | 75              | LOW       | QPSK       | 20.55      | 20.44 | 20.34 | 21.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 20.68 | 20.52 | 20.68              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.59 | 20.66 | 20.62              | 21.80              |
| HIGH            |                 |           | Q16        | 20.16      | 20.76 | 20.58 | 21.80              |                    |
| 36              |                 | LOW       | Q16        | 20.32      | 20.50 | 20.27 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.73      | 20.45 | 20.14 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.51      | 20.45 | 20.40 | 21.80              |                    |
| 75              |                 | LOW       | Q16        | 20.55      | 20.47 | 20.16 | 21.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 20.54 | 20.30 | 20.33              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.68 | 20.85 | 20.52              | 21.80              |
|                 | HIGH            |           | 64QAM      | 20.27      | 20.60 | 20.32 | 21.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.67      | 20.55 | 20.44 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.57      | 20.23 | 20.27 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 20.66 | 20.58 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.82      | 20.60 | 20.43 | 21.80              |                    |

| LTE B26-State 3 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 20.37 | 20.06 | 20.32 | 21.80              |
|                        |         | MID       | QPSK       | 20.69 | 20.56 | 20.36 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.58 | 20.51 | 20.47 | 21.80              |
|                        | 3       | LOW       | QPSK       | 20.38 | 20.20 | 20.33 | 21.80              |
|                        |         | MID       | QPSK       | 20.75 | 20.40 | 20.05 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.14 | 20.46 | 20.15 | 21.80              |
|                        | 6       | LOW       | QPSK       | 20.63 | 20.38 | 20.44 | 21.80              |
|                        | 1.4     | LOW       | Q16        | 20.49 | 20.29 | 20.56 | 21.80              |
|                        |         | MID       | Q16        | 20.61 | 20.60 | 20.52 | 21.80              |
|                        |         | HIGH      | Q16        | 19.94 | 20.82 | 20.52 | 21.80              |
|                        |         | LOW       | Q16        | 20.40 | 20.56 | 20.21 | 21.80              |
|                        |         | MID       | Q16        | 20.71 | 20.55 | 19.92 | 21.80              |
|                        |         | HIGH      | Q16        | 20.28 | 20.53 | 20.50 | 21.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 20.46 | 20.10 | 20.39 | 21.80              |
|                        |         | MID       | 64QAM      | 20.64 | 20.89 | 20.40 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.07 | 20.50 | 20.16 | 21.80              |
|                        | 3       | LOW       | 64QAM      | 20.77 | 20.65 | 20.50 | 21.80              |
|                        |         | MID       | 64QAM      | 20.49 | 20.25 | 20.17 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.76 | 20.64 | 20.50 | 21.80              |
|                        | 6       | LOW       | 64QAM      | 20.82 | 20.60 | 20.45 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 20.37 | 20.22 | 20.30 | 21.80              |
|                        |         | MID       | QPSK       | 20.79 | 20.54 | 20.12 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.46 | 20.37 | 20.32 | 21.80              |
|                        | 8       | LOW       | QPSK       | 20.25 | 20.04 | 20.57 | 21.80              |
|                        |         | MID       | QPSK       | 20.63 | 20.26 | 19.97 | 21.80              |
|                        |         | HIGH      | QPSK       | 20.24 | 20.48 | 20.13 | 21.80              |
|                        | 15      | LOW       | QPSK       | 20.47 | 20.32 | 20.34 | 21.80              |
|                        | 3       | LOW       | Q16        | 20.60 | 20.54 | 20.49 | 21.80              |
|                        |         | MID       | Q16        | 20.49 | 20.47 | 20.39 | 21.80              |
|                        |         | HIGH      | Q16        | 20.10 | 20.74 | 20.60 | 21.80              |
|                        |         | LOW       | Q16        | 20.12 | 20.60 | 20.27 | 21.80              |
|                        |         | MID       | Q16        | 20.61 | 20.47 | 19.94 | 21.80              |
|                        |         | HIGH      | Q16        | 20.39 | 20.23 | 20.26 | 21.80              |
| 3                      | 1       | LOW       | Q16        | 20.61 | 20.43 | 20.00 | 21.80              |
|                        |         | LOW       | 64QAM      | 20.56 | 20.10 | 20.33 | 21.80              |
|                        |         | MID       | 64QAM      | 20.74 | 20.66 | 20.31 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.15 | 20.60 | 20.18 | 21.80              |
|                        | 8       | LOW       | 64QAM      | 20.75 | 20.47 | 20.28 | 21.80              |
|                        |         | MID       | 64QAM      | 20.43 | 20.19 | 20.15 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.80 | 20.66 | 20.68 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.82 | 20.48 | 20.29 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 20.51      | 20.36 | 20.54 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.83      | 20.27 | 20.36 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.36      | 20.35 | 20.34 | 21.80              |                    |
|                 | 12              | LOW       | QPSK       | 20.48      | 20.12 | 20.45 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.50      | 20.46 | 20.25 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.42      | 20.38 | 20.17 | 21.80              |                    |
|                 | 25              | LOW       | QPSK       | 20.34      | 20.40 | 20.30 | 21.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 20.58 | 20.56 | 20.68              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.53 | 20.68 | 20.54              | 21.80              |
| HIGH            |                 |           | Q16        | 19.94      | 20.61 | 20.39 | 21.80              |                    |
| 12              |                 | LOW       | Q16        | 20.10      | 20.50 | 20.19 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.50      | 20.43 | 19.94 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.41      | 20.35 | 20.22 | 21.80              |                    |
| 25              |                 | LOW       | Q16        | 20.41      | 20.45 | 20.14 | 21.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 20.40 | 20.10 | 20.39              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.78 | 20.70 | 20.62              | 21.80              |
|                 | HIGH            |           | 64QAM      | 20.19      | 20.62 | 20.24 | 21.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.57      | 20.37 | 20.40 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.47      | 20.13 | 20.25 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.78      | 20.76 | 20.62 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.88      | 20.39 | 20.45 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 20.35 | 20.18 | 20.44              | 21.80              |
| MID             |                 |           | QPSK       | 20.85      | 20.32 | 20.38 | 21.80              |                    |
| HIGH            |                 |           | QPSK       | 20.52      | 20.51 | 20.41 | 21.80              |                    |
| 25              |                 | LOW       | QPSK       | 20.52      | 20.14 | 20.37 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.81      | 20.28 | 20.01 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.36      | 20.25 | 20.35 | 21.80              |                    |
| 50              |                 | LOW       | QPSK       | 20.55      | 20.54 | 20.42 | 21.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 20.72 | 20.50 | 20.74              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.40 | 20.49 | 20.56              | 21.80              |
|                 | HIGH            |           | Q16        | 20.24      | 20.86 | 20.42 | 21.80              |                    |
|                 | 25              | LOW       | Q16        | 20.18      | 20.58 | 20.15 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.77      | 20.29 | 20.06 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.47      | 20.41 | 20.48 | 21.80              |                    |
|                 | 50              | LOW       | Q16        | 20.49      | 20.33 | 19.96 | 21.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 20.31 | 20.10 | 20.29              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.51 | 20.72 | 20.48              | 21.80              |
| HIGH            |                 |           | 64QAM      | 20.15      | 20.52 | 20.20 | 21.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.53      | 20.63 | 20.46 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.45      | 20.33 | 20.35 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 20.54 | 20.62 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.72      | 20.60 | 20.39 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 20.43 | 20.28 | 20.46              | 21.80              |
|                 | MID             |           | QPSK       | 20.79      | 20.50 | 20.28 | 21.80              |                    |
|                 | HIGH            |           | QPSK       | 20.48      | 20.47 | 20.55 | 21.80              |                    |
|                 | 36              | LOW       | QPSK       | 20.48      | 20.18 | 20.49 | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.73      | 20.40 | 20.17 | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.32      | 20.48 | 20.33 | 21.80              |                    |
|                 | 75              | LOW       | QPSK       | 20.55      | 20.44 | 20.34 | 21.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 20.68 | 20.52 | 20.68              | 21.80              |
|                 |                 |           | MID        | Q16        | 20.59 | 20.66 | 20.62              | 21.80              |
| HIGH            |                 |           | Q16        | 20.16      | 20.76 | 20.58 | 21.80              |                    |
| 36              |                 | LOW       | Q16        | 20.32      | 20.50 | 20.27 | 21.80              |                    |
|                 |                 | MID       | Q16        | 20.73      | 20.45 | 20.14 | 21.80              |                    |
|                 |                 | HIGH      | Q16        | 20.51      | 20.45 | 20.40 | 21.80              |                    |
| 75              |                 | LOW       | Q16        | 20.55      | 20.47 | 20.16 | 21.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 20.54 | 20.30 | 20.33              | 21.80              |
|                 |                 |           | MID        | 64QAM      | 20.68 | 20.85 | 20.52              | 21.80              |
|                 | HIGH            |           | 64QAM      | 20.27      | 20.60 | 20.32 | 21.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.67      | 20.55 | 20.44 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.57      | 20.23 | 20.27 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 20.66 | 20.58 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.82      | 20.60 | 20.43 | 21.80              |                    |

| LTE B26-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.37 | 23.37 | 23.48 | 24.80              |
|                        |         | MID       | QPSK       | 23.49 | 23.37 | 23.30 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.44 | 23.36 | 23.47 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.42 | 23.35 | 23.49 | 24.80              |
|                        |         | MID       | QPSK       | 23.74 | 23.37 | 23.48 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.38 | 23.54 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.45 | 22.48 | 22.39 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.36 | 22.67 | 22.70 | 23.80              |
|                        |         | MID       | Q16        | 22.63 | 22.92 | 22.86 | 23.80              |
|                        |         | HIGH      | Q16        | 22.57 | 22.71 | 22.85 | 23.80              |
|                        |         | LOW       | Q16        | 22.66 | 22.61 | 22.31 | 23.80              |
|                        |         | MID       | Q16        | 22.63 | 22.47 | 22.35 | 23.80              |
|                        |         | HIGH      | Q16        | 22.47 | 22.62 | 22.44 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.40 | 21.84 | 21.65 | 22.80              |
|                        |         | MID       | 64QAM      | 21.60 | 22.24 | 21.83 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.39 | 21.88 | 21.92 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.65 | 21.61 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.71 | 21.65 | 21.29 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.65 | 21.72 | 21.64 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.78 | 20.76 | 20.29 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.70 | 23.30 | 23.41 | 24.80              |
|                        |         | MID       | QPSK       | 23.68 | 23.58 | 23.63 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.66 | 23.29 | 23.19 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.49 | 22.48 | 22.56 | 23.80              |
|                        |         | MID       | QPSK       | 22.58 | 22.64 | 22.48 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69 | 22.38 | 22.41 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.57 | 22.52 | 22.46 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.29 | 22.79 | 22.88 | 23.80              |
|                        |         | MID       | Q16        | 22.66 | 22.99 | 23.05 | 23.80              |
|                        |         | HIGH      | Q16        | 22.43 | 22.69 | 22.89 | 23.80              |
|                        |         | LOW       | Q16        | 21.58 | 21.57 | 21.48 | 22.80              |
|                        |         | MID       | Q16        | 21.78 | 21.67 | 21.54 | 22.80              |
|                        |         | HIGH      | Q16        | 21.58 | 21.51 | 21.48 | 22.80              |
| 3                      | 1       | LOW       | Q16        | 21.45 | 21.43 | 21.54 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.47 | 21.57 | 21.63 | 22.80              |
|                        |         | MID       | 64QAM      | 21.49 | 21.93 | 22.05 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 21.90 | 21.94 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.61 | 20.67 | 20.50 | 21.80              |
|                        |         | MID       | 64QAM      | 20.78 | 20.43 | 20.23 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.71 | 20.84 | 20.66 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.67 | 20.60 | 20.39 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.37      | 23.30 | 23.55 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.49      | 23.61 | 23.35 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.37      | 23.41 | 23.38 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.55      | 22.39 | 22.49 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.76      | 22.37 | 22.57 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.69      | 22.34 | 22.32 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.68      | 22.57 | 22.30 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.65 | 22.63 | 22.74              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.36 | 22.92 | 22.93              | 23.80              |
| HIGH            |                 |           | Q16        | 22.59      | 22.83 | 23.07 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.60      | 21.74 | 21.33 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.47      | 21.60 | 21.48 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.74      | 21.62 | 21.27 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.43      | 21.45 | 21.39 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.64 | 21.55 | 21.94              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.78 | 21.91 | 22.03              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.60      | 21.59 | 21.72 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.47      | 20.63 | 20.37 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.94      | 20.36 | 20.27 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.78      | 20.74 | 20.60 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.80      | 20.47 | 20.49 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.54 | 23.42 | 23.37              | 24.80              |
| MID             |                 |           | QPSK       | 23.57      | 23.47 | 23.52 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.35      | 23.34 | 23.31 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.40      | 22.57 | 22.33 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.47      | 22.59 | 22.50 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.69      | 22.61 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.45      | 22.75 | 22.35 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.29 | 22.72 | 22.70              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.36 | 22.76 | 23.09              | 23.80              |
|                 | HIGH            |           | Q16        | 22.43      | 22.80 | 22.80 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.64      | 21.41 | 21.33 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.78      | 21.43 | 21.50 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.60      | 21.62 | 21.59 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.56      | 21.47 | 21.29 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.47 | 21.81 | 21.98              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.47 | 21.95 | 21.97              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.69      | 21.81 | 21.81 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.51      | 20.57 | 20.42 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.92      | 20.65 | 20.43 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.90      | 20.86 | 20.60 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.63      | 20.74 | 20.21 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.63 | 23.51 | 23.46              | 24.80              |
|                 | MID             |           | QPSK       | 23.66      | 23.56 | 23.54 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.61      | 23.55 | 23.45 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.60      | 22.55 | 22.49 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.65      | 22.57 | 22.57 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.64      | 22.52 | 22.45 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.68      | 22.66 | 22.53 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.54 | 22.88 | 22.95              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.61 | 22.94 | 23.07              | 23.80              |
| HIGH            |                 |           | Q16        | 22.50      | 22.94 | 22.96 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.62      | 21.63 | 21.46 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.67      | 21.58 | 21.54 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.67      | 21.62 | 21.48 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.67      | 21.58 | 21.50 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.64 | 21.77 | 21.87              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.71 | 22.15 | 22.01              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.58      | 21.79 | 21.90 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.55      | 20.69 | 20.56 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.86      | 20.57 | 20.45 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.88      | 20.78 | 20.62 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.86      | 20.66 | 20.41 | 21.80              |                    |

| LTE B26-State 5 -Ant.1 |         |           |            |       |       |       |                    |       |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |       |
| 1.4                    | 1       | LOW       | QPSK       | 23.37 | 23.37 | 23.48 | 24.80              |       |
|                        |         | MID       | QPSK       | 23.49 | 23.37 | 23.30 | 24.80              |       |
|                        |         | HIGH      | QPSK       | 23.44 | 23.36 | 23.47 | 24.80              |       |
|                        | 3       | LOW       | QPSK       | 23.42 | 23.35 | 23.49 | 24.80              |       |
|                        |         | MID       | QPSK       | 23.74 | 23.37 | 23.48 | 24.80              |       |
|                        |         | HIGH      | QPSK       | 23.75 | 23.38 | 23.54 | 24.80              |       |
|                        | 6       | LOW       | QPSK       | 22.45 | 22.48 | 22.39 | 23.80              |       |
| 1.4                    | 1       | LOW       | Q16        | 22.36 | 22.67 | 22.70 | 23.80              |       |
|                        |         | MID       | Q16        | 22.63 | 22.92 | 22.86 | 23.80              |       |
|                        |         | HIGH      | Q16        | 22.57 | 22.71 | 22.85 | 23.80              |       |
|                        | 3       | LOW       | Q16        | 22.66 | 22.61 | 22.31 | 23.80              |       |
|                        |         | MID       | Q16        | 22.63 | 22.47 | 22.35 | 23.80              |       |
|                        |         | HIGH      | Q16        | 22.47 | 22.62 | 22.44 | 23.80              |       |
| 6                      | LOW     | Q16       | 21.71      | 21.60 | 21.56 | 22.80 |                    |       |
| 1.4                    | 1       | LOW       | 64QAM      | 21.40 | 21.84 | 21.65 | 22.80              |       |
|                        |         | MID       | 64QAM      | 21.60 | 22.24 | 21.83 | 22.80              |       |
|                        |         | HIGH      | 64QAM      | 21.39 | 21.88 | 21.92 | 22.80              |       |
|                        | 3       | LOW       | 64QAM      | 21.65 | 21.61 | 21.64 | 22.80              |       |
|                        |         | MID       | 64QAM      | 21.71 | 21.65 | 21.29 | 22.80              |       |
|                        |         | HIGH      | 64QAM      | 21.65 | 21.72 | 21.64 | 22.80              |       |
|                        | 6       | LOW       | 64QAM      | 20.78 | 20.76 | 20.29 | 21.80              |       |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |       |
| 3                      | 1       | LOW       | QPSK       | 23.70 | 23.30 | 23.41 | 24.80              |       |
|                        |         | MID       | QPSK       | 23.68 | 23.58 | 23.63 | 24.80              |       |
|                        |         | HIGH      | QPSK       | 23.66 | 23.29 | 23.19 | 24.80              |       |
|                        | 8       | LOW       | QPSK       | 22.49 | 22.48 | 22.56 | 23.80              |       |
|                        |         | MID       | QPSK       | 22.58 | 22.64 | 22.48 | 23.80              |       |
|                        |         | HIGH      | QPSK       | 22.69 | 22.38 | 22.41 | 23.80              |       |
| 3                      | 15      | LOW       | QPSK       | 22.57 | 22.52 | 22.46 | 23.80              |       |
|                        |         | 1         | LOW        | Q16   | 22.29 | 22.79 | 22.88              | 23.80 |
|                        |         |           | MID        | Q16   | 22.66 | 22.99 | 23.05              | 23.80 |
|                        | HIGH    |           | Q16        | 22.43 | 22.69 | 22.89 | 23.80              |       |
|                        | 8       | LOW       | Q16        | 21.58 | 21.57 | 21.48 | 22.80              |       |
|                        |         | MID       | Q16        | 21.78 | 21.67 | 21.54 | 22.80              |       |
|                        |         | HIGH      | Q16        | 21.58 | 21.51 | 21.48 | 22.80              |       |
|                        | 15      | LOW       | Q16        | 21.45 | 21.43 | 21.54 | 22.80              |       |
|                        |         | 1         | LOW        | 64QAM | 21.47 | 21.57 | 21.63              | 22.80 |
|                        |         |           | MID        | 64QAM | 21.49 | 21.93 | 22.05              | 22.80 |
|                        |         |           | HIGH       | 64QAM | 21.47 | 21.90 | 21.94              | 22.80 |
|                        |         | 8         | LOW        | 64QAM | 20.61 | 20.67 | 20.50              | 21.80 |
|                        |         |           | MID        | 64QAM | 20.78 | 20.43 | 20.23              | 21.80 |
|                        | HIGH    |           | 64QAM      | 20.71 | 20.84 | 20.66 | 21.80              |       |
|                        | 15      | LOW       | 64QAM      | 20.67 | 20.60 | 20.39 | 21.80              |       |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.37      | 23.30 | 23.55 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.49      | 23.61 | 23.35 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.37      | 23.41 | 23.38 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.55      | 22.39 | 22.49 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.76      | 22.37 | 22.57 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.69      | 22.34 | 22.32 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.68      | 22.57 | 22.30 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.65 | 22.63 | 22.74              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.36 | 22.92 | 22.93              | 23.80              |
| HIGH            |                 |           | Q16        | 22.59      | 22.83 | 23.07 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.60      | 21.74 | 21.33 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.47      | 21.60 | 21.48 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.74      | 21.62 | 21.27 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.43      | 21.45 | 21.39 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.64 | 21.55 | 21.94              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.78 | 21.91 | 22.03              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.60      | 21.59 | 21.72 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.47      | 20.63 | 20.37 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.94      | 20.36 | 20.27 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.78      | 20.74 | 20.60 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.80      | 20.47 | 20.49 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.54 | 23.42 | 23.37              | 24.80              |
| MID             |                 |           | QPSK       | 23.57      | 23.47 | 23.52 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.35      | 23.34 | 23.31 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.40      | 22.57 | 22.33 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.47      | 22.59 | 22.50 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.69      | 22.61 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.45      | 22.75 | 22.35 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.29 | 22.72 | 22.70              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.36 | 22.76 | 23.09              | 23.80              |
|                 | HIGH            |           | Q16        | 22.43      | 22.80 | 22.80 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.64      | 21.41 | 21.33 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.78      | 21.43 | 21.50 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.60      | 21.62 | 21.59 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.56      | 21.47 | 21.29 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.47 | 21.81 | 21.98              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.47 | 21.95 | 21.97              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.69      | 21.81 | 21.81 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.51      | 20.57 | 20.42 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.92      | 20.65 | 20.43 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.90      | 20.86 | 20.60 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.63      | 20.74 | 20.21 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.63 | 23.51 | 23.46              | 24.80              |
|                 | MID             |           | QPSK       | 23.66      | 23.56 | 23.54 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.61      | 23.55 | 23.45 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.60      | 22.55 | 22.49 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.65      | 22.57 | 22.57 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.64      | 22.52 | 22.45 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.68      | 22.66 | 22.53 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.54 | 22.88 | 22.95              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.61 | 22.94 | 23.07              | 23.80              |
| HIGH            |                 |           | Q16        | 22.50      | 22.94 | 22.96 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.62      | 21.63 | 21.46 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.67      | 21.58 | 21.54 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.67      | 21.62 | 21.48 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.67      | 21.58 | 21.50 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.64 | 21.77 | 21.87              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.71 | 22.15 | 22.01              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.58      | 21.79 | 21.90 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.55      | 20.69 | 20.56 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.86      | 20.57 | 20.45 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.88      | 20.78 | 20.62 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.86      | 20.66 | 20.41 | 21.80              |                    |

| LTE B26-State 6 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.37 | 23.37 | 23.48 | 24.80              |
|                        |         | MID       | QPSK       | 23.49 | 23.37 | 23.30 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.44 | 23.36 | 23.47 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.42 | 23.35 | 23.49 | 24.80              |
|                        |         | MID       | QPSK       | 23.74 | 23.37 | 23.48 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.38 | 23.54 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.45 | 22.48 | 22.39 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.36 | 22.67 | 22.70 | 23.80              |
|                        |         | MID       | Q16        | 22.63 | 22.92 | 22.86 | 23.80              |
|                        |         | HIGH      | Q16        | 22.57 | 22.71 | 22.85 | 23.80              |
|                        |         | LOW       | Q16        | 22.66 | 22.61 | 22.31 | 23.80              |
|                        |         | MID       | Q16        | 22.63 | 22.47 | 22.35 | 23.80              |
|                        |         | HIGH      | Q16        | 22.47 | 22.62 | 22.44 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.40 | 21.84 | 21.65 | 22.80              |
|                        |         | MID       | 64QAM      | 21.60 | 22.24 | 21.83 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.39 | 21.88 | 21.92 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.65 | 21.61 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.71 | 21.65 | 21.29 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.65 | 21.72 | 21.64 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.78 | 20.76 | 20.29 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.70 | 23.30 | 23.41 | 24.80              |
|                        |         | MID       | QPSK       | 23.68 | 23.58 | 23.63 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.66 | 23.29 | 23.19 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.49 | 22.48 | 22.56 | 23.80              |
|                        |         | MID       | QPSK       | 22.58 | 22.64 | 22.48 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.69 | 22.38 | 22.41 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.57 | 22.52 | 22.46 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.29 | 22.79 | 22.88 | 23.80              |
|                        |         | MID       | Q16        | 22.66 | 22.99 | 23.05 | 23.80              |
|                        |         | HIGH      | Q16        | 22.43 | 22.69 | 22.89 | 23.80              |
|                        |         | LOW       | Q16        | 21.58 | 21.57 | 21.48 | 22.80              |
|                        |         | MID       | Q16        | 21.78 | 21.67 | 21.54 | 22.80              |
|                        |         | HIGH      | Q16        | 21.58 | 21.51 | 21.48 | 22.80              |
| 3                      | 1       | LOW       | Q16        | 21.45 | 21.43 | 21.54 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.47 | 21.57 | 21.63 | 22.80              |
|                        |         | MID       | 64QAM      | 21.49 | 21.93 | 22.05 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.47 | 21.90 | 21.94 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.61 | 20.67 | 20.50 | 21.80              |
|                        |         | MID       | 64QAM      | 20.78 | 20.43 | 20.23 | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.71 | 20.84 | 20.66 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.67 | 20.60 | 20.39 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.37      | 23.30 | 23.55 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.49      | 23.61 | 23.35 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.37      | 23.41 | 23.38 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.55      | 22.39 | 22.49 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.76      | 22.37 | 22.57 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.69      | 22.34 | 22.32 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.68      | 22.57 | 22.30 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.65 | 22.63 | 22.74              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.36 | 22.92 | 22.93              | 23.80              |
| HIGH            |                 |           | Q16        | 22.59      | 22.83 | 23.07 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.60      | 21.74 | 21.33 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.47      | 21.60 | 21.48 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.74      | 21.62 | 21.27 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.43      | 21.45 | 21.39 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.64 | 21.55 | 21.94              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.78 | 21.91 | 22.03              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.60      | 21.59 | 21.72 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.47      | 20.63 | 20.37 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.94      | 20.36 | 20.27 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.78      | 20.74 | 20.60 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.80      | 20.47 | 20.49 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.54 | 23.42 | 23.37              | 24.80              |
| MID             |                 |           | QPSK       | 23.57      | 23.47 | 23.52 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.35      | 23.34 | 23.31 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.40      | 22.57 | 22.33 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.47      | 22.59 | 22.50 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.69      | 22.61 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.45      | 22.75 | 22.35 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.29 | 22.72 | 22.70              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.36 | 22.76 | 23.09              | 23.80              |
|                 | HIGH            |           | Q16        | 22.43      | 22.80 | 22.80 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.64      | 21.41 | 21.33 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.78      | 21.43 | 21.50 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.60      | 21.62 | 21.59 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.56      | 21.47 | 21.29 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.47 | 21.81 | 21.98              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.47 | 21.95 | 21.97              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.69      | 21.81 | 21.81 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.51      | 20.57 | 20.42 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.92      | 20.65 | 20.43 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.90      | 20.86 | 20.60 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.63      | 20.74 | 20.21 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.63 | 23.51 | 23.46              | 24.80              |
|                 | MID             |           | QPSK       | 23.66      | 23.56 | 23.54 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.61      | 23.55 | 23.45 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.60      | 22.55 | 22.49 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.65      | 22.57 | 22.57 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.64      | 22.52 | 22.45 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.68      | 22.66 | 22.53 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.54 | 22.88 | 22.95              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.61 | 22.94 | 23.07              | 23.80              |
| HIGH            |                 |           | Q16        | 22.50      | 22.94 | 22.96 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.62      | 21.63 | 21.46 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.67      | 21.58 | 21.54 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.67      | 21.62 | 21.48 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.67      | 21.58 | 21.50 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.64 | 21.77 | 21.87              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.71 | 22.15 | 22.01              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.58      | 21.79 | 21.90 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.55      | 20.69 | 20.56 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.86      | 20.57 | 20.45 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.88      | 20.78 | 20.62 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.86      | 20.66 | 20.41 | 21.80              |                    |

| LTE B26-State 1 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.60 | 23.43 | 23.65 | 24.80              |
|                        |         | MID       | QPSK       | 23.73 | 23.70 | 23.70 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.85 | 23.56 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.67 | 23.70 | 23.81 | 24.80              |
|                        |         | MID       | QPSK       | 23.97 | 23.55 | 23.71 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76 | 23.53 | 23.79 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.73 | 22.54 | 22.68 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.68 | 22.83 | 23.14 | 23.80              |
|                        |         | MID       | Q16        | 22.77 | 23.00 | 23.01 | 23.80              |
|                        |         | HIGH      | Q16        | 22.62 | 23.20 | 23.20 | 23.80              |
|                        |         | LOW       | Q16        | 22.63 | 22.85 | 22.69 | 23.80              |
|                        |         | MID       | Q16        | 22.68 | 22.84 | 22.68 | 23.80              |
|                        |         | HIGH      | Q16        | 22.88 | 22.68 | 22.69 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.54 | 21.96 | 22.20 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 22.15 | 22.34 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.69 | 22.27 | 22.10 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.75 | 21.93 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.59 | 21.85 | 21.81 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 21.95 | 21.34 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.91 | 20.66 | 20.68 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.83 | 23.67 | 23.46 | 24.80              |
|                        |         | MID       | QPSK       | 23.78 | 23.82 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.70 | 23.71 | 23.77 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.67 | 22.72 | 22.68 | 23.80              |
|                        |         | MID       | QPSK       | 22.81 | 22.57 | 22.58 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.62 | 22.53 | 22.61 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.68 | 22.79 | 22.70 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.68 | 23.20 | 23.16 | 23.80              |
|                        |         | MID       | Q16        | 22.81 | 22.96 | 23.03 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.94 | 23.04 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.85 | 21.89 | 21.80 | 22.80              |
|                        |         | MID       | Q16        | 21.87 | 21.78 | 21.73 | 22.80              |
|                        |         | HIGH      | Q16        | 21.88 | 21.76 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.93 | 21.74 | 21.56 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.82 | 21.98 | 22.40 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 21.89 | 22.27 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 22.16 | 22.03 | 22.80              |
|                        |         | LOW       | 64QAM      | 20.81 | 20.87 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.92 | 20.75 | 20.62 | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.05 | 20.85 | 20.61 | 21.80              |
| 3                      | 15      | LOW       | 64QAM      | 20.73 | 20.76 | 20.66 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.67      | 23.81 | 23.48 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.87      | 23.80 | 23.73 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.56      | 23.85 | 23.65 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.56      | 22.77 | 22.61 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.70      | 22.50 | 22.78 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.56 | 22.57 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.66      | 22.68 | 22.56 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.52 | 23.13 | 22.93              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.05 | 23.15              | 23.80              |
| HIGH            |                 |           | Q16        | 22.51      | 22.99 | 23.13 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.67      | 21.78 | 21.71 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.81      | 21.89 | 21.86 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.77      | 21.74 | 21.67 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.64      | 21.92 | 21.64 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.67 | 21.89 | 22.47              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 22.01 | 21.84 | 21.99              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.95      | 21.99 | 22.32 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.52      | 20.97 | 20.66 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.65 | 20.87 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.16      | 20.81 | 20.37 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.60      | 20.66 | 20.56 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.71 | 23.67 | 23.72              | 24.80              |
| MID             |                 |           | QPSK       | 23.78      | 23.66 | 23.87 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.56      | 23.52 | 23.56 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.87      | 22.72 | 22.54 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.79      | 22.82 | 22.69 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.76      | 22.51 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.61      | 22.58 | 22.63 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.54 | 22.94 | 23.09              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.14 | 23.03              | 23.80              |
|                 | HIGH            |           | Q16        | 22.67      | 23.15 | 23.25 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.54      | 21.65 | 21.78 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.83      | 21.87 | 21.71 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.95      | 21.76 | 21.56 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.60      | 21.63 | 21.49 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.74 | 22.11 | 22.20              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.98 | 22.11 | 22.23              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.82      | 22.21 | 22.01 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.85      | 20.99 | 20.48 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.56 | 20.77 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.91 | 20.43 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.79      | 20.82 | 20.49 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.81 | 23.69 | 23.67              | 24.80              |
|                 | MID             |           | QPSK       | 23.85      | 23.75 | 23.75 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.80      | 23.73 | 23.65 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.76      | 22.79 | 22.70 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.86      | 22.75 | 22.76 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.76 | 22.68 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.84      | 22.79 | 22.70 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.70 | 23.08 | 23.14              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.79 | 23.12 | 23.22              | 23.80              |
| HIGH            |                 |           | Q16        | 22.69      | 23.13 | 23.13 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.78      | 21.85 | 21.69 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.85      | 21.80 | 21.75 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.84      | 21.83 | 21.69 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.84      | 21.83 | 21.71 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.78 | 22.11 | 22.36              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.94 | 22.04 | 22.23              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.86      | 22.23 | 22.21 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.75      | 20.95 | 20.62 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.75 | 20.85 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.89 | 20.55 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.83      | 20.76 | 20.68 | 21.80              |                    |

| LTE B26-State 2 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.60 | 23.43 | 23.65 | 24.80              |
|                        |         | MID       | QPSK       | 23.73 | 23.70 | 23.70 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.85 | 23.56 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.67 | 23.70 | 23.81 | 24.80              |
|                        |         | MID       | QPSK       | 23.97 | 23.55 | 23.71 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76 | 23.53 | 23.79 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.73 | 22.54 | 22.68 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.68 | 22.83 | 23.14 | 23.80              |
|                        |         | MID       | Q16        | 22.77 | 23.00 | 23.01 | 23.80              |
|                        |         | HIGH      | Q16        | 22.62 | 23.20 | 23.20 | 23.80              |
|                        |         | LOW       | Q16        | 22.63 | 22.85 | 22.69 | 23.80              |
|                        |         | MID       | Q16        | 22.68 | 22.84 | 22.68 | 23.80              |
|                        |         | HIGH      | Q16        | 22.88 | 22.68 | 22.69 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.54 | 21.96 | 22.20 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 22.15 | 22.34 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.69 | 22.27 | 22.10 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.75 | 21.93 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.59 | 21.85 | 21.81 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 21.95 | 21.34 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.91 | 20.66 | 20.68 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.83 | 23.67 | 23.46 | 24.80              |
|                        |         | MID       | QPSK       | 23.78 | 23.82 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.70 | 23.71 | 23.77 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.67 | 22.72 | 22.68 | 23.80              |
|                        |         | MID       | QPSK       | 22.81 | 22.57 | 22.58 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.62 | 22.53 | 22.61 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.68 | 22.79 | 22.70 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.68 | 23.20 | 23.16 | 23.80              |
|                        |         | MID       | Q16        | 22.81 | 22.96 | 23.03 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.94 | 23.04 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.85 | 21.89 | 21.80 | 22.80              |
|                        |         | MID       | Q16        | 21.87 | 21.78 | 21.73 | 22.80              |
|                        |         | HIGH      | Q16        | 21.88 | 21.76 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.93 | 21.74 | 21.56 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.82 | 21.98 | 22.40 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 21.89 | 22.27 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 22.16 | 22.03 | 22.80              |
|                        |         | LOW       | 64QAM      | 20.81 | 20.87 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.92 | 20.75 | 20.62 | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.05 | 20.85 | 20.61 | 21.80              |
| 3                      | 15      | LOW       | 64QAM      | 20.73 | 20.76 | 20.66 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.67      | 23.81 | 23.48 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.87      | 23.80 | 23.73 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.56      | 23.85 | 23.65 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.56      | 22.77 | 22.61 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.70      | 22.50 | 22.78 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.56 | 22.57 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.66      | 22.68 | 22.56 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.52 | 23.13 | 22.93              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.05 | 23.15              | 23.80              |
| HIGH            |                 |           | Q16        | 22.51      | 22.99 | 23.13 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.67      | 21.78 | 21.71 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.81      | 21.89 | 21.86 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.77      | 21.74 | 21.67 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.64      | 21.92 | 21.64 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.67 | 21.89 | 22.47              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 22.01 | 21.84 | 21.99              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.95      | 21.99 | 22.32 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.52      | 20.97 | 20.66 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.65 | 20.87 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.16      | 20.81 | 20.37 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.60      | 20.66 | 20.56 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.71 | 23.67 | 23.72              | 24.80              |
| MID             |                 |           | QPSK       | 23.78      | 23.66 | 23.87 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.56      | 23.52 | 23.56 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.87      | 22.72 | 22.54 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.79      | 22.82 | 22.69 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.76      | 22.51 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.61      | 22.58 | 22.63 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.54 | 22.94 | 23.09              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.14 | 23.03              | 23.80              |
|                 | HIGH            |           | Q16        | 22.67      | 23.15 | 23.25 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.54      | 21.65 | 21.78 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.83      | 21.87 | 21.71 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.95      | 21.76 | 21.56 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.60      | 21.63 | 21.49 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.74 | 22.11 | 22.20              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.98 | 22.11 | 22.23              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.82      | 22.21 | 22.01 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.85      | 20.99 | 20.48 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.56 | 20.77 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.91 | 20.43 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.79      | 20.82 | 20.49 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.81 | 23.69 | 23.67              | 24.80              |
|                 | MID             |           | QPSK       | 23.85      | 23.75 | 23.75 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.80      | 23.73 | 23.65 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.76      | 22.79 | 22.70 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.86      | 22.75 | 22.76 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.76 | 22.68 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.84      | 22.79 | 22.70 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.70 | 23.08 | 23.14              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.79 | 23.12 | 23.22              | 23.80              |
| HIGH            |                 |           | Q16        | 22.69      | 23.13 | 23.13 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.78      | 21.85 | 21.69 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.85      | 21.80 | 21.75 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.84      | 21.83 | 21.69 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.84      | 21.83 | 21.71 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.78 | 22.11 | 22.36              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.94 | 22.04 | 22.23              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.86      | 22.23 | 22.21 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.75      | 20.95 | 20.62 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.75 | 20.85 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.89 | 20.55 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.83      | 20.76 | 20.68 | 21.80              |                    |

| LTE B26-State 3 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.60 | 23.43 | 23.65 | 24.80              |
|                        |         | MID       | QPSK       | 23.73 | 23.70 | 23.70 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.85 | 23.56 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.67 | 23.70 | 23.81 | 24.80              |
|                        |         | MID       | QPSK       | 23.97 | 23.55 | 23.71 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76 | 23.53 | 23.79 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.73 | 22.54 | 22.68 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.68 | 22.83 | 23.14 | 23.80              |
|                        |         | MID       | Q16        | 22.77 | 23.00 | 23.01 | 23.80              |
|                        |         | HIGH      | Q16        | 22.62 | 23.20 | 23.20 | 23.80              |
|                        |         | LOW       | Q16        | 22.63 | 22.85 | 22.69 | 23.80              |
|                        |         | MID       | Q16        | 22.68 | 22.84 | 22.68 | 23.80              |
|                        |         | HIGH      | Q16        | 22.88 | 22.68 | 22.69 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.54 | 21.96 | 22.20 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 22.15 | 22.34 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.69 | 22.27 | 22.10 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.75 | 21.93 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.59 | 21.85 | 21.81 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 21.95 | 21.34 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.91 | 20.66 | 20.68 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.83 | 23.67 | 23.46 | 24.80              |
|                        |         | MID       | QPSK       | 23.78 | 23.82 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.70 | 23.71 | 23.77 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.67 | 22.72 | 22.68 | 23.80              |
|                        |         | MID       | QPSK       | 22.81 | 22.57 | 22.58 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.62 | 22.53 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.68 | 22.79 | 22.70 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.68 | 23.20 | 23.16 | 23.80              |
|                        |         | MID       | Q16        | 22.81 | 22.96 | 23.03 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.94 | 23.04 | 23.80              |
|                        |         | LOW       | Q16        | 21.85 | 21.89 | 21.80 | 22.80              |
|                        |         | MID       | Q16        | 21.87 | 21.78 | 21.73 | 22.80              |
|                        |         | HIGH      | Q16        | 21.88 | 21.76 | 21.56 | 22.80              |
| 3                      | 1       | LOW       | Q16        | 21.93 | 21.74 | 21.56 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.82 | 21.98 | 22.40 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 21.89 | 22.27 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 22.16 | 22.03 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.81 | 20.87 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.92 | 20.75 | 20.62 | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.05 | 20.85 | 20.61 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.73 | 20.76 | 20.66 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.67      | 23.81 | 23.48 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.87      | 23.80 | 23.73 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.56      | 23.85 | 23.65 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.56      | 22.77 | 22.61 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.70      | 22.50 | 22.78 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.56 | 22.57 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.66      | 22.68 | 22.56 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.52 | 23.13 | 22.93              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.05 | 23.15              | 23.80              |
| HIGH            |                 |           | Q16        | 22.51      | 22.99 | 23.13 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.67      | 21.78 | 21.71 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.81      | 21.89 | 21.86 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.77      | 21.74 | 21.67 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.64      | 21.92 | 21.64 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.67 | 21.89 | 22.47              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 22.01 | 21.84 | 21.99              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.95      | 21.99 | 22.32 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.52      | 20.97 | 20.66 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.65 | 20.87 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.16      | 20.81 | 20.37 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.60      | 20.66 | 20.56 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.71 | 23.67 | 23.72              | 24.80              |
| MID             |                 |           | QPSK       | 23.78      | 23.66 | 23.87 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.56      | 23.52 | 23.56 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.87      | 22.72 | 22.54 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.79      | 22.82 | 22.69 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.76      | 22.51 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.61      | 22.58 | 22.63 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.54 | 22.94 | 23.09              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.14 | 23.03              | 23.80              |
|                 | HIGH            |           | Q16        | 22.67      | 23.15 | 23.25 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.54      | 21.65 | 21.78 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.83      | 21.87 | 21.71 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.95      | 21.76 | 21.56 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.60      | 21.63 | 21.49 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.74 | 22.11 | 22.20              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.98 | 22.11 | 22.23              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.82      | 22.21 | 22.01 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.85      | 20.99 | 20.48 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.56 | 20.77 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.91 | 20.43 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.79      | 20.82 | 20.49 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.81 | 23.69 | 23.67              | 24.80              |
|                 | MID             |           | QPSK       | 23.85      | 23.75 | 23.75 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.80      | 23.73 | 23.65 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.76      | 22.79 | 22.70 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.86      | 22.75 | 22.76 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.76 | 22.68 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.84      | 22.79 | 22.70 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.70 | 23.08 | 23.14              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.79 | 23.12 | 23.22              | 23.80              |
| HIGH            |                 |           | Q16        | 22.69      | 23.13 | 23.13 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.78      | 21.85 | 21.69 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.85      | 21.80 | 21.75 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.84      | 21.83 | 21.69 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.84      | 21.83 | 21.71 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.78 | 22.11 | 22.36              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.94 | 22.04 | 22.23              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.86      | 22.23 | 22.21 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.75      | 20.95 | 20.62 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.75 | 20.85 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.89 | 20.55 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.83      | 20.76 | 20.68 | 21.80              |                    |

| LTE B26-State 4 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.60 | 23.43 | 23.65 | 24.80              |
|                        |         | MID       | QPSK       | 23.73 | 23.70 | 23.70 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.85 | 23.56 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.67 | 23.70 | 23.81 | 24.80              |
|                        |         | MID       | QPSK       | 23.97 | 23.55 | 23.71 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76 | 23.53 | 23.79 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.73 | 22.54 | 22.68 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.68 | 22.83 | 23.14 | 23.80              |
|                        |         | MID       | Q16        | 22.77 | 23.00 | 23.01 | 23.80              |
|                        |         | HIGH      | Q16        | 22.62 | 23.20 | 23.20 | 23.80              |
|                        |         | LOW       | Q16        | 22.63 | 22.85 | 22.69 | 23.80              |
|                        |         | MID       | Q16        | 22.68 | 22.84 | 22.68 | 23.80              |
|                        |         | HIGH      | Q16        | 22.88 | 22.68 | 22.69 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.54 | 21.96 | 22.20 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 22.15 | 22.34 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.69 | 22.27 | 22.10 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.75 | 21.93 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.59 | 21.85 | 21.81 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 21.95 | 21.34 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.91 | 20.66 | 20.68 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.83 | 23.67 | 23.46 | 24.80              |
|                        |         | MID       | QPSK       | 23.78 | 23.82 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.70 | 23.71 | 23.77 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.67 | 22.72 | 22.68 | 23.80              |
|                        |         | MID       | QPSK       | 22.81 | 22.57 | 22.58 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.62 | 22.53 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.68 | 22.79 | 22.70 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.68 | 23.20 | 23.16 | 23.80              |
|                        |         | MID       | Q16        | 22.81 | 22.96 | 23.03 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.94 | 23.04 | 23.80              |
|                        |         | LOW       | Q16        | 21.85 | 21.89 | 21.80 | 22.80              |
|                        |         | MID       | Q16        | 21.87 | 21.78 | 21.73 | 22.80              |
|                        |         | HIGH      | Q16        | 21.88 | 21.76 | 21.56 | 22.80              |
| 3                      | 1       | LOW       | Q16        | 21.93 | 21.74 | 21.56 | 22.80              |
|                        |         | LOW       | 64QAM      | 21.82 | 21.98 | 22.40 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 21.89 | 22.27 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 22.16 | 22.03 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.81 | 20.87 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.92 | 20.75 | 20.62 | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.05 | 20.85 | 20.61 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.73 | 20.76 | 20.66 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.67      | 23.81 | 23.48 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.87      | 23.80 | 23.73 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.56      | 23.85 | 23.65 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.56      | 22.77 | 22.61 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.70      | 22.50 | 22.78 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.56 | 22.57 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.66      | 22.68 | 22.56 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.52 | 23.13 | 22.93              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.05 | 23.15              | 23.80              |
| HIGH            |                 |           | Q16        | 22.51      | 22.99 | 23.13 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.67      | 21.78 | 21.71 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.81      | 21.89 | 21.86 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.77      | 21.74 | 21.67 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.64      | 21.92 | 21.64 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.67 | 21.89 | 22.47              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 22.01 | 21.84 | 21.99              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.95      | 21.99 | 22.32 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.52      | 20.97 | 20.66 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.65 | 20.87 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.16      | 20.81 | 20.37 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.60      | 20.66 | 20.56 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.71 | 23.67 | 23.72              | 24.80              |
| MID             |                 |           | QPSK       | 23.78      | 23.66 | 23.87 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.56      | 23.52 | 23.56 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.87      | 22.72 | 22.54 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.79      | 22.82 | 22.69 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.76      | 22.51 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.61      | 22.58 | 22.63 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.54 | 22.94 | 23.09              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.14 | 23.03              | 23.80              |
|                 | HIGH            |           | Q16        | 22.67      | 23.15 | 23.25 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.54      | 21.65 | 21.78 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.83      | 21.87 | 21.71 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.95      | 21.76 | 21.56 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.60      | 21.63 | 21.49 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.74 | 22.11 | 22.20              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.98 | 22.11 | 22.23              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.82      | 22.21 | 22.01 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.85      | 20.99 | 20.48 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.56 | 20.77 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.91 | 20.43 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.79      | 20.82 | 20.49 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.81 | 23.69 | 23.67              | 24.80              |
|                 | MID             |           | QPSK       | 23.85      | 23.75 | 23.75 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.80      | 23.73 | 23.65 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.76      | 22.79 | 22.70 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.86      | 22.75 | 22.76 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.76 | 22.68 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.84      | 22.79 | 22.70 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.70 | 23.08 | 23.14              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.79 | 23.12 | 23.22              | 23.80              |
| HIGH            |                 |           | Q16        | 22.69      | 23.13 | 23.13 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.78      | 21.85 | 21.69 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.85      | 21.80 | 21.75 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.84      | 21.83 | 21.69 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.84      | 21.83 | 21.71 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.78 | 22.11 | 22.36              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.94 | 22.04 | 22.23              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.86      | 22.23 | 22.21 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.75      | 20.95 | 20.62 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.75 | 20.85 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.89 | 20.55 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.83      | 20.76 | 20.68 | 21.80              |                    |

| LTE B26-State 5 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.60 | 23.43 | 23.65 | 24.80              |
|                        |         | MID       | QPSK       | 23.73 | 23.70 | 23.70 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.85 | 23.56 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.67 | 23.70 | 23.81 | 24.80              |
|                        |         | MID       | QPSK       | 23.97 | 23.55 | 23.71 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76 | 23.53 | 23.79 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.73 | 22.54 | 22.68 | 23.80              |
| 1.4                    | 1       | LOW       | Q16        | 22.68 | 22.83 | 23.14 | 23.80              |
|                        |         | MID       | Q16        | 22.77 | 23.00 | 23.01 | 23.80              |
|                        |         | HIGH      | Q16        | 22.62 | 23.20 | 23.20 | 23.80              |
|                        | 3       | LOW       | Q16        | 22.63 | 22.85 | 22.69 | 23.80              |
|                        |         | MID       | Q16        | 22.68 | 22.84 | 22.68 | 23.80              |
|                        |         | HIGH      | Q16        | 22.88 | 22.68 | 22.69 | 23.80              |
|                        | 6       | LOW       | Q16        | 21.60 | 21.92 | 21.69 | 22.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.54 | 21.96 | 22.20 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 22.15 | 22.34 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.69 | 22.27 | 22.10 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.75 | 21.93 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.59 | 21.85 | 21.81 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 21.95 | 21.34 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.91 | 20.66 | 20.68 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.83 | 23.67 | 23.46 | 24.80              |
|                        |         | MID       | QPSK       | 23.78 | 23.82 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.70 | 23.71 | 23.77 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.67 | 22.72 | 22.68 | 23.80              |
|                        |         | MID       | QPSK       | 22.81 | 22.57 | 22.58 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.62 | 22.53 | 22.61 | 23.80              |
|                        | 15      | LOW       | QPSK       | 22.68 | 22.79 | 22.70 | 23.80              |
| 3                      | 1       | LOW       | Q16        | 22.68 | 23.20 | 23.16 | 23.80              |
|                        |         | MID       | Q16        | 22.81 | 22.96 | 23.03 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.94 | 23.04 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.85 | 21.89 | 21.80 | 22.80              |
|                        |         | MID       | Q16        | 21.87 | 21.78 | 21.73 | 22.80              |
|                        |         | HIGH      | Q16        | 21.88 | 21.76 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.93 | 21.74 | 21.56 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.82 | 21.98 | 22.40 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 21.89 | 22.27 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 22.16 | 22.03 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.81 | 20.87 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.92 | 20.75 | 20.62 | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.05 | 20.85 | 20.61 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.73 | 20.76 | 20.66 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.67      | 23.81 | 23.48 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.87      | 23.80 | 23.73 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.56      | 23.85 | 23.65 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.56      | 22.77 | 22.61 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.70      | 22.50 | 22.78 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.56 | 22.57 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.66      | 22.68 | 22.56 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.52 | 23.13 | 22.93              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.05 | 23.15              | 23.80              |
| HIGH            |                 |           | Q16        | 22.51      | 22.99 | 23.13 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.67      | 21.78 | 21.71 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.81      | 21.89 | 21.86 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.77      | 21.74 | 21.67 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.64      | 21.92 | 21.64 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.67 | 21.89 | 22.47              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 22.01 | 21.84 | 21.99              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.95      | 21.99 | 22.32 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.52      | 20.97 | 20.66 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.65 | 20.87 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.16      | 20.81 | 20.37 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.60      | 20.66 | 20.56 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.71 | 23.67 | 23.72              | 24.80              |
| MID             |                 |           | QPSK       | 23.78      | 23.66 | 23.87 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.56      | 23.52 | 23.56 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.87      | 22.72 | 22.54 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.79      | 22.82 | 22.69 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.76      | 22.51 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.61      | 22.58 | 22.63 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.54 | 22.94 | 23.09              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.14 | 23.03              | 23.80              |
|                 | HIGH            |           | Q16        | 22.67      | 23.15 | 23.25 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.54      | 21.65 | 21.78 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.83      | 21.87 | 21.71 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.95      | 21.76 | 21.56 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.60      | 21.63 | 21.49 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.74 | 22.11 | 22.20              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.98 | 22.11 | 22.23              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.82      | 22.21 | 22.01 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.85      | 20.99 | 20.48 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.56 | 20.77 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.91 | 20.43 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.79      | 20.82 | 20.49 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.81 | 23.69 | 23.67              | 24.80              |
|                 | MID             |           | QPSK       | 23.85      | 23.75 | 23.75 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.80      | 23.73 | 23.65 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.76      | 22.79 | 22.70 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.86      | 22.75 | 22.76 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.76 | 22.68 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.84      | 22.79 | 22.70 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.70 | 23.08 | 23.14              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.79 | 23.12 | 23.22              | 23.80              |
| HIGH            |                 |           | Q16        | 22.69      | 23.13 | 23.13 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.78      | 21.85 | 21.69 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.85      | 21.80 | 21.75 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.84      | 21.83 | 21.69 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.84      | 21.83 | 21.71 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.78 | 22.11 | 22.36              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.94 | 22.04 | 22.23              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.86      | 22.23 | 22.21 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.75      | 20.95 | 20.62 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.75 | 20.85 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.89 | 20.55 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.83      | 20.76 | 20.68 | 21.80              |                    |

| LTE B26-State 6 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26697 | 26865 | 27033 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.60 | 23.43 | 23.65 | 24.80              |
|                        |         | MID       | QPSK       | 23.73 | 23.70 | 23.70 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.75 | 23.85 | 23.56 | 24.80              |
|                        | 3       | LOW       | QPSK       | 23.67 | 23.70 | 23.81 | 24.80              |
|                        |         | MID       | QPSK       | 23.97 | 23.55 | 23.71 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.76 | 23.53 | 23.79 | 24.80              |
|                        | 6       | LOW       | QPSK       | 22.73 | 22.54 | 22.68 | 23.80              |
|                        | 1.4     | LOW       | Q16        | 22.68 | 22.83 | 23.14 | 23.80              |
|                        |         | MID       | Q16        | 22.77 | 23.00 | 23.01 | 23.80              |
|                        |         | HIGH      | Q16        | 22.62 | 23.20 | 23.20 | 23.80              |
|                        |         | LOW       | Q16        | 22.63 | 22.85 | 22.69 | 23.80              |
|                        |         | MID       | Q16        | 22.68 | 22.84 | 22.68 | 23.80              |
|                        |         | HIGH      | Q16        | 22.88 | 22.68 | 22.69 | 23.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 21.54 | 21.96 | 22.20 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 22.15 | 22.34 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.69 | 22.27 | 22.10 | 22.80              |
|                        | 3       | LOW       | 64QAM      | 21.75 | 21.93 | 21.64 | 22.80              |
|                        |         | MID       | 64QAM      | 21.59 | 21.85 | 21.81 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 21.95 | 21.34 | 22.80              |
|                        | 6       | LOW       | 64QAM      | 20.91 | 20.66 | 20.68 | 21.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 26715 | 26865 | 27015 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.83 | 23.67 | 23.46 | 24.80              |
|                        |         | MID       | QPSK       | 23.78 | 23.82 | 23.56 | 24.80              |
|                        |         | HIGH      | QPSK       | 23.70 | 23.71 | 23.77 | 24.80              |
|                        | 8       | LOW       | QPSK       | 22.67 | 22.72 | 22.68 | 23.80              |
|                        |         | MID       | QPSK       | 22.81 | 22.57 | 22.58 | 23.80              |
|                        |         | HIGH      | QPSK       | 22.62 | 22.53 | 22.61 | 23.80              |
| 3                      | 15      | LOW       | QPSK       | 22.68 | 22.79 | 22.70 | 23.80              |
|                        | 1       | LOW       | Q16        | 22.68 | 23.20 | 23.16 | 23.80              |
|                        |         | MID       | Q16        | 22.81 | 22.96 | 23.03 | 23.80              |
|                        |         | HIGH      | Q16        | 22.76 | 22.94 | 23.04 | 23.80              |
|                        | 8       | LOW       | Q16        | 21.85 | 21.89 | 21.80 | 22.80              |
|                        |         | MID       | Q16        | 21.87 | 21.78 | 21.73 | 22.80              |
|                        |         | HIGH      | Q16        | 21.88 | 21.76 | 21.56 | 22.80              |
|                        | 15      | LOW       | Q16        | 21.93 | 21.74 | 21.56 | 22.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.82 | 21.98 | 22.40 | 22.80              |
|                        |         | MID       | 64QAM      | 22.01 | 21.89 | 22.27 | 22.80              |
|                        |         | HIGH      | 64QAM      | 21.84 | 22.16 | 22.03 | 22.80              |
|                        | 8       | LOW       | 64QAM      | 20.81 | 20.87 | 20.66 | 21.80              |
|                        |         | MID       | 64QAM      | 20.92 | 20.75 | 20.62 | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.05 | 20.85 | 20.61 | 21.80              |
|                        | 15      | LOW       | 64QAM      | 20.73 | 20.76 | 20.66 | 21.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 26715      | 26865 | 27015 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 5               | 1               | LOW       | QPSK       | 23.67      | 23.81 | 23.48 | 24.80              |                    |
|                 |                 | MID       | QPSK       | 23.87      | 23.80 | 23.73 | 24.80              |                    |
|                 |                 | HIGH      | QPSK       | 23.56      | 23.85 | 23.65 | 24.80              |                    |
|                 | 12              | LOW       | QPSK       | 22.56      | 22.77 | 22.61 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.70      | 22.50 | 22.78 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.56 | 22.57 | 23.80              |                    |
|                 | 25              | LOW       | QPSK       | 22.66      | 22.68 | 22.56 | 23.80              |                    |
|                 | 5               | 1         | LOW        | Q16        | 22.52 | 23.13 | 22.93              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.05 | 23.15              | 23.80              |
| HIGH            |                 |           | Q16        | 22.51      | 22.99 | 23.13 | 23.80              |                    |
| 12              |                 | LOW       | Q16        | 21.67      | 21.78 | 21.71 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.81      | 21.89 | 21.86 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.77      | 21.74 | 21.67 | 22.80              |                    |
| 25              |                 | LOW       | Q16        | 21.64      | 21.92 | 21.64 | 22.80              |                    |
| 5               |                 | 1         | LOW        | 64QAM      | 21.67 | 21.89 | 22.47              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 22.01 | 21.84 | 21.99              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.95      | 21.99 | 22.32 | 22.80              |                    |
|                 | 12              | LOW       | 64QAM      | 20.52      | 20.97 | 20.66 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.76      | 20.65 | 20.87 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.16      | 20.81 | 20.37 | 21.80              |                    |
|                 | 25              | LOW       | 64QAM      | 20.60      | 20.66 | 20.56 | 21.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 26740 | 26865 | 26990              | Tune-up power(dBm) |
|                 | 10              | 1         | LOW        | QPSK       | 23.71 | 23.67 | 23.72              | 24.80              |
| MID             |                 |           | QPSK       | 23.78      | 23.66 | 23.87 | 24.80              |                    |
| HIGH            |                 |           | QPSK       | 23.56      | 23.52 | 23.56 | 24.80              |                    |
| 25              |                 | LOW       | QPSK       | 22.87      | 22.72 | 22.54 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.79      | 22.82 | 22.69 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.76      | 22.51 | 22.43 | 23.80              |                    |
| 50              |                 | LOW       | QPSK       | 22.61      | 22.58 | 22.63 | 23.80              |                    |
| 10              |                 | 1         | LOW        | Q16        | 22.54 | 22.94 | 23.09              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.77 | 23.14 | 23.03              | 23.80              |
|                 | HIGH            |           | Q16        | 22.67      | 23.15 | 23.25 | 23.80              |                    |
|                 | 25              | LOW       | Q16        | 21.54      | 21.65 | 21.78 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.83      | 21.87 | 21.71 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.95      | 21.76 | 21.56 | 22.80              |                    |
|                 | 50              | LOW       | Q16        | 21.60      | 21.63 | 21.49 | 22.80              |                    |
|                 | 10              | 1         | LOW        | 64QAM      | 21.74 | 22.11 | 22.20              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.98 | 22.11 | 22.23              | 22.80              |
| HIGH            |                 |           | 64QAM      | 21.82      | 22.21 | 22.01 | 22.80              |                    |
| 25              |                 | LOW       | 64QAM      | 20.85      | 20.99 | 20.48 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.56 | 20.77 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.91 | 20.43 | 21.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.79      | 20.82 | 20.49 | 21.80              |                    |
| Bandwidth (MHz) |                 | RB Size   | RB offset  | Modulation | 26765 | 26865 | 26965              | Tune-up power(dBm) |
| 15              |                 | 1         | LOW        | QPSK       | 23.81 | 23.69 | 23.67              | 24.80              |
|                 | MID             |           | QPSK       | 23.85      | 23.75 | 23.75 | 24.80              |                    |
|                 | HIGH            |           | QPSK       | 23.80      | 23.73 | 23.65 | 24.80              |                    |
|                 | 36              | LOW       | QPSK       | 22.76      | 22.79 | 22.70 | 23.80              |                    |
|                 |                 | MID       | QPSK       | 22.86      | 22.75 | 22.76 | 23.80              |                    |
|                 |                 | HIGH      | QPSK       | 22.83      | 22.76 | 22.68 | 23.80              |                    |
|                 | 75              | LOW       | QPSK       | 22.84      | 22.79 | 22.70 | 23.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 22.70 | 23.08 | 23.14              | 23.80              |
|                 |                 |           | MID        | Q16        | 22.79 | 23.12 | 23.22              | 23.80              |
| HIGH            |                 |           | Q16        | 22.69      | 23.13 | 23.13 | 23.80              |                    |
| 36              |                 | LOW       | Q16        | 21.78      | 21.85 | 21.69 | 22.80              |                    |
|                 |                 | MID       | Q16        | 21.85      | 21.80 | 21.75 | 22.80              |                    |
|                 |                 | HIGH      | Q16        | 21.84      | 21.83 | 21.69 | 22.80              |                    |
| 75              |                 | LOW       | Q16        | 21.84      | 21.83 | 21.71 | 22.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 21.78 | 22.11 | 22.36              | 22.80              |
|                 |                 |           | MID        | 64QAM      | 21.94 | 22.04 | 22.23              | 22.80              |
|                 | HIGH            |           | 64QAM      | 21.86      | 22.23 | 22.21 | 22.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.75      | 20.95 | 20.62 | 21.80              |                    |
|                 |                 | MID       | 64QAM      | 20.82      | 20.75 | 20.85 | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.05      | 20.89 | 20.55 | 21.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.83      | 20.76 | 20.68 | 21.80              |                    |

### 8.3.8 LTE Band66 Output Power

BL-SZ2220432-701

| LTE B66-State 1 -Ant.1 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 17.86  | 17.90  | 18.00  | 18.80              |
|                        |         | MID       | QPSK       | 17.82  | 18.13  | 18.01  | 18.80              |
|                        |         | HIGH      | QPSK       | 17.98  | 18.21  | 17.76  | 18.80              |
|                        | 3       | LOW       | QPSK       | 17.92  | 18.17  | 18.01  | 18.80              |
|                        |         | MID       | QPSK       | 18.12  | 18.21  | 18.26  | 18.80              |
|                        |         | HIGH      | QPSK       | 18.02  | 17.98  | 18.01  | 18.80              |
|                        | 6       | LOW       | QPSK       | 18.06  | 17.98  | 18.03  | 18.80              |
|                        |         | LOW       | Q16        | 18.14  | 18.19  | 18.23  | 18.80              |
|                        |         | MID       | Q16        | 18.21  | 18.24  | 18.08  | 18.80              |
| 1.4                    | 1       | HIGH      | Q16        | 17.99  | 18.32  | 18.19  | 18.80              |
|                        |         | LOW       | Q16        | 18.08  | 18.01  | 18.11  | 18.80              |
|                        |         | MID       | Q16        | 18.10  | 18.22  | 18.16  | 18.80              |
|                        | 3       | HIGH      | Q16        | 17.90  | 18.02  | 17.94  | 18.80              |
|                        |         | LOW       | Q16        | 18.17  | 18.00  | 18.02  | 18.80              |
|                        |         | MID       | Q16        | 18.32  | 17.78  | 17.95  | 18.80              |
|                        | 6       | LOW       | 64QAM      | 17.76  | 17.85  | 17.99  | 18.80              |
|                        |         | MID       | 64QAM      | 17.84  | 17.83  | 18.13  | 18.80              |
|                        |         | HIGH      | 64QAM      | 18.05  | 18.13  | 18.28  | 18.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 17.99  | 17.97  | 18.14  | 18.80              |
|                        |         | MID       | 64QAM      | 18.07  | 18.14  | 18.13  | 18.80              |
|                        |         | HIGH      | 64QAM      | 18.07  | 18.15  | 18.11  | 18.80              |
|                        | 3       | LOW       | 64QAM      | 18.07  | 18.15  | 18.11  | 18.80              |
|                        |         | MID       | 64QAM      | 18.07  | 18.15  | 18.11  | 18.80              |
|                        |         | HIGH      | 64QAM      | 18.07  | 18.15  | 18.11  | 18.80              |
|                        | 6       | LOW       | 64QAM      | 18.07  | 18.15  | 18.11  | 18.80              |
|                        |         | MID       | 64QAM      | 18.07  | 18.15  | 18.11  | 18.80              |
|                        |         | HIGH      | 64QAM      | 18.07  | 18.15  | 18.11  | 18.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 17.95  | 18.03  | 17.76  | 18.80              |
|                        |         | MID       | QPSK       | 18.04  | 18.04  | 18.14  | 18.80              |
|                        |         | HIGH      | QPSK       | 18.11  | 18.01  | 17.89  | 18.80              |
|                        | 8       | LOW       | QPSK       | 18.10  | 18.20  | 17.97  | 18.80              |
|                        |         | MID       | QPSK       | 18.09  | 18.19  | 18.22  | 18.80              |
|                        |         | HIGH      | QPSK       | 18.11  | 17.98  | 17.95  | 18.80              |
|                        | 15      | LOW       | QPSK       | 17.94  | 18.16  | 17.96  | 18.80              |
|                        |         | LOW       | Q16        | 18.09  | 18.26  | 18.01  | 18.80              |
|                        |         | MID       | Q16        | 18.31  | 18.25  | 18.30  | 18.80              |
| 3                      | 1       | HIGH      | Q16        | 18.06  | 18.36  | 18.21  | 18.80              |
|                        |         | LOW       | Q16        | 17.90  | 17.98  | 18.05  | 18.80              |
|                        |         | MID       | Q16        | 18.17  | 18.27  | 18.14  | 18.80              |
|                        | 8       | HIGH      | Q16        | 17.96  | 18.22  | 17.92  | 18.80              |
|                        |         | LOW       | Q16        | 18.19  | 18.00  | 18.02  | 18.80              |
|                        |         | MID       | Q16        | 18.31  | 18.25  | 18.30  | 18.80              |
|                        | 15      | LOW       | Q16        | 18.09  | 18.26  | 18.01  | 18.80              |
|                        |         | MID       | Q16        | 18.31  | 18.25  | 18.30  | 18.80              |
|                        |         | HIGH      | Q16        | 18.06  | 18.36  | 18.21  | 18.80              |
| 3                      | 1       | LOW       | 64QAM      | 18.27  | 17.92  | 18.18  | 18.80              |
|                        |         | MID       | 64QAM      | 17.99  | 17.90  | 18.22  | 18.80              |
|                        |         | HIGH      | 64QAM      | 18.01  | 17.94  | 18.09  | 18.80              |
|                        | 8       | LOW       | 64QAM      | 18.04  | 18.29  | 18.06  | 18.80              |
|                        |         | MID       | 64QAM      | 18.01  | 18.00  | 17.94  | 18.80              |
|                        |         | HIGH      | 64QAM      | 17.94  | 18.27  | 18.08  | 18.80              |
|                        | 15      | LOW       | 64QAM      | 18.13  | 18.37  | 18.06  | 18.80              |
|                        |         | MID       | 64QAM      | 18.13  | 18.37  | 18.06  | 18.80              |
|                        |         | HIGH      | 64QAM      | 18.13  | 18.37  | 18.06  | 18.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 17.84  | 18.12  | 17.76  | 18.80              |
|                        |         | MID       | QPSK       | 18.00  | 18.22  | 17.92  | 18.80              |
|                        |         | HIGH      | QPSK       | 17.82  | 18.23  | 17.94  | 18.80              |
|                        | 12      | LOW       | QPSK       | 17.90  | 18.09  | 18.12  | 18.80              |
|                        |         | MID       | QPSK       | 18.11  | 18.24  | 18.08  | 18.80              |
|                        |         | HIGH      | QPSK       | 18.20  | 17.96  | 18.02  | 18.80              |
|                        | 25      | LOW       | QPSK       | 18.06  | 18.01  | 17.92  | 18.80              |
|                        |         | LOW       | Q16        | 18.36  | 18.01  | 18.23  | 18.80              |
|                        |         | MID       | Q16        | 18.10  | 18.29  | 18.30  | 18.80              |
| 5                      | 1       | HIGH      | Q16        | 18.02  | 18.11  | 18.21  | 18.80              |
|                        |         | LOW       | Q16        | 18.08  | 18.21  | 17.93  | 18.80              |
|                        |         | MID       | Q16        | 18.08  | 18.09  | 18.05  | 18.80              |
|                        | 12      | HIGH      | Q16        | 18.05  | 18.10  | 17.90  | 18.80              |
|                        |         | LOW       | Q16        | 18.10  | 18.09  | 18.02  | 18.80              |
|                        |         | MID       | Q16        | 18.10  | 18.09  | 18.02  | 18.80              |
|                        | 25      | LOW       | Q16        | 18.10  | 18.09  | 18.02  | 18.80              |
|                        |         | MID       | Q16        | 18.10  | 18.09  | 18.02  | 18.80              |
|                        |         | HIGH      | Q16        | 18.10  | 18.09  | 18.02  | 18.80              |
| 5                      | 1       | LOW       | 64QAM      | 18.14  | 17.81  | 18.07  | 18.80              |
|                        |         | MID       | 64QAM      | 18.01  | 17.97  | 18.08  | 18.80              |
|                        |         | HIGH      | 64QAM      | 17.95  | 17.90  | 18.02  | 18.80              |
|                        | 12      | LOW       | 64QAM      | 18.07  | 18.20  | 18.01  | 18.80              |
|                        |         | MID       | 64QAM      | 17.92  | 18.06  | 18.09  | 18.80              |
|                        |         | HIGH      | 64QAM      | 17.98  | 18.16  | 18.19  | 18.80              |
|                        | 25      | LOW       | 64QAM      | 18.11  | 18.10  | 18.06  | 18.80              |
|                        |         | MID       | 64QAM      | 18.11  | 18.10  | 18.06  | 18.80              |
|                        |         | HIGH      | 64QAM      | 18.11  | 18.10  | 18.06  | 18.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 17.81  | 18.08  | 17.82  | 18.80              |
|           |         | MID       | QPSK       | 17.82  | 18.20  | 18.07  | 18.80              |
|           |         | HIGH      | QPSK       | 18.04  | 18.18  | 17.85  | 18.80              |
|           | 25      | LOW       | QPSK       | 17.99  | 18.15  | 18.22  | 18.80              |
|           |         | MID       | QPSK       | 18.05  | 18.28  | 17.97  | 18.80              |
|           |         | HIGH      | QPSK       | 18.11  | 18.05  | 17.86  | 18.80              |
|           | 50      | LOW       | QPSK       | 18.17  | 18.03  | 18.12  | 18.80              |
|           |         | LOW       | Q16        | 18.20  | 18.14  | 18.14  | 18.80              |
|           |         | MID       | Q16        | 18.30  | 18.27  | 18.30  | 18.80              |
| 10        | 1       | MID       | Q16        | 18.15  | 18.18  | 18.17  | 18.80              |
|           |         | LOW       | Q16        | 17.92  | 18.03  | 18.13  | 18.80              |
|           |         | MID       | Q16        | 18.14  | 18.11  | 18.01  | 18.80              |
|           | 25      | HIGH      | Q16        | 18.03  | 18.02  | 17.92  | 18.80              |
|           |         | LOW       | Q16        | 17.99  | 17.98  | 18.14  | 18.80              |
|           |         | LOW       | Q16        | 17.99  | 17.98  | 18.14  | 18.80              |
|           | 50      | LOW       | Q16        | 17.99  | 17.98  | 18.14  | 18.80              |
|           |         | LOW       | 64QAM      | 18.30  | 17.65  | 18.16  | 18.80              |
|           |         | MID       | 64QAM      | 18.01  | 17.83  | 18.02  | 18.80              |
| 10        | 1       | HIGH      | 64QAM      | 18.01  | 18.05  | 18.06  | 18.80              |
|           |         | LOW       | 64QAM      | 18.25  | 18.33  | 18.01  | 18.80              |
|           |         | MID       | 64QAM      | 17.96  | 18.15  | 18.05  | 18.80              |
|           | 25      | HIGH      | 64QAM      | 18.08  | 18.18  | 17.95  | 18.80              |
|           |         | LOW       | 64QAM      | 18.16  | 18.28  | 18.06  | 18.80              |
|           |         | LOW       | 64QAM      | 18.16  | 18.28  | 18.06  | 18.80              |
|           | 50      | LOW       | 64QAM      | 18.16  | 18.28  | 18.06  | 18.80              |
|           |         | LOW       | 64QAM      | 18.16  | 18.28  | 18.06  | 18.80              |
|           |         | LOW       | 64QAM      | 18.16  | 18.28  | 18.06  | 18.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 18.01  | 17.94  | 18.01  | 18.80              |
|           |         | MID       | QPSK       | 17.82  | 18.09  | 18.10  | 18.80              |
|           |         | HIGH      | QPSK       | 17.86  | 18.18  | 17.92  | 18.80              |
|           | 36      | LOW       | QPSK       | 17.90  | 18.04  | 18.26  | 18.80              |
|           |         | MID       | QPSK       | 18.11  | 18.06  | 18.10  | 18.80              |
|           |         | HIGH      | QPSK       | 18.06  | 18.14  | 18.04  | 18.80              |
|           | 75      | LOW       | QPSK       | 18.13  | 18.03  | 18.08  | 18.80              |
|           |         | LOW       | Q16        | 18.18  | 18.14  | 18.21  | 18.80              |
|           |         | MID       | Q16        | 18.11  | 18.09  | 18.14  | 18.80              |
| 15        | 1       | HIGH      | Q16        | 18.15  | 18.27  | 18.04  | 18.80              |
|           |         | LOW       | Q16        | 17.94  | 18.12  | 17.91  | 18.80              |
|           |         | MID       | Q16        | 18.19  | 18.29  | 18.09  | 18.80              |
|           | 36      | HIGH      | Q16        | 17.96  | 17.99  | 17.97  | 18.80              |
|           |         | LOW       | Q16        | 18.10  | 18.11  | 18.13  | 18.80              |
|           |         | LOW       | Q16        | 18.10  | 18.11  | 18.13  | 18.80              |
|           | 75      | LOW       | Q16        | 18.10  | 18.11  | 18.13  | 18.80              |
|           |         | LOW       | 64QAM      | 18.03  | 17.90  | 17.93  | 18.80              |
|           |         | MID       | 64QAM      | 18.01  | 17.81  | 17.99  | 18.80              |
| 15        | 1       | HIGH      | 64QAM      | 17.90  | 18.06  | 17.97  | 18.80              |
|           |         | LOW       | 64QAM      | 18.20  | 18.31  | 18.24  | 18.80              |
|           |         | MID       | 64QAM      | 17.88  | 18.08  | 18.01  | 18.80              |
|           | 36      | HIGH      | 64QAM      | 18.12  | 18.14  | 18.17  | 18.80              |
|           |         | LOW       | 64QAM      | 18.18  | 18.19  | 18.22  | 18.80              |
|           |         | LOW       | 64QAM      | 18.18  | 18.19  | 18.22  | 18.80              |
|           | 75      | LOW       | 64QAM      | 18.18  | 18.19  | 18.22  | 18.80              |
|           |         | LOW       | 64QAM      | 18.18  | 18.19  | 18.22  | 18.80              |
|           |         | LOW       | 64QAM      | 18.18  | 18.19  | 18.22  | 18.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 17.97  | 18.03  | 17.96  | 18.80              |
|           |         | MID       | QPSK       | 18.02  | 18.20  | 18.12  | 18.80              |
|           |         | HIGH      | QPSK       | 18.02  | 18.14  | 17.94  | 18.80              |
|           | 50      | LOW       | QPSK       | 18.10  | 18.13  | 18.17  | 18.80              |
|           |         | MID       | QPSK       | 18.16  | 18.19  | 18.17  | 18.80              |
|           |         | HIGH      | QPSK       | 18.13  | 18.16  | 18.06  | 18.80              |
|           | 100     | LOW       | QPSK       | 18.08  | 18.16  | 18.12  | 18.80              |
|           |         | LOW       | Q16        | 18.27  | 18.19  | 18.21  | 18.80              |
|           |         | MID       | Q16        | 18.26  | 18.20  | 18.23  | 18.80              |
| 20        | 1       | HIGH      | Q16        | 18.17  | 18.27  | 18.17  | 18.80              |
|           |         | LOW       | Q16        | 18.08  | 18.12  | 18.09  | 18.80              |
|           |         | MID       | Q16        | 18.12  | 18.20  | 18.16  | 18.80              |
|           | 50      | HIGH      | Q16        | 18.10  | 18.17  | 18.01  | 18.80              |
|           |         | LOW       | Q16        | 18.12  | 18.16  | 18.09  | 18.80              |
|           |         | LOW       | Q16        | 18.12  | 18.16  | 18.09  | 18.80              |
|           | 100     | LOW       | Q16        | 18.12  | 18.16  | 18.09  | 18.80              |
|           |         | LOW       | 64QAM      | 18.23  | 17.85  | 18.11  | 18.80              |
|           |         | MID       | 64QAM      | 17.94  | 17.92  | 18.17  | 18.80              |
| 20        | 1       | HIGH      | 64QAM      | 17.97  | 18.01  | 18.13  | 18.80              |
|           |         | LOW       | 64QAM      | 18.20  | 18.24  | 18.19  | 18.80              |
|           |         | MID       | 64QAM      | 18.01  | 18.15  | 18.05  | 18.80              |
|           | 50      | HIGH      | 64QAM      | 18.12  | 18.23  | 18.15  | 18.80              |
|           |         | LOW       | 64QAM      | 18.09  | 18.30  | 18.13  | 18.80              |
|           |         | LOW       | 64QAM      | 18.09  | 18.30  | 18.13  | 18.80              |
|           | 100     | LOW       | 64QAM      | 18.09  | 18.30  | 18.13  | 18.80              |
|           |         | LOW       | 64QAM      | 18.09  | 18.30  | 18.13  | 18.80              |
|           |         | LOW       | 64QAM      | 18.09  | 18.30  | 18.13  | 18.80              |

| LTE B66-State 2 -Ant.1 |           |           |            |            |        |        |                    |                    |
|------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth              | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                    | 1         | LOW       | QPSK       | 16.97      | 16.79  | 16.91  | 17.80              |                    |
|                        |           | MID       | QPSK       | 16.96      | 17.26  | 16.98  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.99      | 17.04  | 16.71  | 17.80              |                    |
|                        | 3         | LOW       | QPSK       | 16.95      | 16.89  | 17.07  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.00      | 17.11  | 16.92  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.96      | 17.02  | 17.20  | 17.80              |                    |
|                        | 6         | LOW       | QPSK       | 17.18      | 17.16  | 17.00  | 17.80              |                    |
|                        | 1.4       | 1         | LOW        | Q16        | 17.18  | 17.00  | 16.98              | 17.80              |
|                        |           |           | MID        | Q16        | 17.10  | 17.44  | 17.27              | 17.80              |
| HIGH                   |           |           | Q16        | 17.04      | 17.13  | 17.31  | 17.80              |                    |
| 3                      |           | LOW       | Q16        | 17.00      | 17.04  | 16.89  | 17.80              |                    |
|                        |           | MID       | Q16        | 16.92      | 17.13  | 16.99  | 17.80              |                    |
| 6                      | HIGH      | Q16       | 16.93      | 16.95      | 16.70  | 17.80  |                    |                    |
| 1.4                    | 6         | LOW       | Q16        | 17.24      | 16.88  | 16.82  | 17.80              |                    |
|                        | 1         | LOW       | 64QAM      | 17.15      | 17.16  | 17.21  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 17.17      | 17.05  | 17.40  | 17.80              |                    |
|                        |           | HIGH      | 64QAM      | 17.20      | 17.01  | 17.17  | 17.80              |                    |
|                        | 3         | LOW       | 64QAM      | 17.08      | 17.16  | 16.95  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 16.82      | 17.03  | 17.00  | 17.80              |                    |
|                        |           | HIGH      | 64QAM      | 17.12      | 17.00  | 17.17  | 17.80              |                    |
|                        | 6         | LOW       | 64QAM      | 16.94      | 17.39  | 16.99  | 17.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                      | 1         | LOW       | QPSK       | 16.96      | 16.75  | 16.84  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.10      | 17.19  | 17.07  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.78      | 17.21  | 16.94  | 17.80              |                    |
|                        | 8         | LOW       | QPSK       | 17.02      | 17.06  | 16.83  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.04      | 17.02  | 16.87  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.84      | 17.20  | 17.03  | 17.80              |                    |
|                        | 15        | LOW       | QPSK       | 16.98      | 17.17  | 17.09  | 17.80              |                    |
|                        | 3         | 1         | LOW        | Q16        | 16.96  | 16.81  | 16.97              | 17.80              |
|                        |           |           | MID        | Q16        | 17.27  | 17.40  | 17.27              | 17.80              |
| HIGH                   |           |           | Q16        | 17.04      | 17.29  | 17.05  | 17.80              |                    |
| 8                      |           | LOW       | Q16        | 16.74      | 17.05  | 17.05  | 17.80              |                    |
|                        |           | MID       | Q16        | 17.00      | 17.25  | 17.10  | 17.80              |                    |
| 15                     | HIGH      | Q16       | 17.06      | 16.91      | 16.82  | 17.80  |                    |                    |
| 3                      | 1         | LOW       | Q16        | 17.12      | 17.00  | 17.01  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 16.99      | 17.16  | 17.21  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 17.26      | 17.17  | 17.28  | 17.80              |                    |
|                        | 8         | HIGH      | 64QAM      | 17.08      | 17.04  | 17.20  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 17.25      | 17.21  | 17.04  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 16.91      | 16.91  | 16.92  | 17.80              |                    |
|                        | 15        | HIGH      | 64QAM      | 17.00      | 16.92  | 17.21  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 16.73      | 17.27  | 17.02  | 17.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                      | 1         | LOW       | QPSK       | 17.02      | 16.94  | 16.87  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.08      | 17.22  | 16.98  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.87      | 17.02  | 16.94  | 17.80              |                    |
|                        | 12        | LOW       | QPSK       | 17.05      | 17.06  | 17.11  | 17.80              |                    |
|                        |           | MID       | QPSK       | 16.85      | 17.16  | 17.11  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 17.06      | 17.02  | 17.24  | 17.80              |                    |
|                        | 25        | LOW       | QPSK       | 17.01      | 17.19  | 16.95  | 17.80              |                    |
|                        | 5         | 1         | LOW        | Q16        | 17.12  | 16.88  | 16.93              | 17.80              |
|                        |           |           | MID        | Q16        | 17.31  | 17.37  | 17.32              | 17.80              |
| HIGH                   |           |           | Q16        | 17.16      | 17.36  | 17.27  | 17.80              |                    |
| 12                     |           | LOW       | Q16        | 16.98      | 17.07  | 17.00  | 17.80              |                    |
|                        |           | MID       | Q16        | 17.04      | 17.09  | 16.89  | 17.80              |                    |
| 25                     | HIGH      | Q16       | 17.08      | 17.14      | 16.70  | 17.80  |                    |                    |
| 5                      | 1         | LOW       | Q16        | 17.14      | 16.90  | 16.96  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 17.04      | 16.97  | 17.24  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 17.12      | 16.96  | 17.36  | 17.80              |                    |
|                        | 12        | HIGH      | 64QAM      | 17.06      | 17.04  | 17.05  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 17.06      | 17.35  | 17.18  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 16.96      | 16.89  | 16.83  | 17.80              |                    |
|                        | 25        | HIGH      | 64QAM      | 17.09      | 17.00  | 17.08  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 16.92      | 17.39  | 16.85  | 17.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 17.02  | 16.77  | 16.70  | 17.80              |
|           |         | MID       | QPSK       | 17.12  | 17.08  | 17.04  | 17.80              |
|           |         | HIGH      | QPSK       | 16.80  | 17.25  | 16.93  | 17.80              |
|           | 25      | LOW       | QPSK       | 17.09  | 16.91  | 16.88  | 17.80              |
|           |         | MID       | QPSK       | 16.93  | 17.11  | 16.88  | 17.80              |
|           |         | HIGH      | QPSK       | 17.01  | 16.92  | 16.98  | 17.80              |
|           | 50      | LOW       | QPSK       | 17.22  | 17.28  | 16.95  | 17.80              |
|           |         | LOW       | Q16        | 17.13  | 16.98  | 17.19  | 17.80              |
|           |         | MID       | Q16        | 17.21  | 17.40  | 17.27  | 17.80              |
| 10        | 1       | MID       | Q16        | 16.97  | 17.12  | 17.17  | 17.80              |
|           |         | LOW       | Q16        | 16.81  | 17.10  | 16.92  | 17.80              |
|           |         | MID       | Q16        | 16.80  | 17.27  | 17.03  | 17.80              |
|           | 25      | HIGH      | Q16        | 17.05  | 16.96  | 16.70  | 17.80              |
|           |         | LOW       | Q16        | 17.15  | 17.04  | 17.04  | 17.80              |
|           |         | LOW       | 64QAM      | 17.04  | 16.92  | 17.04  | 17.80              |
|           | 1       | MID       | 64QAM      | 17.12  | 17.20  | 17.22  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.04  | 17.25  | 17.12  | 17.80              |
|           |         | LOW       | 64QAM      | 17.06  | 17.33  | 17.04  | 17.80              |
| 10        | 25      | MID       | 64QAM      | 16.97  | 17.03  | 16.92  | 17.80              |
|           |         | HIGH      | 64QAM      | 16.90  | 17.05  | 17.07  | 17.80              |
|           |         | LOW       | 64QAM      | 16.94  | 17.13  | 17.02  | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 17.07  | 17.02  | 16.75  | 17.80              |
|           |         | MID       | QPSK       | 16.90  | 17.00  | 17.04  | 17.80              |
|           |         | HIGH      | QPSK       | 16.99  | 17.01  | 16.73  | 17.80              |
|           | 36      | LOW       | QPSK       | 17.09  | 17.07  | 16.93  | 17.80              |
|           |         | MID       | QPSK       | 16.99  | 17.16  | 17.02  | 17.80              |
|           |         | HIGH      | QPSK       | 16.99  | 16.94  | 17.15  | 17.80              |
|           | 75      | LOW       | QPSK       | 17.20  | 17.19  | 17.05  | 17.80              |
|           |         | LOW       | Q16        | 17.22  | 16.85  | 17.14  | 17.80              |
|           |         | MID       | Q16        | 17.14  | 17.30  | 17.41  | 17.80              |
| 15        | 1       | HIGH      | Q16        | 16.98  | 17.26  | 17.07  | 17.80              |
|           |         | LOW       | Q16        | 16.88  | 17.12  | 16.94  | 17.80              |
|           |         | MID       | Q16        | 16.78  | 17.25  | 17.08  | 17.80              |
|           | 36      | HIGH      | Q16        | 17.10  | 17.07  | 16.84  | 17.80              |
|           |         | LOW       | Q16        | 17.22  | 16.98  | 16.99  | 17.80              |
|           |         | LOW       | 64QAM      | 17.22  | 17.16  | 17.12  | 17.80              |
|           | 1       | MID       | 64QAM      | 17.19  | 17.00  | 17.29  | 17.80              |
|           |         | HIGH      | 64QAM      | 16.94  | 17.03  | 17.20  | 17.80              |
|           |         | LOW       | 64QAM      | 17.13  | 17.21  | 17.14  | 17.80              |
| 15        | 36      | MID       | 64QAM      | 16.96  | 16.87  | 17.04  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.09  | 17.02  | 17.19  | 17.80              |
|           |         | LOW       | 64QAM      | 16.89  | 17.20  | 16.89  | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 16.99  | 16.94  | 16.89  | 17.80              |
|           |         | MID       | QPSK       | 17.05  | 17.17  | 17.07  | 17.80              |
|           |         | HIGH      | QPSK       | 16.92  | 17.16  | 16.86  | 17.80              |
|           | 50      | LOW       | QPSK       | 17.07  | 16.99  | 17.02  | 17.80              |
|           |         | MID       | QPSK       | 17.02  | 17.16  | 17.02  | 17.80              |
|           |         | HIGH      | QPSK       | 16.99  | 17.11  | 17.15  | 17.80              |
|           | 100     | LOW       | QPSK       | 17.13  | 17.19  | 17.00  | 17.80              |
|           |         | LOW       | Q16        | 17.15  | 17.00  | 17.12  | 17.80              |
|           |         | MID       | Q16        | 17.24  | 17.37  | 17.34  | 17.80              |
| 20        | 1       | HIGH      | Q16        | 17.07  | 17.29  | 17.22  | 17.80              |
|           |         | LOW       | Q16        | 16.93  | 17.07  | 16.97  | 17.80              |
|           |         | MID       | Q16        | 16.97  | 17.18  | 17.01  | 17.80              |
|           | 50      | HIGH      | Q16        | 17.08  | 17.05  | 16.82  | 17.80              |
|           |         | LOW       | Q16        | 17.17  | 17.07  | 16.99  | 17.80              |
|           |         | LOW       | 64QAM      | 17.13  | 17.07  | 17.19  | 17.80              |
|           | 1       | MID       | 64QAM      | 17.26  | 17.15  | 17.38  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.11  | 17.18  | 17.15  | 17.80              |
|           |         | LOW       | 64QAM      | 17.20  | 17.33  | 17.09  | 17.80              |
| 20        | 50      | MID       | 64QAM      | 16.99  | 17.06  | 17.02  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.09  | 17.07  | 17.24  | 17.80              |
|           |         | LOW       | 64QAM      | 16.92  | 17.32  | 16.99  | 17.80              |

| LTE B66-State 3 -Ant.1 |           |           |            |            |        |        |                    |                    |
|------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth              | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                    | 1         | LOW       | QPSK       | 16.97      | 16.79  | 16.91  | 17.80              |                    |
|                        |           | MID       | QPSK       | 16.96      | 17.26  | 16.98  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.99      | 17.04  | 16.71  | 17.80              |                    |
|                        | 3         | LOW       | QPSK       | 16.95      | 16.89  | 17.07  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.00      | 17.11  | 16.92  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.96      | 17.02  | 17.20  | 17.80              |                    |
|                        | 6         | LOW       | QPSK       | 17.18      | 17.16  | 17.00  | 17.80              |                    |
|                        | 1.4       | 1         | LOW        | Q16        | 17.18  | 17.00  | 16.98              | 17.80              |
|                        |           |           | MID        | Q16        | 17.10  | 17.44  | 17.27              | 17.80              |
| HIGH                   |           |           | Q16        | 17.04      | 17.13  | 17.31  | 17.80              |                    |
| 3                      |           | LOW       | Q16        | 17.00      | 17.04  | 16.89  | 17.80              |                    |
|                        |           | MID       | Q16        | 16.92      | 17.13  | 16.99  | 17.80              |                    |
| 6                      | HIGH      | Q16       | 16.93      | 16.95      | 16.70  | 17.80  |                    |                    |
| 1.4                    | 6         | LOW       | Q16        | 17.24      | 16.88  | 16.82  | 17.80              |                    |
|                        | 1         | LOW       | 64QAM      | 17.15      | 17.16  | 17.21  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 17.17      | 17.05  | 17.40  | 17.80              |                    |
|                        |           | HIGH      | 64QAM      | 17.20      | 17.01  | 17.17  | 17.80              |                    |
|                        | 3         | LOW       | 64QAM      | 17.08      | 17.16  | 16.95  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 16.82      | 17.03  | 17.00  | 17.80              |                    |
|                        |           | HIGH      | 64QAM      | 17.12      | 17.00  | 17.17  | 17.80              |                    |
|                        | 6         | LOW       | 64QAM      | 16.94      | 17.39  | 16.99  | 17.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                      | 1         | LOW       | QPSK       | 16.96      | 16.75  | 16.84  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.10      | 17.19  | 17.07  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.78      | 17.21  | 16.94  | 17.80              |                    |
|                        | 8         | LOW       | QPSK       | 17.02      | 17.06  | 16.83  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.04      | 17.02  | 16.87  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.84      | 17.20  | 17.03  | 17.80              |                    |
|                        | 15        | LOW       | QPSK       | 16.98      | 17.17  | 17.09  | 17.80              |                    |
|                        | 3         | 1         | LOW        | Q16        | 16.96  | 16.81  | 16.97              | 17.80              |
|                        |           |           | MID        | Q16        | 17.27  | 17.40  | 17.27              | 17.80              |
| HIGH                   |           |           | Q16        | 17.04      | 17.29  | 17.05  | 17.80              |                    |
| 8                      |           | LOW       | Q16        | 16.74      | 17.05  | 17.05  | 17.80              |                    |
|                        |           | MID       | Q16        | 17.00      | 17.25  | 17.10  | 17.80              |                    |
| 15                     | HIGH      | Q16       | 17.06      | 16.91      | 16.82  | 17.80  |                    |                    |
| 3                      | 1         | LOW       | Q16        | 17.12      | 17.00  | 17.01  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 16.99      | 17.16  | 17.21  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 17.26      | 17.17  | 17.28  | 17.80              |                    |
|                        | 8         | HIGH      | 64QAM      | 17.08      | 17.04  | 17.20  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 17.25      | 17.21  | 17.04  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 16.91      | 16.91  | 16.92  | 17.80              |                    |
|                        | 15        | HIGH      | 64QAM      | 17.00      | 16.92  | 17.21  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 16.73      | 17.27  | 17.02  | 17.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                      | 1         | LOW       | QPSK       | 17.02      | 16.94  | 16.87  | 17.80              |                    |
|                        |           | MID       | QPSK       | 17.08      | 17.22  | 16.98  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 16.87      | 17.02  | 16.94  | 17.80              |                    |
|                        | 12        | LOW       | QPSK       | 17.05      | 17.06  | 17.11  | 17.80              |                    |
|                        |           | MID       | QPSK       | 16.85      | 17.16  | 17.11  | 17.80              |                    |
|                        |           | HIGH      | QPSK       | 17.06      | 17.02  | 17.24  | 17.80              |                    |
|                        | 25        | LOW       | QPSK       | 17.01      | 17.19  | 16.95  | 17.80              |                    |
|                        | 5         | 1         | LOW        | Q16        | 17.12  | 16.88  | 16.93              | 17.80              |
|                        |           |           | MID        | Q16        | 17.31  | 17.37  | 17.32              | 17.80              |
| HIGH                   |           |           | Q16        | 17.16      | 17.36  | 17.27  | 17.80              |                    |
| 12                     |           | LOW       | Q16        | 16.98      | 17.07  | 17.00  | 17.80              |                    |
|                        |           | MID       | Q16        | 17.04      | 17.09  | 16.89  | 17.80              |                    |
| 25                     | HIGH      | Q16       | 17.08      | 17.14      | 16.70  | 17.80  |                    |                    |
| 5                      | 1         | LOW       | Q16        | 17.14      | 16.90  | 16.96  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 17.04      | 16.97  | 17.24  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 17.12      | 16.96  | 17.36  | 17.80              |                    |
|                        | 12        | HIGH      | 64QAM      | 17.06      | 17.04  | 17.05  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 17.06      | 17.35  | 17.18  | 17.80              |                    |
|                        |           | MID       | 64QAM      | 16.96      | 16.89  | 16.83  | 17.80              |                    |
|                        | 25        | HIGH      | 64QAM      | 17.09      | 17.00  | 17.08  | 17.80              |                    |
|                        |           | LOW       | 64QAM      | 16.92      | 17.39  | 16.85  | 17.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 17.02  | 16.77  | 16.70  | 17.80              |
|           |         | MID       | QPSK       | 17.12  | 17.08  | 17.04  | 17.80              |
|           |         | HIGH      | QPSK       | 16.80  | 17.25  | 16.93  | 17.80              |
|           | 25      | LOW       | QPSK       | 17.09  | 16.91  | 16.88  | 17.80              |
|           |         | MID       | QPSK       | 16.93  | 17.11  | 16.88  | 17.80              |
|           |         | HIGH      | QPSK       | 17.01  | 16.92  | 16.98  | 17.80              |
|           | 50      | LOW       | QPSK       | 17.22  | 17.28  | 16.95  | 17.80              |
|           |         | LOW       | Q16        | 17.13  | 16.98  | 17.19  | 17.80              |
|           |         | MID       | Q16        | 17.21  | 17.40  | 17.27  | 17.80              |
| 10        | 1       | MID       | Q16        | 16.97  | 17.12  | 17.17  | 17.80              |
|           |         | LOW       | Q16        | 16.81  | 17.10  | 16.92  | 17.80              |
|           |         | MID       | Q16        | 16.80  | 17.27  | 17.03  | 17.80              |
|           | 25      | HIGH      | Q16        | 17.05  | 16.96  | 16.70  | 17.80              |
|           |         | LOW       | Q16        | 17.15  | 17.04  | 17.04  | 17.80              |
|           |         | LOW       | 64QAM      | 17.04  | 16.92  | 17.04  | 17.80              |
|           | 1       | MID       | 64QAM      | 17.12  | 17.20  | 17.22  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.04  | 17.25  | 17.12  | 17.80              |
|           |         | LOW       | 64QAM      | 17.06  | 17.33  | 17.04  | 17.80              |
| 10        | 25      | MID       | 64QAM      | 16.97  | 17.03  | 16.92  | 17.80              |
|           |         | HIGH      | 64QAM      | 16.90  | 17.05  | 17.07  | 17.80              |
|           |         | LOW       | 64QAM      | 16.94  | 17.13  | 17.02  | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 17.07  | 17.02  | 16.75  | 17.80              |
|           |         | MID       | QPSK       | 16.90  | 17.00  | 17.04  | 17.80              |
|           |         | HIGH      | QPSK       | 16.99  | 17.01  | 16.73  | 17.80              |
|           | 36      | LOW       | QPSK       | 17.09  | 17.07  | 16.93  | 17.80              |
|           |         | MID       | QPSK       | 16.99  | 17.16  | 17.02  | 17.80              |
|           |         | HIGH      | QPSK       | 16.99  | 16.94  | 17.15  | 17.80              |
|           | 75      | LOW       | QPSK       | 17.20  | 17.19  | 17.05  | 17.80              |
|           |         | LOW       | Q16        | 17.22  | 16.85  | 17.14  | 17.80              |
|           |         | MID       | Q16        | 17.14  | 17.30  | 17.41  | 17.80              |
| 15        | 1       | HIGH      | Q16        | 16.98  | 17.26  | 17.07  | 17.80              |
|           |         | LOW       | Q16        | 16.88  | 17.12  | 16.94  | 17.80              |
|           |         | MID       | Q16        | 16.78  | 17.25  | 17.08  | 17.80              |
|           | 36      | HIGH      | Q16        | 17.10  | 17.07  | 16.84  | 17.80              |
|           |         | LOW       | Q16        | 17.22  | 16.98  | 16.99  | 17.80              |
|           |         | LOW       | 64QAM      | 17.22  | 17.16  | 17.12  | 17.80              |
|           | 1       | MID       | 64QAM      | 17.19  | 17.00  | 17.29  | 17.80              |
|           |         | HIGH      | 64QAM      | 16.94  | 17.03  | 17.20  | 17.80              |
|           |         | LOW       | 64QAM      | 17.13  | 17.21  | 17.14  | 17.80              |
| 15        | 36      | MID       | 64QAM      | 16.96  | 16.87  | 17.04  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.09  | 17.02  | 17.19  | 17.80              |
|           |         | LOW       | 64QAM      | 16.89  | 17.20  | 16.89  | 17.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 16.99  | 16.94  | 16.89  | 17.80              |
|           |         | MID       | QPSK       | 17.05  | 17.17  | 17.07  | 17.80              |
|           |         | HIGH      | QPSK       | 16.92  | 17.16  | 16.86  | 17.80              |
|           | 50      | LOW       | QPSK       | 17.07  | 16.99  | 17.02  | 17.80              |
|           |         | MID       | QPSK       | 17.02  | 17.16  | 17.02  | 17.80              |
|           |         | HIGH      | QPSK       | 16.99  | 17.11  | 17.15  | 17.80              |
|           | 100     | LOW       | QPSK       | 17.13  | 17.19  | 17.00  | 17.80              |
|           |         | LOW       | Q16        | 17.15  | 17.00  | 17.12  | 17.80              |
|           |         | MID       | Q16        | 17.24  | 17.37  | 17.34  | 17.80              |
| 20        | 1       | HIGH      | Q16        | 17.07  | 17.29  | 17.22  | 17.80              |
|           |         | LOW       | Q16        | 16.93  | 17.07  | 16.97  | 17.80              |
|           |         | MID       | Q16        | 16.97  | 17.18  | 17.01  | 17.80              |
|           | 50      | HIGH      | Q16        | 17.08  | 17.05  | 16.82  | 17.80              |
|           |         | LOW       | Q16        | 17.17  | 17.07  | 16.99  | 17.80              |
|           |         | LOW       | 64QAM      | 17.13  | 17.07  | 17.19  | 17.80              |
|           | 1       | MID       | 64QAM      | 17.26  | 17.15  | 17.38  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.11  | 17.18  | 17.15  | 17.80              |
|           |         | LOW       | 64QAM      | 17.20  | 17.33  | 17.09  | 17.80              |
| 20        | 50      | MID       | 64QAM      | 16.99  | 17.06  | 17.02  | 17.80              |
|           |         | HIGH      | 64QAM      | 17.09  | 17.07  | 17.24  | 17.80              |
|           |         | LOW       | 64QAM      | 16.92  | 17.32  | 16.99  | 17.80              |

| LTE B66-State 4 -Ant.1 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 20.99  | 20.91  | 20.73  | 21.80              |
|                        |         | MID       | QPSK       | 20.90  | 21.13  | 20.87  | 21.80              |
|                        |         | HIGH      | QPSK       | 20.77  | 20.96  | 20.91  | 21.80              |
|                        | 3       | LOW       | QPSK       | 20.85  | 20.93  | 20.86  | 21.80              |
|                        |         | MID       | QPSK       | 20.92  | 21.21  | 20.87  | 21.80              |
|                        |         | HIGH      | QPSK       | 21.06  | 20.81  | 20.91  | 21.80              |
|                        | 6       | LOW       | QPSK       | 21.10  | 20.92  | 21.07  | 21.80              |
|                        | 1       | LOW       | Q16        | 20.99  | 21.21  | 20.90  | 21.80              |
|                        |         | MID       | Q16        | 21.07  | 21.31  | 21.07  | 21.80              |
| HIGH                   |         | Q16       | 21.13      | 20.98  | 21.05  | 21.80  |                    |
| 1.4                    | 3       | LOW       | Q16        | 20.72  | 21.01  | 20.75  | 21.80              |
|                        |         | MID       | Q16        | 21.09  | 21.26  | 21.02  | 21.80              |
|                        |         | HIGH      | Q16        | 20.75  | 20.87  | 20.87  | 21.80              |
|                        | 6       | LOW       | Q16        | 20.96  | 21.24  | 21.07  | 21.80              |
|                        | 1       | LOW       | 64QAM      | 21.15  | 20.73  | 20.79  | 21.80              |
|                        |         | MID       | 64QAM      | 21.18  | 21.30  | 21.13  | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.98  | 20.90  | 20.68  | 21.80              |
|                        | 3       | LOW       | 64QAM      | 20.93  | 21.09  | 21.06  | 21.80              |
|                        |         | MID       | 64QAM      | 21.23  | 20.95  | 21.18  | 21.80              |
| HIGH                   |         | 64QAM     | 20.95      | 21.08  | 20.72  | 21.80  |                    |
| 6                      | LOW     | 64QAM     | 19.86      | 20.03  | 20.02  | 20.80  |                    |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 20.93  | 20.99  | 20.75  | 21.80              |
|                        |         | MID       | QPSK       | 20.99  | 21.19  | 20.99  | 21.80              |
|                        |         | HIGH      | QPSK       | 20.92  | 21.00  | 20.82  | 21.80              |
|                        | 8       | LOW       | QPSK       | 20.82  | 20.91  | 20.91  | 21.80              |
|                        |         | MID       | QPSK       | 21.24  | 21.33  | 20.98  | 21.80              |
|                        |         | HIGH      | QPSK       | 21.06  | 21.14  | 20.89  | 21.80              |
|                        | 15      | LOW       | QPSK       | 20.95  | 21.00  | 21.07  | 21.80              |
|                        | 1       | LOW       | Q16        | 21.30  | 21.18  | 20.83  | 21.80              |
|                        |         | MID       | Q16        | 21.05  | 21.10  | 21.07  | 21.80              |
| HIGH                   |         | Q16       | 21.13      | 21.15  | 20.91  | 21.80  |                    |
| 3                      | 8       | LOW       | Q16        | 20.90  | 20.97  | 21.24  | 21.80              |
|                        |         | MID       | Q16        | 21.09  | 21.23  | 21.22  | 21.80              |
|                        |         | HIGH      | Q16        | 21.01  | 21.17  | 20.94  | 21.80              |
|                        | 15      | LOW       | Q16        | 20.98  | 21.12  | 21.00  | 21.80              |
|                        | 1       | LOW       | 64QAM      | 21.32  | 20.62  | 20.85  | 21.80              |
|                        |         | MID       | 64QAM      | 21.01  | 21.06  | 21.24  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.19  | 20.88  | 20.97  | 21.80              |
|                        | 8       | LOW       | 64QAM      | 20.11  | 20.15  | 19.84  | 20.80              |
|                        |         | MID       | 64QAM      | 20.03  | 19.97  | 20.20  | 20.80              |
| HIGH                   |         | 64QAM     | 20.03      | 19.98  | 19.60  | 20.80  |                    |
| 15                     | LOW     | 64QAM     | 19.84      | 19.81  | 20.20  | 20.80  |                    |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.03  | 21.03  | 20.81  | 21.80              |
|                        |         | MID       | QPSK       | 21.11  | 21.13  | 21.16  | 21.80              |
|                        |         | HIGH      | QPSK       | 20.86  | 20.87  | 20.87  | 21.80              |
|                        | 12      | LOW       | QPSK       | 21.11  | 21.04  | 20.99  | 21.80              |
|                        |         | MID       | QPSK       | 21.14  | 21.26  | 21.13  | 21.80              |
|                        |         | HIGH      | QPSK       | 21.18  | 21.22  | 20.93  | 21.80              |
|                        | 25      | LOW       | QPSK       | 21.08  | 21.13  | 21.15  | 21.80              |
|                        | 1       | LOW       | Q16        | 21.01  | 21.12  | 20.98  | 21.80              |
|                        |         | MID       | Q16        | 21.16  | 21.02  | 21.09  | 21.80              |
| HIGH                   |         | Q16       | 21.09      | 21.11  | 20.80  | 21.80  |                    |
| 5                      | 12      | LOW       | Q16        | 20.94  | 21.03  | 21.02  | 21.80              |
|                        |         | MID       | Q16        | 21.21  | 21.15  | 21.20  | 21.80              |
|                        |         | HIGH      | Q16        | 21.06  | 21.02  | 21.07  | 21.80              |
|                        | 25      | LOW       | Q16        | 20.92  | 21.22  | 20.94  | 21.80              |
|                        | 1       | LOW       | 64QAM      | 21.36  | 20.83  | 20.83  | 21.80              |
|                        |         | MID       | 64QAM      | 21.09  | 21.25  | 21.13  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.13  | 21.00  | 20.95  | 21.80              |
|                        | 12      | LOW       | 64QAM      | 20.21  | 20.13  | 19.84  | 20.80              |
|                        |         | MID       | 64QAM      | 20.11  | 19.93  | 20.04  | 20.80              |
| HIGH                   |         | 64QAM     | 19.83      | 20.02  | 19.90  | 20.80  |                    |
| 25                     | LOW     | 64QAM     | 19.84      | 20.11  | 20.02  | 20.80  |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 20.80  | 20.78  | 20.79  | 21.80              |
|           |         | MID       | QPSK       | 20.86  | 21.02  | 21.08  | 21.80              |
|           |         | HIGH      | QPSK       | 20.94  | 21.12  | 20.89  | 21.80              |
|           | 25      | LOW       | QPSK       | 21.11  | 21.01  | 21.18  | 21.80              |
|           |         | MID       | QPSK       | 20.95  | 20.99  | 21.25  | 21.80              |
|           |         | HIGH      | QPSK       | 21.04  | 21.10  | 21.14  | 21.80              |
|           | 50      | LOW       | QPSK       | 21.02  | 20.96  | 20.90  | 21.80              |
| 10        | 1       | LOW       | Q16        | 21.18  | 21.04  | 20.96  | 21.80              |
|           |         | MID       | Q16        | 21.11  | 21.29  | 21.26  | 21.80              |
|           |         | HIGH      | Q16        | 21.25  | 21.02  | 20.74  | 21.80              |
|           | 25      | LOW       | Q16        | 21.19  | 21.14  | 21.15  | 21.80              |
|           |         | MID       | Q16        | 21.21  | 21.12  | 21.10  | 21.80              |
|           |         | HIGH      | Q16        | 21.12  | 21.25  | 21.05  | 21.80              |
|           | 50      | LOW       | Q16        | 20.98  | 21.12  | 21.00  | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 21.28  | 20.75  | 20.96  | 21.80              |
|           |         | MID       | 64QAM      | 21.05  | 21.17  | 21.05  | 21.80              |
|           |         | HIGH      | 64QAM      | 20.96  | 21.04  | 20.66  | 21.80              |
|           | 25      | LOW       | 64QAM      | 20.31  | 20.13  | 20.00  | 20.80              |
|           |         | MID       | 64QAM      | 20.31  | 19.95  | 19.96  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.13  | 20.06  | 19.72  | 20.80              |
|           | 50      | LOW       | 64QAM      | 19.76  | 20.05  | 20.26  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 21.01  | 20.93  | 20.77  | 21.80              |
|           |         | MID       | QPSK       | 20.88  | 21.02  | 20.89  | 21.80              |
|           |         | HIGH      | QPSK       | 20.81  | 21.02  | 21.03  | 21.80              |
|           | 36      | LOW       | QPSK       | 21.07  | 21.14  | 21.16  | 21.80              |
|           |         | MID       | QPSK       | 21.05  | 21.28  | 21.00  | 21.80              |
|           |         | HIGH      | QPSK       | 21.04  | 20.97  | 21.10  | 21.80              |
|           | 75      | LOW       | QPSK       | 21.08  | 20.94  | 21.05  | 21.80              |
| 15        | 1       | LOW       | Q16        | 21.22  | 20.93  | 21.04  | 21.80              |
|           |         | MID       | Q16        | 21.11  | 21.15  | 21.17  | 21.80              |
|           |         | HIGH      | Q16        | 21.13  | 21.15  | 20.85  | 21.80              |
|           | 36      | LOW       | Q16        | 20.90  | 21.14  | 21.00  | 21.80              |
|           |         | MID       | Q16        | 21.28  | 21.10  | 21.10  | 21.80              |
|           |         | HIGH      | Q16        | 21.04  | 21.17  | 20.94  | 21.80              |
|           | 75      | LOW       | Q16        | 21.09  | 20.95  | 21.17  | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 21.13  | 20.58  | 21.08  | 21.80              |
|           |         | MID       | 64QAM      | 21.35  | 21.11  | 21.21  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.24  | 20.77  | 20.77  | 21.80              |
|           | 36      | LOW       | 64QAM      | 20.13  | 19.99  | 19.82  | 20.80              |
|           |         | MID       | 64QAM      | 20.07  | 20.19  | 20.00  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.01  | 19.96  | 19.72  | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.06  | 20.01  | 20.24  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 20.95  | 20.97  | 20.96  | 21.80              |
|           |         | MID       | QPSK       | 21.03  | 21.15  | 21.10  | 21.80              |
|           |         | HIGH      | QPSK       | 20.96  | 21.04  | 20.95  | 21.80              |
|           | 50      | LOW       | QPSK       | 21.05  | 21.12  | 21.12  | 21.80              |
|           |         | MID       | QPSK       | 21.16  | 21.22  | 21.19  | 21.80              |
|           |         | HIGH      | QPSK       | 21.10  | 21.16  | 21.08  | 21.80              |
|           | 100     | LOW       | QPSK       | 21.06  | 21.13  | 21.09  | 21.80              |
| 20        | 1       | LOW       | Q16        | 21.22  | 21.10  | 21.00  | 21.80              |
|           |         | MID       | Q16        | 21.24  | 21.23  | 21.15  | 21.80              |
|           |         | HIGH      | Q16        | 21.17  | 21.17  | 20.95  | 21.80              |
|           | 50      | LOW       | Q16        | 21.11  | 21.14  | 21.13  | 21.80              |
|           |         | MID       | Q16        | 21.17  | 21.23  | 21.16  | 21.80              |
|           |         | HIGH      | Q16        | 21.12  | 21.19  | 21.05  | 21.80              |
|           | 100     | LOW       | Q16        | 21.15  | 21.16  | 21.11  | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 21.32  | 20.81  | 21.00  | 21.80              |
|           |         | MID       | 64QAM      | 21.24  | 21.19  | 21.13  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.13  | 20.98  | 20.87  | 21.80              |
|           | 50      | LOW       | 64QAM      | 20.15  | 20.07  | 20.04  | 20.80              |
|           |         | MID       | 64QAM      | 20.23  | 20.09  | 20.12  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.05  | 20.02  | 19.80  | 20.80              |
|           | 100     | LOW       | 64QAM      | 19.96  | 20.01  | 20.20  | 20.80              |

| LTE B66-State 5 -Ant.1 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 19.01  | 18.80  | 18.98  | 19.80              |
|                        |         | MID       | QPSK       | 19.10  | 19.01  | 18.89  | 19.80              |
|                        |         | HIGH      | QPSK       | 18.95  | 19.02  | 18.78  | 19.80              |
|                        | 3       | LOW       | QPSK       | 18.95  | 19.20  | 18.96  | 19.80              |
|                        |         | MID       | QPSK       | 19.22  | 19.12  | 19.07  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.20  | 18.92  | 19.02  | 19.80              |
|                        | 6       | LOW       | QPSK       | 18.94  | 19.05  | 19.06  | 19.80              |
|                        | 1       | LOW       | Q16        | 19.23  | 18.99  | 19.03  | 19.80              |
|                        |         | MID       | Q16        | 19.26  | 19.15  | 19.06  | 19.80              |
| HIGH                   |         | Q16       | 18.92      | 18.99  | 19.12  | 19.80  |                    |
| LOW                    |         | Q16       | 18.85      | 19.19  | 18.89  | 19.80  |                    |
| 3                      | MID     | Q16       | 18.94      | 19.25  | 19.13  | 19.80  |                    |
|                        | HIGH    | Q16       | 19.14      | 19.06  | 18.87  | 19.80  |                    |
|                        | 6       | LOW       | Q16        | 18.96  | 18.92  | 19.02  | 19.80              |
|                        | 1.4     | 1         | LOW        | 64QAM  | 19.17  | 18.93  | 18.84              |
| MID                    |         |           | 64QAM      | 19.14  | 18.96  | 19.16  | 19.80              |
| HIGH                   |         |           | 64QAM      | 19.21  | 19.05  | 18.92  | 19.80              |
| 3                      |         | LOW       | 64QAM      | 18.89  | 18.98  | 18.89  | 19.80              |
|                        |         | MID       | 64QAM      | 19.06  | 18.94  | 18.77  | 19.80              |
|                        |         | HIGH      | 64QAM      | 18.95  | 18.91  | 18.75  | 19.80              |
| 6                      |         | LOW       | 64QAM      | 18.85  | 18.90  | 18.88  | 19.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 18.97  | 18.87  | 18.92  | 19.80              |
|                        |         | MID       | QPSK       | 18.79  | 19.05  | 19.12  | 19.80              |
|                        |         | HIGH      | QPSK       | 18.95  | 18.83  | 18.70  | 19.80              |
|                        | 8       | LOW       | QPSK       | 19.08  | 19.00  | 18.90  | 19.80              |
|                        |         | MID       | QPSK       | 18.99  | 18.99  | 19.09  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.18  | 18.92  | 18.96  | 19.80              |
|                        | 15      | LOW       | QPSK       | 19.11  | 18.98  | 18.87  | 19.80              |
| 3                      | 1       | LOW       | Q16        | 19.13  | 18.99  | 19.03  | 19.80              |
|                        |         | MID       | Q16        | 19.30  | 19.17  | 19.01  | 19.80              |
|                        |         | HIGH      | Q16        | 18.94  | 18.94  | 19.02  | 19.80              |
|                        | 8       | LOW       | Q16        | 18.87  | 18.98  | 18.87  | 19.80              |
|                        |         | MID       | Q16        | 19.13  | 19.21  | 19.07  | 19.80              |
|                        |         | HIGH      | Q16        | 18.89  | 19.18  | 18.91  | 19.80              |
|                        | 15      | LOW       | Q16        | 18.94  | 19.05  | 18.85  | 19.80              |
| 3                      | 1       | LOW       | 64QAM      | 19.09  | 18.99  | 18.92  | 19.80              |
|                        |         | MID       | 64QAM      | 19.06  | 19.02  | 19.28  | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.08  | 19.11  | 18.77  | 19.80              |
|                        | 8       | LOW       | 64QAM      | 18.85  | 19.11  | 18.68  | 19.80              |
|                        |         | MID       | 64QAM      | 18.79  | 19.00  | 18.96  | 19.80              |
|                        |         | HIGH      | 64QAM      | 18.95  | 18.76  | 18.87  | 19.80              |
|                        | 15      | LOW       | 64QAM      | 18.81  | 18.88  | 18.96  | 19.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 18.84  | 18.97  | 18.96  | 19.80              |
|                        |         | MID       | QPSK       | 18.83  | 19.11  | 18.87  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.03  | 19.02  | 18.93  | 19.80              |
|                        | 12      | LOW       | QPSK       | 19.02  | 19.04  | 19.01  | 19.80              |
|                        |         | MID       | QPSK       | 19.06  | 19.26  | 19.19  | 19.80              |
|                        |         | HIGH      | QPSK       | 18.97  | 19.13  | 19.08  | 19.80              |
|                        | 25      | LOW       | QPSK       | 18.84  | 19.07  | 19.08  | 19.80              |
| 5                      | 1       | LOW       | Q16        | 19.29  | 18.88  | 18.90  | 19.80              |
|                        |         | MID       | Q16        | 19.30  | 19.21  | 18.91  | 19.80              |
|                        |         | HIGH      | Q16        | 19.17  | 18.86  | 18.98  | 19.80              |
|                        | 12      | LOW       | Q16        | 19.14  | 19.05  | 18.96  | 19.80              |
|                        |         | MID       | Q16        | 19.00  | 19.09  | 18.96  | 19.80              |
|                        |         | HIGH      | Q16        | 18.95  | 19.20  | 19.10  | 19.80              |
|                        | 25      | LOW       | Q16        | 18.96  | 19.17  | 18.87  | 19.80              |
| 5                      | 1       | LOW       | 64QAM      | 19.21  | 19.04  | 19.01  | 19.80              |
|                        |         | MID       | 64QAM      | 19.12  | 19.07  | 19.20  | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.06  | 18.95  | 18.86  | 19.80              |
|                        | 12      | LOW       | 64QAM      | 18.76  | 19.04  | 18.89  | 19.80              |
|                        |         | MID       | 64QAM      | 18.89  | 18.98  | 18.96  | 19.80              |
|                        |         | HIGH      | 64QAM      | 18.82  | 19.00  | 18.74  | 19.80              |
|                        | 25      | LOW       | 64QAM      | 18.94  | 19.01  | 18.98  | 19.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 18.97  | 18.83  | 18.96  | 19.80              |
|           |         | MID       | QPSK       | 19.02  | 19.03  | 19.14  | 19.80              |
|           |         | HIGH      | QPSK       | 18.78  | 18.96  | 18.80  | 19.80              |
|           | 25      | LOW       | QPSK       | 18.87  | 18.93  | 19.15  | 19.80              |
|           |         | MID       | QPSK       | 19.22  | 19.26  | 19.19  | 19.80              |
|           |         | HIGH      | QPSK       | 18.99  | 19.11  | 18.98  | 19.80              |
|           | 50      | LOW       | QPSK       | 18.84  | 18.99  | 19.04  | 19.80              |
|           |         | LOW       | Q16        | 19.13  | 18.99  | 18.85  | 19.80              |
|           |         | MID       | Q16        | 19.03  | 18.96  | 19.01  | 19.80              |
| 10        | 1       | MID       | Q16        | 18.94  | 19.07  | 18.81  | 19.80              |
|           |         | LOW       | Q16        | 19.10  | 18.92  | 19.08  | 19.80              |
|           |         | MID       | Q16        | 18.90  | 19.19  | 19.07  | 19.80              |
|           | 25      | HIGH      | Q16        | 19.08  | 19.00  | 18.91  | 19.80              |
|           |         | LOW       | Q16        | 19.13  | 18.90  | 19.14  | 19.80              |
|           |         | LOW       | Q16        | 19.13  | 18.90  | 19.14  | 19.80              |
|           | 50      | LOW       | 64QAM      | 19.21  | 18.82  | 19.13  | 19.80              |
|           |         | MID       | 64QAM      | 19.20  | 19.06  | 18.99  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.06  | 18.97  | 18.86  | 19.80              |
|           |         | LOW       | 64QAM      | 18.89  | 19.07  | 18.70  | 19.80              |
|           |         | MID       | 64QAM      | 19.00  | 18.85  | 18.79  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.80  | 18.70  | 18.81  | 19.80              |
| 10        | 1       | LOW       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | MID       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           | 25      | LOW       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | MID       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           | 50      | LOW       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | MID       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 18.93  | 18.83  | 18.94  | 19.80              |
|           |         | MID       | QPSK       | 19.06  | 18.94  | 18.95  | 19.80              |
|           |         | HIGH      | QPSK       | 18.95  | 18.83  | 19.00  | 19.80              |
|           | 36      | LOW       | QPSK       | 18.96  | 19.08  | 18.96  | 19.80              |
|           |         | MID       | QPSK       | 19.06  | 19.20  | 19.13  | 19.80              |
|           |         | HIGH      | QPSK       | 19.18  | 18.90  | 18.96  | 19.80              |
|           | 75      | LOW       | QPSK       | 18.99  | 19.01  | 18.97  | 19.80              |
|           |         | LOW       | Q16        | 19.06  | 18.97  | 19.00  | 19.80              |
|           |         | MID       | Q16        | 19.03  | 19.15  | 19.02  | 19.80              |
| 15        | 1       | HIGH      | Q16        | 19.02  | 18.95  | 18.96  | 19.80              |
|           |         | LOW       | Q16        | 18.95  | 18.90  | 19.04  | 19.80              |
|           |         | MID       | Q16        | 19.03  | 19.23  | 18.92  | 19.80              |
|           | 36      | HIGH      | Q16        | 19.20  | 19.08  | 19.06  | 19.80              |
|           |         | LOW       | Q16        | 19.15  | 19.09  | 18.98  | 19.80              |
|           |         | LOW       | Q16        | 19.15  | 19.09  | 18.98  | 19.80              |
|           | 75      | LOW       | 64QAM      | 19.00  | 18.74  | 19.11  | 19.80              |
|           |         | MID       | 64QAM      | 19.08  | 19.07  | 19.22  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.04  | 18.86  | 18.92  | 19.80              |
|           |         | LOW       | 64QAM      | 18.85  | 19.02  | 18.79  | 19.80              |
|           |         | MID       | 64QAM      | 19.08  | 18.90  | 18.96  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.99  | 18.72  | 18.74  | 19.80              |
| 15        | 1       | LOW       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | MID       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           | 36      | LOW       | 64QAM      | 18.85  | 19.02  | 18.79  | 19.80              |
|           |         | MID       | 64QAM      | 19.08  | 18.90  | 18.96  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.99  | 18.72  | 18.74  | 19.80              |
|           | 75      | LOW       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | MID       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 18.93  | 18.91  | 18.90  | 19.80              |
|           |         | MID       | QPSK       | 19.00  | 19.09  | 19.06  | 19.80              |
|           |         | HIGH      | QPSK       | 18.95  | 19.00  | 18.91  | 19.80              |
|           | 50      | LOW       | QPSK       | 19.06  | 19.10  | 19.09  | 19.80              |
|           |         | MID       | QPSK       | 19.12  | 19.18  | 19.17  | 19.80              |
|           |         | HIGH      | QPSK       | 19.12  | 19.09  | 19.06  | 19.80              |
|           | 100     | LOW       | QPSK       | 19.05  | 19.09  | 19.08  | 19.80              |
|           |         | LOW       | Q16        | 19.23  | 18.97  | 18.94  | 19.80              |
|           |         | MID       | Q16        | 19.24  | 19.13  | 19.12  | 19.80              |
| 20        | 1       | HIGH      | Q16        | 19.13  | 19.05  | 19.02  | 19.80              |
|           |         | LOW       | Q16        | 19.06  | 19.11  | 19.04  | 19.80              |
|           |         | MID       | Q16        | 19.11  | 19.17  | 19.09  | 19.80              |
|           | 50      | HIGH      | Q16        | 19.10  | 19.10  | 19.00  | 19.80              |
|           |         | LOW       | Q16        | 19.07  | 19.11  | 19.06  | 19.80              |
|           |         | LOW       | Q16        | 19.07  | 19.11  | 19.06  | 19.80              |
|           | 100     | LOW       | 64QAM      | 19.17  | 18.95  | 19.03  | 19.80              |
|           |         | MID       | 64QAM      | 19.16  | 18.98  | 19.18  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.21  | 19.03  | 18.92  | 19.80              |
|           |         | LOW       | 64QAM      | 18.85  | 19.15  | 18.87  | 19.80              |
|           |         | MID       | 64QAM      | 19.00  | 18.98  | 18.92  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.93  | 18.91  | 18.83  | 19.80              |
| 20        | 100     | LOW       | 64QAM      | 18.96  | 19.07  | 18.96  | 19.80              |
|           |         | MID       | 64QAM      | 18.96  | 19.07  | 18.96  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.96  | 19.07  | 18.96  | 19.80              |

| LTE B66-State 6 -Ant.1 |           |           |            |            |        |        |                    |                    |
|------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth              | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                    | 1         | LOW       | QPSK       | 19.01      | 18.80  | 18.98  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.10      | 19.01  | 18.89  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 18.95      | 19.02  | 18.78  | 19.80              |                    |
|                        | 3         | LOW       | QPSK       | 18.95      | 19.20  | 18.96  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.22      | 19.12  | 19.07  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.20      | 18.92  | 19.02  | 19.80              |                    |
|                        | 6         | LOW       | QPSK       | 18.94      | 19.05  | 19.06  | 19.80              |                    |
|                        | 1.4       | 1         | LOW        | Q16        | 19.23  | 18.99  | 19.03              | 19.80              |
|                        |           |           | MID        | Q16        | 19.26  | 19.15  | 19.06              | 19.80              |
| HIGH                   |           |           | Q16        | 18.92      | 18.99  | 19.12  | 19.80              |                    |
| 3                      |           | LOW       | Q16        | 18.85      | 19.19  | 18.89  | 19.80              |                    |
|                        |           | MID       | Q16        | 18.94      | 19.25  | 19.13  | 19.80              |                    |
| 6                      | HIGH      | Q16       | 19.14      | 19.06      | 18.87  | 19.80  |                    |                    |
| 1.4                    | 1         | LOW       | Q16        | 18.96      | 18.92  | 19.02  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 19.17      | 18.93  | 18.84  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.14      | 18.96  | 19.16  | 19.80              |                    |
|                        | 3         | HIGH      | 64QAM      | 19.21      | 19.05  | 18.92  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 18.89      | 18.98  | 18.89  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.06      | 18.94  | 18.77  | 19.80              |                    |
|                        | 6         | HIGH      | 64QAM      | 18.95      | 18.91  | 18.75  | 19.80              |                    |
|                        | 6         | LOW       | 64QAM      | 18.85      | 18.90  | 18.88  | 19.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                      | 1         | LOW       | QPSK       | 18.97      | 18.87  | 18.92  | 19.80              |                    |
|                        |           | MID       | QPSK       | 18.79      | 19.05  | 19.12  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 18.95      | 18.83  | 18.70  | 19.80              |                    |
|                        | 8         | LOW       | QPSK       | 19.08      | 19.00  | 18.90  | 19.80              |                    |
|                        |           | MID       | QPSK       | 18.99      | 18.99  | 19.09  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.18      | 18.92  | 18.96  | 19.80              |                    |
|                        | 15        | LOW       | QPSK       | 19.11      | 18.98  | 18.87  | 19.80              |                    |
|                        | 3         | 1         | LOW        | Q16        | 19.13  | 18.99  | 19.03              | 19.80              |
|                        |           |           | MID        | Q16        | 19.30  | 19.17  | 19.01              | 19.80              |
| HIGH                   |           |           | Q16        | 18.94      | 18.94  | 19.02  | 19.80              |                    |
| 8                      |           | LOW       | Q16        | 18.87      | 18.98  | 18.87  | 19.80              |                    |
|                        |           | MID       | Q16        | 19.13      | 19.21  | 19.07  | 19.80              |                    |
| 15                     | HIGH      | Q16       | 18.89      | 19.18      | 18.91  | 19.80  |                    |                    |
| 3                      | 1         | LOW       | Q16        | 18.94      | 19.05  | 18.85  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 19.09      | 18.99  | 18.92  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.06      | 19.02  | 19.28  | 19.80              |                    |
|                        | 8         | HIGH      | 64QAM      | 19.08      | 19.11  | 18.77  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 18.85      | 19.11  | 18.68  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 18.79      | 19.00  | 18.96  | 19.80              |                    |
|                        | 15        | HIGH      | 64QAM      | 18.95      | 18.76  | 18.87  | 19.80              |                    |
|                        | 15        | LOW       | 64QAM      | 18.81      | 18.88  | 18.96  | 19.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                      | 1         | LOW       | QPSK       | 18.84      | 18.97  | 18.96  | 19.80              |                    |
|                        |           | MID       | QPSK       | 18.83      | 19.11  | 18.87  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.03      | 19.02  | 18.93  | 19.80              |                    |
|                        | 12        | LOW       | QPSK       | 19.02      | 19.04  | 19.01  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.06      | 19.26  | 19.19  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 18.97      | 19.13  | 19.08  | 19.80              |                    |
|                        | 25        | LOW       | QPSK       | 18.84      | 19.07  | 19.08  | 19.80              |                    |
|                        | 5         | 1         | LOW        | Q16        | 19.29  | 18.88  | 18.90              | 19.80              |
|                        |           |           | MID        | Q16        | 19.30  | 19.21  | 18.91              | 19.80              |
| HIGH                   |           |           | Q16        | 19.17      | 18.86  | 18.98  | 19.80              |                    |
| 12                     |           | LOW       | Q16        | 19.14      | 19.05  | 18.96  | 19.80              |                    |
|                        |           | MID       | Q16        | 19.00      | 19.09  | 18.96  | 19.80              |                    |
| 25                     | HIGH      | Q16       | 18.95      | 19.20      | 19.10  | 19.80  |                    |                    |
| 5                      | 1         | LOW       | Q16        | 18.96      | 19.17  | 18.87  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 19.21      | 19.04  | 19.01  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.12      | 19.07  | 19.20  | 19.80              |                    |
|                        | 12        | HIGH      | 64QAM      | 19.06      | 18.95  | 18.86  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 18.76      | 19.04  | 18.89  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 18.89      | 18.98  | 18.96  | 19.80              |                    |
|                        | 25        | HIGH      | 64QAM      | 18.82      | 19.00  | 18.74  | 19.80              |                    |
|                        | 25        | LOW       | 64QAM      | 18.94      | 19.01  | 18.98  | 19.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 18.97  | 18.83  | 18.96  | 19.80              |
|           |         | MID       | QPSK       | 19.02  | 19.03  | 19.14  | 19.80              |
|           |         | HIGH      | QPSK       | 18.78  | 18.96  | 18.80  | 19.80              |
|           | 25      | LOW       | QPSK       | 18.87  | 18.93  | 19.15  | 19.80              |
|           |         | MID       | QPSK       | 19.22  | 19.26  | 19.19  | 19.80              |
|           |         | HIGH      | QPSK       | 18.99  | 19.11  | 18.98  | 19.80              |
|           | 50      | LOW       | QPSK       | 18.84  | 18.99  | 19.04  | 19.80              |
|           |         | LOW       | Q16        | 19.13  | 18.99  | 18.85  | 19.80              |
|           |         | MID       | Q16        | 19.03  | 18.96  | 19.01  | 19.80              |
| 10        | 1       | MID       | Q16        | 18.94  | 19.07  | 18.81  | 19.80              |
|           |         | LOW       | Q16        | 19.10  | 18.92  | 19.08  | 19.80              |
|           |         | MID       | Q16        | 18.90  | 19.19  | 19.07  | 19.80              |
|           | 25      | HIGH      | Q16        | 19.08  | 19.00  | 18.91  | 19.80              |
|           |         | LOW       | Q16        | 19.13  | 18.90  | 19.14  | 19.80              |
|           |         | LOW       | Q16        | 19.13  | 18.90  | 19.14  | 19.80              |
|           | 50      | LOW       | 64QAM      | 19.21  | 18.82  | 19.13  | 19.80              |
|           |         | MID       | 64QAM      | 19.20  | 19.06  | 18.99  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.06  | 18.97  | 18.86  | 19.80              |
|           |         | LOW       | 64QAM      | 18.89  | 19.07  | 18.70  | 19.80              |
|           |         | MID       | 64QAM      | 19.00  | 18.85  | 18.79  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.80  | 18.70  | 18.81  | 19.80              |
| 10        | 1       | LOW       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | MID       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           | 25      | LOW       | 64QAM      | 18.89  | 19.07  | 18.70  | 19.80              |
|           |         | MID       | 64QAM      | 19.00  | 18.85  | 18.79  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.80  | 18.70  | 18.81  | 19.80              |
|           | 50      | LOW       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | MID       | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.96  | 19.11  | 19.04  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 18.93  | 18.83  | 18.94  | 19.80              |
|           |         | MID       | QPSK       | 19.06  | 18.94  | 18.95  | 19.80              |
|           |         | HIGH      | QPSK       | 18.95  | 18.83  | 19.00  | 19.80              |
|           | 36      | LOW       | QPSK       | 18.96  | 19.08  | 18.96  | 19.80              |
|           |         | MID       | QPSK       | 19.06  | 19.20  | 19.13  | 19.80              |
|           |         | HIGH      | QPSK       | 19.18  | 18.90  | 18.96  | 19.80              |
|           | 75      | LOW       | QPSK       | 18.99  | 19.01  | 18.97  | 19.80              |
|           |         | LOW       | Q16        | 19.06  | 18.97  | 19.00  | 19.80              |
|           |         | MID       | Q16        | 19.03  | 19.15  | 19.02  | 19.80              |
| 15        | 1       | HIGH      | Q16        | 19.02  | 18.95  | 18.96  | 19.80              |
|           |         | LOW       | Q16        | 18.95  | 18.90  | 19.04  | 19.80              |
|           |         | MID       | Q16        | 19.03  | 19.23  | 18.92  | 19.80              |
|           | 36      | HIGH      | Q16        | 19.20  | 19.08  | 19.06  | 19.80              |
|           |         | LOW       | Q16        | 19.15  | 19.09  | 18.98  | 19.80              |
|           |         | LOW       | Q16        | 19.15  | 19.09  | 18.98  | 19.80              |
|           | 75      | LOW       | 64QAM      | 19.00  | 18.74  | 19.11  | 19.80              |
|           |         | MID       | 64QAM      | 19.08  | 19.07  | 19.22  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.04  | 18.86  | 18.92  | 19.80              |
|           |         | LOW       | 64QAM      | 18.85  | 19.02  | 18.79  | 19.80              |
|           |         | MID       | 64QAM      | 19.08  | 18.90  | 18.96  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.99  | 18.72  | 18.74  | 19.80              |
| 15        | 1       | LOW       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | MID       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           | 36      | LOW       | 64QAM      | 18.85  | 19.02  | 18.79  | 19.80              |
|           |         | MID       | 64QAM      | 19.08  | 18.90  | 18.96  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.99  | 18.72  | 18.74  | 19.80              |
|           | 75      | LOW       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | MID       | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.05  | 18.92  | 18.83  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 18.93  | 18.91  | 18.90  | 19.80              |
|           |         | MID       | QPSK       | 19.00  | 19.09  | 19.06  | 19.80              |
|           |         | HIGH      | QPSK       | 18.95  | 19.00  | 18.91  | 19.80              |
|           | 50      | LOW       | QPSK       | 19.06  | 19.10  | 19.09  | 19.80              |
|           |         | MID       | QPSK       | 19.12  | 19.18  | 19.17  | 19.80              |
|           |         | HIGH      | QPSK       | 19.12  | 19.09  | 19.06  | 19.80              |
|           | 100     | LOW       | QPSK       | 19.05  | 19.09  | 19.08  | 19.80              |
|           |         | LOW       | Q16        | 19.23  | 18.97  | 18.94  | 19.80              |
|           |         | MID       | Q16        | 19.24  | 19.13  | 19.12  | 19.80              |
| 20        | 1       | HIGH      | Q16        | 19.13  | 19.05  | 19.02  | 19.80              |
|           |         | LOW       | Q16        | 19.06  | 19.11  | 19.04  | 19.80              |
|           |         | MID       | Q16        | 19.11  | 19.17  | 19.09  | 19.80              |
|           | 50      | HIGH      | Q16        | 19.10  | 19.10  | 19.00  | 19.80              |
|           |         | LOW       | Q16        | 19.07  | 19.11  | 19.06  | 19.80              |
|           |         | LOW       | Q16        | 19.07  | 19.11  | 19.06  | 19.80              |
|           | 100     | LOW       | 64QAM      | 19.17  | 18.95  | 19.03  | 19.80              |
|           |         | MID       | 64QAM      | 19.16  | 18.98  | 19.18  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.21  | 19.03  | 18.92  | 19.80              |
|           |         | LOW       | 64QAM      | 18.85  | 19.15  | 18.87  | 19.80              |
|           |         | MID       | 64QAM      | 19.00  | 18.98  | 18.92  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.93  | 18.91  | 18.83  | 19.80              |
| 20        | 100     | LOW       | 64QAM      | 18.96  | 19.07  | 18.96  | 19.80              |
|           |         | MID       | 64QAM      | 18.96  | 19.07  | 18.96  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.96  | 19.07  | 18.96  | 19.80              |

### 8.3.8 LTE Band66 Output Power

BL-SZ2220432-701

| LTE B66-State 1 -Ant.1(NSA) |           |           |            |            |            |        |                    |                    |
|-----------------------------|-----------|-----------|------------|------------|------------|--------|--------------------|--------------------|
| Bandwidth                   | RB Size   | RB offset | Modulation | 131979     | 132322     | 132665 | Tune-up power(dBm) |                    |
| 1.4                         | 1         | LOW       | QPSK       | 15.55      | 15.62      | 15.60  | 16.30              |                    |
|                             |           | MID       | QPSK       | 15.62      | 15.64      | 15.56  | 16.30              |                    |
|                             |           | HIGH      | QPSK       | 15.39      | 15.44      | 15.24  | 16.30              |                    |
|                             | 3         | LOW       | QPSK       | 15.73      | 15.55      | 15.43  | 16.30              |                    |
|                             |           | MID       | QPSK       | 15.55      | 15.65      | 15.50  | 16.30              |                    |
|                             |           | HIGH      | QPSK       | 15.41      | 15.44      | 15.46  | 16.30              |                    |
|                             | 6         | LOW       | QPSK       | 15.36      | 15.59      | 15.51  | 16.30              |                    |
|                             | 1.4       | 1         | LOW        | Q16        | 15.77      | 15.43  | 15.29              | 16.30              |
|                             |           |           | MID        | Q16        | 15.48      | 15.56  | 15.44              | 16.30              |
| HIGH                        |           |           | Q16        | 15.78      | 15.58      | 15.67  | 16.30              |                    |
| 3                           |           | LOW       | Q16        | 15.36      | 15.64      | 15.40  | 16.30              |                    |
|                             |           | MID       | Q16        | 15.36      | 15.73      | 15.55  | 16.30              |                    |
| 6                           | HIGH      | Q16       | 15.26      | 15.72      | 15.35      | 16.30  |                    |                    |
| 1.4                         | 1         | LOW       | Q16        | 15.39      | 15.50      | 15.70  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.39      | 15.70      | 15.33  | 16.30              |                    |
|                             |           | MID       | 64QAM      | 15.55      | 15.63      | 15.66  | 16.30              |                    |
|                             | 3         | HIGH      | 64QAM      | 15.49      | 15.57      | 15.30  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.24      | 15.43      | 15.49  | 16.30              |                    |
|                             |           | MID       | 64QAM      | 15.29      | 15.36      | 15.63  | 16.30              |                    |
|                             | 6         | HIGH      | 64QAM      | 15.59      | 15.36      | 15.58  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.24      | 15.36      | 15.40  | 16.30              |                    |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131987     | 132322 | 132657             | Tune-up power(dBm) |
| 3                           | 1         | LOW       | QPSK       | 15.35      | 15.48      | 15.52  | 16.30              |                    |
|                             |           | MID       | QPSK       | 15.52      | 15.59      | 15.61  | 16.30              |                    |
|                             |           | HIGH      | QPSK       | 15.41      | 15.63      | 15.24  | 16.30              |                    |
|                             | 8         | LOW       | QPSK       | 15.59      | 15.60      | 15.51  | 16.30              |                    |
|                             |           | MID       | QPSK       | 15.58      | 15.76      | 15.48  | 16.30              |                    |
|                             |           | HIGH      | QPSK       | 15.47      | 15.50      | 15.41  | 16.30              |                    |
|                             | 15        | LOW       | QPSK       | 15.42      | 15.53      | 15.58  | 16.30              |                    |
|                             | 3         | 1         | LOW        | Q16        | 15.66      | 15.59  | 15.27              | 16.30              |
|                             |           |           | MID        | Q16        | 15.67      | 15.52  | 15.44              | 16.30              |
| HIGH                        |           |           | Q16        | 15.69      | 15.36      | 15.62  | 16.30              |                    |
| 8                           |           | LOW       | Q16        | 15.38      | 15.48      | 15.31  | 16.30              |                    |
|                             |           | MID       | Q16        | 15.31      | 15.62      | 15.42  | 16.30              |                    |
| 15                          | HIGH      | Q16       | 15.40      | 15.55      | 15.35      | 16.30  |                    |                    |
| 3                           | 1         | LOW       | Q16        | 15.41      | 15.64      | 15.51  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.59      | 15.47      | 15.26  | 16.30              |                    |
|                             |           | MID       | 64QAM      | 15.57      | 15.53      | 15.67  | 16.30              |                    |
|                             | 8         | HIGH      | 64QAM      | 15.65      | 15.68      | 15.31  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.29      | 15.41      | 15.49  | 16.30              |                    |
|                             |           | MID       | 64QAM      | 15.34      | 15.47      | 15.66  | 16.30              |                    |
|                             | 15        | HIGH      | 64QAM      | 15.39      | 15.36      | 15.61  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.26      | 15.23      | 15.37  | 16.30              |                    |
|                             |           | Bandwidth | RB Size    | RB offset  | Modulation | 131997 | 132322             | 132647             |
| 5                           | 1         | LOW       | QPSK       | 15.40      | 15.50      | 15.36  | 16.30              |                    |
|                             |           | MID       | QPSK       | 15.42      | 15.62      | 15.42  | 16.30              |                    |
|                             |           | HIGH      | QPSK       | 15.39      | 15.50      | 15.22  | 16.30              |                    |
|                             | 12        | LOW       | QPSK       | 15.73      | 15.61      | 15.48  | 16.30              |                    |
|                             |           | MID       | QPSK       | 15.54      | 15.62      | 15.45  | 16.30              |                    |
|                             |           | HIGH      | QPSK       | 15.54      | 15.58      | 15.44  | 16.30              |                    |
|                             | 25        | LOW       | QPSK       | 15.28      | 15.56      | 15.50  | 16.30              |                    |
|                             | 5         | 1         | LOW        | Q16        | 15.69      | 15.54  | 15.42              | 16.30              |
|                             |           |           | MID        | Q16        | 15.60      | 15.61  | 15.49              | 16.30              |
| HIGH                        |           |           | Q16        | 15.55      | 15.55      | 15.51  | 16.30              |                    |
| 12                          |           | LOW       | Q16        | 15.27      | 15.67      | 15.43  | 16.30              |                    |
|                             |           | MID       | Q16        | 15.34      | 15.82      | 15.33  | 16.30              |                    |
| 25                          | HIGH      | Q16       | 15.29      | 15.56      | 15.32      | 16.30  |                    |                    |
| 5                           | 1         | LOW       | Q16        | 15.58      | 15.45      | 15.54  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.55      | 15.55      | 15.29  | 16.30              |                    |
|                             |           | MID       | 64QAM      | 15.65      | 15.45      | 15.69  | 16.30              |                    |
|                             | 12        | HIGH      | 64QAM      | 15.67      | 15.70      | 15.13  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.15      | 15.63      | 15.71  | 16.30              |                    |
|                             |           | MID       | 64QAM      | 15.46      | 15.40      | 15.61  | 16.30              |                    |
|                             | 25        | HIGH      | 64QAM      | 15.50      | 15.35      | 15.44  | 16.30              |                    |
|                             |           | LOW       | 64QAM      | 15.47      | 15.40      | 15.37  | 16.30              |                    |
|                             |           |           |            |            |            |        |                    |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 15.36  | 15.56  | 15.36  | 16.30              |
|           |         | MID       | QPSK       | 15.43  | 15.65  | 15.45  | 16.30              |
|           |         | HIGH      | QPSK       | 15.44  | 15.50  | 15.31  | 16.30              |
|           | 25      | LOW       | QPSK       | 15.54  | 15.63  | 15.41  | 16.30              |
|           |         | MID       | QPSK       | 15.54  | 15.56  | 15.47  | 16.30              |
|           |         | HIGH      | QPSK       | 15.52  | 15.49  | 15.60  | 16.30              |
|           | 50      | LOW       | QPSK       | 15.34  | 15.56  | 15.42  | 16.30              |
|           |         | LOW       | Q16        | 15.62  | 15.53  | 15.41  | 16.30              |
|           |         | MID       | Q16        | 15.50  | 15.52  | 15.46  | 16.30              |
| 10        | 1       | MID       | Q16        | 15.61  | 15.37  | 15.62  | 16.30              |
|           |         | LOW       | Q16        | 15.49  | 15.62  | 15.28  | 16.30              |
|           |         | MID       | Q16        | 15.31  | 15.60  | 15.45  | 16.30              |
|           | 25      | HIGH      | Q16        | 15.28  | 15.50  | 15.32  | 16.30              |
|           |         | LOW       | Q16        | 15.39  | 15.55  | 15.56  | 16.30              |
|           |         | LOW       | Q16        | 15.39  | 15.55  | 15.56  | 16.30              |
|           | 50      | LOW       | 64QAM      | 15.36  | 15.61  | 15.35  | 16.30              |
|           |         | MID       | 64QAM      | 15.59  | 15.56  | 15.64  | 16.30              |
|           |         | HIGH      | 64QAM      | 15.60  | 15.62  | 15.34  | 16.30              |
|           |         | LOW       | 64QAM      | 15.20  | 15.57  | 15.55  | 16.30              |
|           |         | MID       | 64QAM      | 15.54  | 15.53  | 15.68  | 16.30              |
|           |         | HIGH      | 64QAM      | 15.50  | 15.44  | 15.47  | 16.30              |
| 10        | 1       | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           |         | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           |         | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           | 25      | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           |         | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           |         | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           | 50      | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           |         | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
|           |         | LOW       | 64QAM      | 15.44  | 15.22  | 15.45  | 16.30              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 15.46  | 15.62  | 15.35  | 16.30              |
|           |         | MID       | QPSK       | 15.45  | 15.53  | 15.56  | 16.30              |
|           |         | HIGH      | QPSK       | 15.52  | 15.47  | 15.25  | 16.30              |
|           | 36      | LOW       | QPSK       | 15.51  | 15.75  | 15.34  | 16.30              |
|           |         | MID       | QPSK       | 15.50  | 15.57  | 15.51  | 16.30              |
|           |         | HIGH      | QPSK       | 15.32  | 15.45  | 15.47  | 16.30              |
|           | 75      | LOW       | QPSK       | 15.48  | 15.53  | 15.47  | 16.30              |
|           |         | LOW       | Q16        | 15.66  | 15.43  | 15.44  | 16.30              |
|           |         | MID       | Q16        | 15.51  | 15.61  | 15.50  | 16.30              |
| 15        | 1       | HIGH      | Q16        | 15.66  | 15.41  | 15.70  | 16.30              |
|           |         | LOW       | Q16        | 15.46  | 15.53  | 15.51  | 16.30              |
|           |         | MID       | Q16        | 15.50  | 15.68  | 15.58  | 16.30              |
|           | 36      | HIGH      | Q16        | 15.32  | 15.48  | 15.34  | 16.30              |
|           |         | LOW       | Q16        | 15.53  | 15.69  | 15.73  | 16.30              |
|           |         | LOW       | Q16        | 15.53  | 15.69  | 15.73  | 16.30              |
|           | 75      | LOW       | 64QAM      | 15.50  | 15.58  | 15.24  | 16.30              |
|           |         | MID       | 64QAM      | 15.59  | 15.64  | 15.69  | 16.30              |
|           |         | HIGH      | 64QAM      | 15.68  | 15.52  | 15.33  | 16.30              |
|           |         | LOW       | 64QAM      | 15.24  | 15.57  | 15.71  | 16.30              |
|           |         | MID       | 64QAM      | 15.43  | 15.39  | 15.55  | 16.30              |
|           |         | HIGH      | 64QAM      | 15.48  | 15.44  | 15.53  | 16.30              |
| 15        | 1       | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           |         | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           |         | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           | 36      | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           |         | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           |         | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           | 75      | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           |         | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
|           |         | LOW       | 64QAM      | 15.49  | 15.34  | 15.26  | 16.30              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 15.52  | 15.59  | 15.52  | 16.30              |
|           |         | MID       | QPSK       | 15.54  | 15.62  | 15.59  | 16.30              |
|           |         | HIGH      | QPSK       | 15.55  | 15.58  | 15.33  | 16.30              |
|           | 50      | LOW       | QPSK       | 15.68  | 15.69  | 15.43  | 16.30              |
|           |         | MID       | QPSK       | 15.63  | 15.73  | 15.59  | 16.30              |
|           |         | HIGH      | QPSK       | 15.49  | 15.61  | 15.58  | 16.30              |
|           | 100     | LOW       | QPSK       | 15.42  | 15.61  | 15.56  | 16.30              |
|           |         | LOW       | Q16        | 15.75  | 15.51  | 15.44  | 16.30              |
|           |         | MID       | Q16        | 15.62  | 15.61  | 15.58  | 16.30              |
| 20        | 1       | HIGH      | Q16        | 15.72  | 15.53  | 15.65  | 16.30              |
|           |         | LOW       | Q16        | 15.41  | 15.59  | 15.45  | 16.30              |
|           |         | MID       | Q16        | 15.48  | 15.76  | 15.50  | 16.30              |
|           | 50      | HIGH      | Q16        | 15.43  | 15.64  | 15.46  | 16.30              |
|           |         | LOW       | Q16        | 15.50  | 15.61  | 15.67  | 16.30              |
|           |         | LOW       | Q16        | 15.50  | 15.61  | 15.67  | 16.30              |
|           | 100     | LOW       | 64QAM      | 15.53  | 15.64  | 15.38  | 16.30              |
|           |         | MID       | 64QAM      | 15.68  | 15.61  | 15.61  | 16.30              |
|           |         | HIGH      | 64QAM      | 15.65  | 15.68  | 15.28  | 16.30              |
|           |         | LOW       | 64QAM      | 15.32  | 15.57  | 15.63  | 16.30              |
|           |         | MID       | 64QAM      | 15.46  | 15.45  | 15.63  | 16.30              |
|           |         | HIGH      | 64QAM      | 15.53  | 15.50  | 15.56  | 16.30              |
| 20        | 1       | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           |         | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           |         | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           | 50      | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           |         | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           |         | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           | 100     | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           |         | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |
|           |         | LOW       | 64QAM      | 15.41  | 15.34  | 15.40  | 16.30              |

| LTE B66-State 2 -Ant.1(NSA) |         |           |            |        |        |        |                    |       |
|-----------------------------|---------|-----------|------------|--------|--------|--------|--------------------|-------|
| Bandwidth (MHz)             | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |       |
| 1.4                         | 1       | LOW       | QPSK       | 13.86  | 14.05  | 13.89  | 14.80              |       |
|                             |         | MID       | QPSK       | 13.90  | 14.23  | 14.01  | 14.80              |       |
|                             |         | HIGH      | QPSK       | 13.95  | 14.04  | 13.90  | 14.80              |       |
|                             | 3       | LOW       | QPSK       | 14.10  | 14.05  | 13.98  | 14.80              |       |
|                             |         | MID       | QPSK       | 14.16  | 14.27  | 14.14  | 14.80              |       |
|                             |         | HIGH      | QPSK       | 14.14  | 14.12  | 13.88  | 14.80              |       |
|                             | 6       | LOW       | QPSK       | 14.18  | 14.21  | 14.01  | 14.80              |       |
|                             | 1.4     | 1         | LOW        | Q16    | 14.20  | 13.99  | 14.21              | 14.80 |
|                             |         | MID       | Q16        | 14.15  | 14.24  | 14.32  | 14.80              |       |
| HIGH                        |         | Q16       | 14.04      | 14.22  | 14.03  | 14.80  |                    |       |
| 3                           |         | LOW       | Q16        | 13.91  | 13.97  | 14.21  | 14.80              |       |
| 1.4                         | 1       | MID       | Q16        | 14.04  | 14.24  | 14.22  | 14.80              |       |
|                             |         | HIGH      | Q16        | 13.79  | 13.93  | 13.93  | 14.80              |       |
|                             |         | 6         | LOW        | Q16    | 14.09  | 14.13  | 13.93              | 14.80 |
|                             | 3       | 1         | LOW        | 64QAM  | 13.98  | 13.94  | 14.18              | 14.80 |
|                             |         | MID       | 64QAM      | 14.02  | 14.24  | 14.18  | 14.80              |       |
|                             |         | HIGH      | 64QAM      | 14.17  | 14.09  | 13.82  | 14.80              |       |
|                             |         | 3         | LOW        | 64QAM  | 13.79  | 14.11  | 14.02              | 14.80 |
|                             |         | MID       | 64QAM      | 14.08  | 14.02  | 13.96  | 14.80              |       |
|                             |         | HIGH      | 64QAM      | 14.14  | 13.95  | 13.87  | 14.80              |       |
| 6                           | LOW     | 64QAM     | 13.73      | 13.74  | 13.89  | 14.80  |                    |       |
| Bandwidth (MHz)             | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |       |
| 3                           | 1       | LOW       | QPSK       | 13.90  | 13.92  | 13.82  | 14.80              |       |
|                             |         | MID       | QPSK       | 14.00  | 14.32  | 14.19  | 14.80              |       |
|                             |         | HIGH      | QPSK       | 13.88  | 14.11  | 13.79  | 14.80              |       |
|                             | 8       | LOW       | QPSK       | 14.17  | 14.01  | 14.15  | 14.80              |       |
|                             |         | MID       | QPSK       | 14.23  | 14.25  | 14.17  | 14.80              |       |
|                             |         | HIGH      | QPSK       | 14.08  | 13.92  | 13.91  | 14.80              |       |
|                             | 15      | LOW       | QPSK       | 13.98  | 14.06  | 14.02  | 14.80              |       |
|                             | 3       | 1         | LOW        | Q16    | 14.32  | 13.96  | 14.08              | 14.80 |
|                             |         | MID       | Q16        | 14.15  | 14.27  | 14.21  | 14.80              |       |
| HIGH                        |         | Q16       | 14.06      | 14.17  | 14.03  | 14.80  |                    |       |
| 8                           |         | LOW       | Q16        | 14.01  | 14.14  | 14.21  | 14.80              |       |
| 3                           | 1       | MID       | Q16        | 14.11  | 14.11  | 14.15  | 14.80              |       |
|                             |         | HIGH      | Q16        | 13.86  | 13.95  | 13.93  | 14.80              |       |
|                             |         | 15        | LOW        | Q16    | 14.11  | 14.07  | 13.90              | 14.80 |
|                             | 3       | 1         | LOW        | 64QAM  | 13.99  | 13.81  | 14.14              | 14.80 |
|                             |         | MID       | 64QAM      | 14.11  | 14.10  | 14.18  | 14.80              |       |
|                             |         | HIGH      | 64QAM      | 14.13  | 14.26  | 13.71  | 14.80              |       |
|                             |         | 8         | LOW        | 64QAM  | 13.84  | 13.98  | 13.95              | 14.80 |
|                             |         | MID       | 64QAM      | 14.06  | 13.94  | 13.96  | 14.80              |       |
|                             |         | HIGH      | 64QAM      | 14.05  | 13.85  | 14.08  | 14.80              |       |
| 15                          | LOW     | 64QAM     | 13.74      | 13.82  | 13.80  | 14.80  |                    |       |
| Bandwidth (MHz)             | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |       |
| 5                           | 1       | LOW       | QPSK       | 13.93  | 14.10  | 13.92  | 14.80              |       |
|                             |         | MID       | QPSK       | 13.90  | 14.10  | 14.11  | 14.80              |       |
|                             |         | HIGH      | QPSK       | 13.81  | 14.01  | 13.79  | 14.80              |       |
|                             | 12      | LOW       | QPSK       | 14.08  | 13.89  | 14.08  | 14.80              |       |
|                             |         | MID       | QPSK       | 14.08  | 14.12  | 14.27  | 14.80              |       |
|                             |         | HIGH      | QPSK       | 14.03  | 14.12  | 13.98  | 14.80              |       |
|                             | 25      | LOW       | QPSK       | 14.12  | 14.09  | 13.96  | 14.80              |       |
|                             | 5       | 1         | LOW        | Q16    | 14.22  | 14.00  | 14.19              | 14.80 |
|                             |         | MID       | Q16        | 14.26  | 14.19  | 14.18  | 14.80              |       |
| HIGH                        |         | Q16       | 14.07      | 14.25  | 14.03  | 14.80  |                    |       |
| 12                          |         | LOW       | Q16        | 13.94  | 14.04  | 14.19  | 14.80              |       |
| 5                           | 1       | MID       | Q16        | 14.15  | 14.17  | 14.14  | 14.80              |       |
|                             |         | HIGH      | Q16        | 13.86  | 14.07  | 13.98  | 14.80              |       |
|                             |         | 25        | LOW        | Q16    | 13.99  | 14.00  | 13.88              | 14.80 |
|                             | 3       | 1         | LOW        | 64QAM  | 14.10  | 13.98  | 14.05              | 14.80 |
|                             |         | MID       | 64QAM      | 14.02  | 14.14  | 14.03  | 14.80              |       |
|                             |         | HIGH      | 64QAM      | 14.15  | 14.16  | 13.79  | 14.80              |       |
|                             |         | 12        | LOW        | 64QAM  | 13.75  | 14.14  | 13.94              | 14.80 |
|                             |         | MID       | 64QAM      | 13.93  | 13.97  | 13.99  | 14.80              |       |
|                             |         | HIGH      | 64QAM      | 14.22  | 14.00  | 14.00  | 14.80              |       |
| 25                          | LOW     | 64QAM     | 13.82      | 13.76  | 13.76  | 14.80  |                    |       |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 13.93  | 13.91  | 13.74  | 14.80              |
|           |         | MID       | QPSK       | 13.91  | 14.16  | 14.14  | 14.80              |
|           |         | HIGH      | QPSK       | 13.95  | 13.96  | 13.73  | 14.80              |
|           | 25      | LOW       | QPSK       | 14.14  | 13.95  | 14.07  | 14.80              |
|           |         | MID       | QPSK       | 14.29  | 14.23  | 14.22  | 14.80              |
|           |         | HIGH      | QPSK       | 14.13  | 13.91  | 14.01  | 14.80              |
|           | 50      | LOW       | QPSK       | 14.12  | 14.13  | 13.99  | 14.80              |
|           |         | LOW       | Q16        | 14.27  | 14.00  | 14.24  | 14.80              |
|           |         | MID       | Q16        | 14.33  | 14.18  | 14.31  | 14.80              |
| 10        | 1       | MID       | Q16        | 13.88  | 14.22  | 14.03  | 14.80              |
|           |         | LOW       | Q16        | 14.08  | 13.95  | 13.99  | 14.80              |
|           |         | HIGH      | Q16        | 14.17  | 14.16  | 14.07  | 14.80              |
|           | 25      | LOW       | Q16        | 14.00  | 13.93  | 13.91  | 14.80              |
|           |         | LOW       | Q16        | 14.04  | 14.03  | 13.88  | 14.80              |
|           |         | HIGH      | Q16        | 14.09  | 14.02  | 14.01  | 14.80              |
|           | 50      | LOW       | Q16        | 14.13  | 13.81  | 14.14  | 14.80              |
|           |         | MID       | Q16        | 13.99  | 14.07  | 14.14  | 14.80              |
|           |         | HIGH      | Q16        | 14.16  | 14.13  | 13.70  | 14.80              |
| 10        | 1       | LOW       | 64QAM      | 13.90  | 14.04  | 14.05  | 14.80              |
|           |         | MID       | 64QAM      | 13.97  | 14.05  | 13.95  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.09  | 14.02  | 14.01  | 14.80              |
|           | 25      | LOW       | 64QAM      | 13.73  | 13.80  | 13.73  | 14.80              |
|           |         | LOW       | 64QAM      | 13.83  | 13.88  | 13.80  | 14.80              |
|           |         | MID       | 64QAM      | 13.82  | 14.20  | 13.99  | 14.80              |
|           |         | HIGH      | 64QAM      | 13.80  | 14.00  | 13.81  | 14.80              |
|           | 36      | LOW       | 64QAM      | 14.06  | 13.92  | 14.18  | 14.80              |
|           |         | MID       | 64QAM      | 14.25  | 14.29  | 14.25  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.17  | 13.95  | 13.92  | 14.80              |
| 15        | 1       | LOW       | QPSK       | 14.12  | 14.12  | 13.96  | 14.80              |
|           |         | LOW       | Q16        | 14.10  | 14.11  | 14.05  | 14.80              |
|           |         | MID       | Q16        | 14.20  | 14.14  | 14.18  | 14.80              |
|           | 36      | HIGH      | Q16        | 13.95  | 14.24  | 14.04  | 14.80              |
|           |         | LOW       | Q16        | 14.02  | 14.12  | 14.02  | 14.80              |
|           |         | MID       | Q16        | 14.12  | 14.27  | 13.99  | 14.80              |
|           | 75      | HIGH      | Q16        | 13.84  | 14.14  | 13.94  | 14.80              |
|           |         | LOW       | Q16        | 14.08  | 14.05  | 13.90  | 14.80              |
|           |         | LOW       | 64QAM      | 14.05  | 13.88  | 14.04  | 14.80              |
| 15        | 1       | MID       | 64QAM      | 14.16  | 14.23  | 14.03  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.00  | 14.15  | 13.77  | 14.80              |
|           |         | LOW       | 64QAM      | 13.83  | 14.11  | 14.06  | 14.80              |
|           | 36      | MID       | 64QAM      | 13.92  | 14.08  | 14.04  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.24  | 14.03  | 14.00  | 14.80              |
|           |         | LOW       | 64QAM      | 13.82  | 13.87  | 13.80  | 14.80              |
|           | 75      | LOW       | 64QAM      | 13.87  | 14.06  | 13.85  | 14.80              |
|           |         | MID       | 64QAM      | 13.97  | 14.26  | 14.15  | 14.80              |
|           |         | HIGH      | 64QAM      | 13.91  | 14.07  | 13.87  | 14.80              |
| 20        | 1       | LOW       | QPSK       | 14.17  | 14.02  | 14.11  | 14.80              |
|           |         | MID       | QPSK       | 14.22  | 14.26  | 14.21  | 14.80              |
|           |         | HIGH      | QPSK       | 14.14  | 14.06  | 13.95  | 14.80              |
|           | 50      | LOW       | QPSK       | 14.12  | 14.22  | 14.02  | 14.80              |
|           |         | LOW       | Q16        | 14.26  | 14.10  | 14.18  | 14.80              |
|           |         | MID       | Q16        | 14.29  | 14.28  | 14.28  | 14.80              |
|           | 100     | HIGH      | Q16        | 14.03  | 14.21  | 14.14  | 14.80              |
|           |         | LOW       | Q16        | 14.02  | 14.11  | 14.15  | 14.80              |
|           |         | MID       | Q16        | 14.18  | 14.20  | 14.15  | 14.80              |
| 20        | 1       | HIGH      | Q16        | 13.94  | 14.08  | 13.94  | 14.80              |
|           |         | LOW       | Q16        | 14.15  | 14.06  | 14.01  | 14.80              |
|           |         | LOW       | 64QAM      | 14.06  | 13.95  | 14.11  | 14.80              |
|           | 50      | MID       | 64QAM      | 14.12  | 14.17  | 14.14  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.16  | 14.19  | 13.85  | 14.80              |
|           |         | LOW       | 64QAM      | 13.90  | 14.11  | 14.05  | 14.80              |
|           | 100     | MID       | 64QAM      | 14.07  | 14.08  | 14.03  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.18  | 13.99  | 14.01  | 14.80              |
|           |         | LOW       | 64QAM      | 13.81  | 13.88  | 13.88  | 14.80              |

| LTE B66-State 3 -Ant.1(NSA) |           |           |            |            |        |        |                    |
|-----------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|
| Bandwidth                   | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                         | 1         | LOW       | QPSK       | 13.86      | 14.05  | 13.89  | 14.80              |
|                             |           | MID       | QPSK       | 13.90      | 14.23  | 14.01  | 14.80              |
|                             |           | HIGH      | QPSK       | 13.95      | 14.04  | 13.90  | 14.80              |
|                             | 3         | LOW       | QPSK       | 14.10      | 14.05  | 13.98  | 14.80              |
|                             |           | MID       | QPSK       | 14.16      | 14.27  | 14.14  | 14.80              |
|                             |           | HIGH      | QPSK       | 14.14      | 14.12  | 13.88  | 14.80              |
|                             | 6         | LOW       | QPSK       | 14.18      | 14.21  | 14.01  | 14.80              |
|                             | 1         | LOW       | Q16        | 14.20      | 13.99  | 14.21  | 14.80              |
|                             |           | MID       | Q16        | 14.15      | 14.24  | 14.32  | 14.80              |
| 3                           |           | HIGH      | Q16        | 14.04      | 14.22  | 14.03  | 14.80              |
|                             |           | LOW       | Q16        | 13.91      | 13.97  | 14.21  | 14.80              |
|                             | MID       | Q16       | 14.04      | 14.24      | 14.22  | 14.80  |                    |
| 6                           | HIGH      | Q16       | 13.79      | 13.93      | 13.93  | 14.80  |                    |
|                             | LOW       | Q16       | 14.09      | 14.13      | 13.93  | 14.80  |                    |
|                             | 1         | LOW       | 64QAM      | 13.98      | 13.94  | 14.18  | 14.80              |
|                             |           | MID       | 64QAM      | 14.02      | 14.24  | 14.18  | 14.80              |
| HIGH                        |           | 64QAM     | 14.17      | 14.09      | 13.82  | 14.80  |                    |
| 3                           | 1         | LOW       | 64QAM      | 13.79      | 14.11  | 14.02  | 14.80              |
|                             |           | MID       | 64QAM      | 14.08      | 14.02  | 13.96  | 14.80              |
|                             |           | HIGH      | 64QAM      | 14.14      | 13.95  | 13.87  | 14.80              |
|                             | 6         | LOW       | 64QAM      | 13.73      | 13.74  | 13.89  | 14.80              |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             |
| 3                           | 1         | LOW       | QPSK       | 13.90      | 13.92  | 13.82  | 14.80              |
|                             |           | MID       | QPSK       | 14.00      | 14.32  | 14.19  | 14.80              |
|                             |           | HIGH      | QPSK       | 13.88      | 14.11  | 13.79  | 14.80              |
|                             | 8         | LOW       | QPSK       | 14.17      | 14.01  | 14.15  | 14.80              |
|                             |           | MID       | QPSK       | 14.23      | 14.25  | 14.17  | 14.80              |
|                             |           | HIGH      | QPSK       | 14.08      | 13.92  | 13.91  | 14.80              |
|                             | 15        | LOW       | QPSK       | 13.98      | 14.06  | 14.02  | 14.80              |
|                             | 1         | LOW       | Q16        | 14.32      | 13.96  | 14.08  | 14.80              |
|                             |           | MID       | Q16        | 14.15      | 14.27  | 14.21  | 14.80              |
| 8                           |           | HIGH      | Q16        | 14.06      | 14.17  | 14.03  | 14.80              |
|                             |           | LOW       | Q16        | 14.01      | 14.14  | 14.21  | 14.80              |
|                             | MID       | Q16       | 14.11      | 14.11      | 14.15  | 14.80  |                    |
| 15                          | HIGH      | Q16       | 13.86      | 13.95      | 13.93  | 14.80  |                    |
|                             | LOW       | Q16       | 14.11      | 14.07      | 13.90  | 14.80  |                    |
|                             | 1         | LOW       | 64QAM      | 13.99      | 13.81  | 14.14  | 14.80              |
|                             |           | MID       | 64QAM      | 14.11      | 14.10  | 14.18  | 14.80              |
| HIGH                        |           | 64QAM     | 14.13      | 14.26      | 13.71  | 14.80  |                    |
| 3                           | 1         | LOW       | 64QAM      | 13.84      | 13.98  | 13.95  | 14.80              |
|                             |           | MID       | 64QAM      | 14.06      | 13.94  | 13.96  | 14.80              |
|                             |           | HIGH      | 64QAM      | 14.05      | 13.85  | 14.08  | 14.80              |
|                             | 15        | LOW       | 64QAM      | 13.74      | 13.82  | 13.80  | 14.80              |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             |
| 5                           | 1         | LOW       | QPSK       | 13.93      | 14.10  | 13.92  | 14.80              |
|                             |           | MID       | QPSK       | 13.90      | 14.10  | 14.11  | 14.80              |
|                             |           | HIGH      | QPSK       | 13.81      | 14.01  | 13.79  | 14.80              |
|                             | 12        | LOW       | QPSK       | 14.08      | 13.89  | 14.08  | 14.80              |
|                             |           | MID       | QPSK       | 14.08      | 14.12  | 14.27  | 14.80              |
|                             |           | HIGH      | QPSK       | 14.03      | 14.12  | 13.98  | 14.80              |
|                             | 25        | LOW       | QPSK       | 14.12      | 14.09  | 13.96  | 14.80              |
|                             | 1         | LOW       | Q16        | 14.22      | 14.00  | 14.19  | 14.80              |
|                             |           | MID       | Q16        | 14.26      | 14.19  | 14.18  | 14.80              |
| 12                          |           | HIGH      | Q16        | 14.07      | 14.25  | 14.03  | 14.80              |
|                             |           | LOW       | Q16        | 13.94      | 14.04  | 14.19  | 14.80              |
|                             | MID       | Q16       | 14.15      | 14.17      | 14.14  | 14.80  |                    |
| 25                          | HIGH      | Q16       | 13.86      | 14.07      | 13.98  | 14.80  |                    |
|                             | LOW       | Q16       | 13.99      | 14.00      | 13.88  | 14.80  |                    |
|                             | 1         | LOW       | 64QAM      | 14.10      | 13.98  | 14.05  | 14.80              |
|                             |           | MID       | 64QAM      | 14.02      | 14.14  | 14.03  | 14.80              |
| HIGH                        |           | 64QAM     | 14.15      | 14.16      | 13.79  | 14.80  |                    |
| 5                           | 12        | LOW       | 64QAM      | 13.75      | 14.14  | 13.94  | 14.80              |
|                             |           | MID       | 64QAM      | 13.93      | 13.97  | 13.99  | 14.80              |
|                             |           | HIGH      | 64QAM      | 14.22      | 14.00  | 14.00  | 14.80              |
|                             | 25        | LOW       | 64QAM      | 13.82      | 13.76  | 13.76  | 14.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 13.93  | 13.91  | 13.74  | 14.80              |
|           |         | MID       | QPSK       | 13.91  | 14.16  | 14.14  | 14.80              |
|           |         | HIGH      | QPSK       | 13.95  | 13.96  | 13.73  | 14.80              |
|           | 25      | LOW       | QPSK       | 14.14  | 13.95  | 14.07  | 14.80              |
|           |         | MID       | QPSK       | 14.29  | 14.23  | 14.22  | 14.80              |
|           |         | HIGH      | QPSK       | 14.13  | 13.91  | 14.01  | 14.80              |
|           | 50      | LOW       | QPSK       | 14.12  | 14.13  | 13.99  | 14.80              |
|           |         | LOW       | Q16        | 14.27  | 14.00  | 14.24  | 14.80              |
|           |         | MID       | Q16        | 14.33  | 14.18  | 14.31  | 14.80              |
| 10        | 1       | MID       | Q16        | 13.88  | 14.22  | 14.03  | 14.80              |
|           |         | LOW       | Q16        | 14.08  | 13.95  | 13.99  | 14.80              |
|           |         | HIGH      | Q16        | 14.17  | 14.16  | 14.07  | 14.80              |
|           | 25      | MID       | Q16        | 14.00  | 13.93  | 13.91  | 14.80              |
|           |         | LOW       | Q16        | 14.04  | 14.03  | 13.88  | 14.80              |
|           |         | HIGH      | Q16        | 14.08  | 14.03  | 13.88  | 14.80              |
|           | 50      | LOW       | Q16        | 14.04  | 14.03  | 13.88  | 14.80              |
|           |         | LOW       | 64QAM      | 14.13  | 13.81  | 14.14  | 14.80              |
|           |         | MID       | 64QAM      | 13.99  | 14.07  | 14.14  | 14.80              |
| 10        | 1       | HIGH      | 64QAM      | 14.16  | 14.13  | 13.70  | 14.80              |
|           |         | LOW       | 64QAM      | 13.90  | 14.04  | 14.05  | 14.80              |
|           |         | MID       | 64QAM      | 13.97  | 14.05  | 13.95  | 14.80              |
|           | 25      | HIGH      | 64QAM      | 14.09  | 14.02  | 14.01  | 14.80              |
|           |         | LOW       | 64QAM      | 13.73  | 13.80  | 13.73  | 14.80              |
|           |         | MID       | 64QAM      | 13.99  | 14.07  | 14.14  | 14.80              |
|           | 50      | LOW       | 64QAM      | 13.73  | 13.80  | 13.73  | 14.80              |
|           |         | MID       | 64QAM      | 13.99  | 14.07  | 14.14  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.16  | 14.13  | 13.70  | 14.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 13.83  | 13.96  | 13.85  | 14.80              |
|           |         | MID       | QPSK       | 13.82  | 14.20  | 13.99  | 14.80              |
|           |         | HIGH      | QPSK       | 13.80  | 14.00  | 13.81  | 14.80              |
|           | 36      | LOW       | QPSK       | 14.06  | 13.92  | 14.18  | 14.80              |
|           |         | MID       | QPSK       | 14.25  | 14.29  | 14.25  | 14.80              |
|           |         | HIGH      | QPSK       | 14.17  | 13.95  | 13.92  | 14.80              |
|           | 75      | LOW       | QPSK       | 14.12  | 14.12  | 13.96  | 14.80              |
|           |         | LOW       | Q16        | 14.10  | 14.11  | 14.05  | 14.80              |
|           |         | MID       | Q16        | 14.20  | 14.14  | 14.18  | 14.80              |
| 15        | 1       | HIGH      | Q16        | 13.95  | 14.24  | 14.04  | 14.80              |
|           |         | LOW       | Q16        | 14.02  | 14.12  | 14.02  | 14.80              |
|           |         | MID       | Q16        | 14.12  | 14.27  | 13.99  | 14.80              |
|           | 36      | HIGH      | Q16        | 13.84  | 14.14  | 13.94  | 14.80              |
|           |         | LOW       | Q16        | 14.08  | 14.05  | 13.90  | 14.80              |
|           |         | MID       | Q16        | 14.12  | 14.27  | 13.99  | 14.80              |
|           | 75      | LOW       | Q16        | 14.08  | 14.05  | 13.90  | 14.80              |
|           |         | LOW       | 64QAM      | 14.05  | 13.88  | 14.04  | 14.80              |
|           |         | MID       | 64QAM      | 14.16  | 14.23  | 14.03  | 14.80              |
| 15        | 1       | HIGH      | 64QAM      | 14.00  | 14.15  | 13.77  | 14.80              |
|           |         | LOW       | 64QAM      | 13.83  | 14.11  | 14.06  | 14.80              |
|           |         | MID       | 64QAM      | 13.92  | 14.08  | 14.04  | 14.80              |
|           | 36      | HIGH      | 64QAM      | 14.24  | 14.03  | 14.00  | 14.80              |
|           |         | LOW       | 64QAM      | 13.82  | 13.87  | 13.80  | 14.80              |
|           |         | MID       | 64QAM      | 14.16  | 14.23  | 14.03  | 14.80              |
|           | 75      | LOW       | 64QAM      | 13.82  | 13.87  | 13.80  | 14.80              |
|           |         | MID       | 64QAM      | 14.16  | 14.23  | 14.03  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.00  | 14.15  | 13.77  | 14.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 13.87  | 14.06  | 13.85  | 14.80              |
|           |         | MID       | QPSK       | 13.97  | 14.26  | 14.15  | 14.80              |
|           |         | HIGH      | QPSK       | 13.91  | 14.07  | 13.87  | 14.80              |
|           | 50      | LOW       | QPSK       | 14.17  | 14.02  | 14.11  | 14.80              |
|           |         | MID       | QPSK       | 14.22  | 14.26  | 14.21  | 14.80              |
|           |         | HIGH      | QPSK       | 14.14  | 14.06  | 13.95  | 14.80              |
|           | 100     | LOW       | QPSK       | 14.12  | 14.22  | 14.02  | 14.80              |
|           |         | LOW       | Q16        | 14.26  | 14.10  | 14.18  | 14.80              |
|           |         | MID       | Q16        | 14.29  | 14.28  | 14.28  | 14.80              |
| 20        | 1       | HIGH      | Q16        | 14.03  | 14.21  | 14.14  | 14.80              |
|           |         | LOW       | Q16        | 14.02  | 14.11  | 14.15  | 14.80              |
|           |         | MID       | Q16        | 14.18  | 14.20  | 14.15  | 14.80              |
|           | 50      | HIGH      | Q16        | 13.94  | 14.08  | 13.94  | 14.80              |
|           |         | LOW       | Q16        | 14.15  | 14.06  | 14.01  | 14.80              |
|           |         | MID       | Q16        | 14.18  | 14.20  | 14.15  | 14.80              |
|           | 100     | LOW       | Q16        | 14.15  | 14.06  | 14.01  | 14.80              |
|           |         | LOW       | 64QAM      | 14.06  | 13.95  | 14.11  | 14.80              |
|           |         | MID       | 64QAM      | 14.12  | 14.17  | 14.14  | 14.80              |
| 20        | 1       | HIGH      | 64QAM      | 14.16  | 14.19  | 13.85  | 14.80              |
|           |         | LOW       | 64QAM      | 13.90  | 14.11  | 14.05  | 14.80              |
|           |         | MID       | 64QAM      | 14.07  | 14.08  | 14.03  | 14.80              |
|           | 50      | HIGH      | 64QAM      | 14.18  | 13.99  | 14.01  | 14.80              |
|           |         | LOW       | 64QAM      | 13.81  | 13.88  | 13.88  | 14.80              |
|           |         | MID       | 64QAM      | 14.12  | 14.17  | 14.14  | 14.80              |
|           | 100     | LOW       | 64QAM      | 13.81  | 13.88  | 13.88  | 14.80              |
|           |         | MID       | 64QAM      | 14.12  | 14.17  | 14.14  | 14.80              |
|           |         | HIGH      | 64QAM      | 14.16  | 14.19  | 13.85  | 14.80              |

| LTE B66-State 4 -Ant.1(NSA) |         |           |            |            |        |        |                    |                    |
|-----------------------------|---------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth                   | RB Size | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                         | 1       | LOW       | QPSK       | 17.95      | 18.03  | 17.83  | 18.30              |                    |
|                             |         | MID       | QPSK       | 17.98      | 18.29  | 18.07  | 18.30              |                    |
|                             |         | HIGH      | QPSK       | 18.02      | 18.16  | 17.89  | 18.30              |                    |
|                             | 3       | LOW       | QPSK       | 17.97      | 18.17  | 18.10  | 18.30              |                    |
|                             |         | MID       | QPSK       | 18.12      | 18.03  | 18.01  | 18.30              |                    |
|                             |         | HIGH      | QPSK       | 17.95      | 17.98  | 17.97  | 18.30              |                    |
|                             | 6       | LOW       | QPSK       | 17.92      | 18.01  | 18.16  | 18.30              |                    |
|                             | 1       | LOW       | Q16        | 18.20      | 18.24  | 18.25  | 18.30              |                    |
|                             |         | MID       | Q16        | 18.11      | 18.18  | 18.27  | 18.30              |                    |
| HIGH                        |         | Q16       | 18.15      | 18.16      | 18.21  | 18.30  |                    |                    |
| LOW                         |         | Q16       | 18.15      | 18.21      | 17.93  | 18.30  |                    |                    |
| MID                         |         | Q16       | 17.99      | 18.20      | 18.09  | 18.30  |                    |                    |
| 3                           | HIGH    | Q16       | 17.99      | 18.04      | 17.92  | 18.30  |                    |                    |
|                             | 6       | LOW       | Q16        | 18.10      | 17.98  | 17.96  | 18.30              |                    |
|                             | 1.4     | 1         | LOW        | 64QAM      | 18.10  | 17.73  | 18.04              | 18.30              |
| MID                         |         |           | 64QAM      | 17.96      | 17.96  | 17.97  | 18.30              |                    |
| HIGH                        |         |           | 64QAM      | 17.86      | 17.85  | 18.11  | 18.30              |                    |
| 3                           |         | LOW       | 64QAM      | 18.09      | 18.11  | 18.03  | 18.30              |                    |
|                             |         | MID       | 64QAM      | 18.05      | 18.02  | 18.09  | 18.30              |                    |
|                             |         | HIGH      | 64QAM      | 18.19      | 18.07  | 18.19  | 18.30              |                    |
| 6                           |         | LOW       | 64QAM      | 17.98      | 18.12  | 17.97  | 18.30              |                    |
| Bandwidth                   |         | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                           |         | 1         | LOW        | QPSK       | 17.84  | 17.96  | 17.92              | 18.30              |
|                             | MID     |           | QPSK       | 17.86      | 18.22  | 18.05  | 18.30              |                    |
|                             | HIGH    |           | QPSK       | 17.97      | 18.19  | 17.74  | 18.30              |                    |
|                             | 8       | LOW       | QPSK       | 18.17      | 18.15  | 18.12  | 18.30              |                    |
|                             |         | MID       | QPSK       | 18.09      | 18.01  | 18.17  | 18.30              |                    |
|                             |         | HIGH      | QPSK       | 18.08      | 18.14  | 17.88  | 18.30              |                    |
|                             | 15      | LOW       | QPSK       | 17.92      | 18.00  | 18.05  | 18.30              |                    |
|                             | 1       | LOW       | Q16        | 18.07      | 18.08  | 18.03  | 18.30              |                    |
|                             |         | MID       | Q16        | 18.13      | 18.16  | 18.05  | 18.30              |                    |
| HIGH                        |         | Q16       | 18.26      | 18.25      | 17.99  | 18.30  |                    |                    |
| LOW                         |         | Q16       | 18.03      | 17.92      | 18.05  | 18.30  |                    |                    |
| MID                         |         | Q16       | 18.19      | 18.24      | 18.00  | 18.30  |                    |                    |
| 8                           | HIGH    | Q16       | 18.14      | 18.10      | 18.03  | 18.30  |                    |                    |
|                             | 15      | LOW       | Q16        | 17.98      | 18.00  | 17.93  | 18.30              |                    |
|                             | 3       | 1         | LOW        | 64QAM      | 18.27  | 17.92  | 18.09              | 18.30              |
| MID                         |         |           | 64QAM      | 17.90      | 17.74  | 17.99  | 18.30              |                    |
| HIGH                        |         |           | 64QAM      | 17.88      | 18.06  | 18.08  | 18.30              |                    |
| 8                           |         | LOW       | 64QAM      | 18.16      | 18.06  | 18.06  | 18.30              |                    |
|                             |         | MID       | 64QAM      | 17.94      | 18.17  | 18.10  | 18.30              |                    |
|                             |         | HIGH      | 64QAM      | 18.03      | 18.03  | 18.13  | 18.30              |                    |
| 15                          |         | LOW       | 64QAM      | 17.98      | 18.28  | 18.06  | 18.30              |                    |
| Bandwidth                   |         | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                           |         | 1         | LOW        | QPSK       | 17.83  | 17.98  | 17.85              | 18.30              |
|                             | MID     |           | QPSK       | 17.93      | 18.07  | 18.03  | 18.30              |                    |
|                             | HIGH    |           | QPSK       | 17.88      | 18.21  | 17.89  | 18.30              |                    |
|                             | 12      | LOW       | QPSK       | 18.17      | 18.04  | 18.10  | 18.30              |                    |
|                             |         | MID       | QPSK       | 18.18      | 18.12  | 18.04  | 18.30              |                    |
|                             |         | HIGH      | QPSK       | 17.97      | 18.07  | 17.86  | 18.30              |                    |
|                             | 25      | LOW       | QPSK       | 18.06      | 18.01  | 18.19  | 18.30              |                    |
|                             | 1       | LOW       | Q16        | 18.14      | 18.06  | 18.30  | 18.30              |                    |
|                             |         | MID       | Q16        | 18.26      | 18.04  | 18.10  | 18.30              |                    |
| HIGH                        |         | Q16       | 18.02      | 18.14      | 18.02  | 18.30  |                    |                    |
| LOW                         |         | Q16       | 18.15      | 17.99      | 17.95  | 18.30  |                    |                    |
| MID                         |         | Q16       | 18.10      | 18.00      | 18.00  | 18.30  |                    |                    |
| 12                          | HIGH    | Q16       | 17.97      | 18.10      | 17.92  | 18.30  |                    |                    |
|                             | 25      | LOW       | Q16        | 17.94      | 18.01  | 17.93  | 18.30              |                    |
|                             | 5       | 1         | LOW        | 64QAM      | 18.12  | 17.78  | 18.09              | 18.30              |
| MID                         |         |           | 64QAM      | 17.80      | 17.96  | 18.19  | 18.30              |                    |
| HIGH                        |         |           | 64QAM      | 17.84      | 17.92  | 18.08  | 18.30              |                    |
| 12                          |         | LOW       | 64QAM      | 18.20      | 18.29  | 18.06  | 18.30              |                    |
|                             |         | MID       | 64QAM      | 17.97      | 18.06  | 18.07  | 18.30              |                    |
|                             |         | HIGH      | 64QAM      | 18.03      | 18.18  | 18.19  | 18.30              |                    |
| 25                          |         | LOW       | 64QAM      | 18.04      | 18.30  | 18.09  | 18.30              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 18.06  | 17.89  | 18.01  | 18.30              |
|           |         | MID       | QPSK       | 17.93  | 18.20  | 17.98  | 18.30              |
|           |         | HIGH      | QPSK       | 17.97  | 18.05  | 18.03  | 18.30              |
|           | 25      | LOW       | QPSK       | 17.92  | 17.98  | 18.22  | 18.30              |
|           |         | MID       | QPSK       | 18.12  | 18.14  | 18.24  | 18.30              |
|           |         | HIGH      | QPSK       | 17.95  | 18.25  | 17.92  | 18.30              |
|           | 50      | LOW       | QPSK       | 18.17  | 18.23  | 18.17  | 18.30              |
|           |         | LOW       | Q16        | 18.25  | 18.23  | 18.12  | 18.30              |
|           |         | MID       | Q16        | 18.11  | 18.04  | 18.25  | 18.30              |
| 10        | 1       | MID       | Q16        | 18.01  | 18.14  | 18.12  | 18.30              |
|           |         | LOW       | Q16        | 18.15  | 18.16  | 18.11  | 18.30              |
|           |         | HIGH      | Q16        | 18.17  | 18.07  | 18.12  | 18.30              |
|           | 25      | LOW       | Q16        | 17.92  | 18.01  | 17.81  | 18.30              |
|           |         | MID       | Q16        | 17.92  | 18.03  | 18.04  | 18.30              |
|           |         | HIGH      | Q16        | 17.92  | 18.03  | 18.04  | 18.30              |
|           | 50      | LOW       | Q16        | 17.92  | 18.03  | 18.04  | 18.30              |
|           |         | LOW       | 64QAM      | 18.03  | 17.76  | 17.91  | 18.30              |
|           |         | MID       | 64QAM      | 17.90  | 17.72  | 18.01  | 18.30              |
| 10        | 1       | HIGH      | 64QAM      | 17.95  | 17.96  | 18.13  | 18.30              |
|           |         | LOW       | 64QAM      | 18.07  | 18.19  | 18.03  | 18.30              |
|           |         | MID       | 64QAM      | 18.03  | 18.11  | 17.89  | 18.30              |
|           | 25      | HIGH      | 64QAM      | 18.19  | 18.19  | 18.00  | 18.30              |
|           |         | LOW       | 64QAM      | 17.89  | 18.17  | 18.02  | 18.30              |
|           |         | MID       | 64QAM      | 17.89  | 18.17  | 18.02  | 18.30              |
|           | 50      | LOW       | 64QAM      | 17.89  | 18.17  | 18.02  | 18.30              |
|           |         | MID       | 64QAM      | 17.89  | 18.17  | 18.02  | 18.30              |
|           |         | HIGH      | 64QAM      | 17.89  | 18.17  | 18.02  | 18.30              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 17.93  | 18.08  | 17.94  | 18.30              |
|           |         | MID       | QPSK       | 17.95  | 18.22  | 18.07  | 18.30              |
|           |         | HIGH      | QPSK       | 17.97  | 18.10  | 17.92  | 18.30              |
|           | 36      | LOW       | QPSK       | 17.99  | 18.02  | 18.10  | 18.30              |
|           |         | MID       | QPSK       | 18.09  | 18.08  | 18.08  | 18.30              |
|           |         | HIGH      | QPSK       | 17.95  | 18.07  | 18.08  | 18.30              |
|           | 75      | LOW       | QPSK       | 18.04  | 18.25  | 18.12  | 18.30              |
|           |         | LOW       | Q16        | 18.12  | 18.12  | 18.28  | 18.30              |
|           |         | MID       | Q16        | 18.13  | 18.22  | 18.23  | 18.30              |
| 15        | 1       | HIGH      | Q16        | 18.10  | 18.11  | 18.02  | 18.30              |
|           |         | LOW       | Q16        | 18.13  | 18.21  | 18.04  | 18.30              |
|           |         | MID       | Q16        | 18.07  | 18.11  | 18.14  | 18.30              |
|           | 36      | HIGH      | Q16        | 17.92  | 18.24  | 18.01  | 18.30              |
|           |         | LOW       | Q16        | 18.07  | 18.18  | 18.13  | 18.30              |
|           |         | MID       | Q16        | 18.07  | 18.18  | 18.13  | 18.30              |
|           | 75      | LOW       | Q16        | 18.07  | 18.18  | 18.13  | 18.30              |
|           |         | LOW       | 64QAM      | 18.16  | 17.83  | 18.07  | 18.30              |
|           |         | MID       | 64QAM      | 18.01  | 17.81  | 18.15  | 18.30              |
| 15        | 1       | HIGH      | 64QAM      | 17.79  | 17.99  | 17.95  | 18.30              |
|           |         | LOW       | 64QAM      | 18.27  | 18.29  | 18.23  | 18.30              |
|           |         | MID       | 64QAM      | 18.05  | 18.06  | 18.05  | 18.30              |
|           | 36      | HIGH      | 64QAM      | 18.14  | 18.28  | 18.20  | 18.30              |
|           |         | LOW       | 64QAM      | 18.09  | 18.30  | 18.04  | 18.30              |
|           |         | MID       | 64QAM      | 18.09  | 18.30  | 18.04  | 18.30              |
|           | 75      | LOW       | 64QAM      | 18.09  | 18.30  | 18.04  | 18.30              |
|           |         | MID       | 64QAM      | 18.09  | 18.30  | 18.04  | 18.30              |
|           |         | HIGH      | 64QAM      | 18.09  | 18.30  | 18.04  | 18.30              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 17.97  | 18.03  | 17.96  | 18.30              |
|           |         | MID       | QPSK       | 18.02  | 18.20  | 18.12  | 18.30              |
|           |         | HIGH      | QPSK       | 18.02  | 18.14  | 17.94  | 18.30              |
|           | 50      | LOW       | QPSK       | 18.10  | 18.13  | 18.17  | 18.30              |
|           |         | MID       | QPSK       | 18.16  | 18.19  | 18.17  | 18.30              |
|           |         | HIGH      | QPSK       | 18.13  | 18.16  | 18.06  | 18.30              |
|           | 100     | LOW       | QPSK       | 18.08  | 18.16  | 18.12  | 18.30              |
|           |         | LOW       | Q16        | 18.27  | 18.19  | 18.21  | 18.30              |
|           |         | MID       | Q16        | 18.26  | 18.20  | 18.23  | 18.30              |
| 20        | 1       | HIGH      | Q16        | 18.17  | 18.27  | 18.17  | 18.30              |
|           |         | LOW       | Q16        | 18.08  | 18.12  | 18.09  | 18.30              |
|           |         | MID       | Q16        | 18.12  | 18.20  | 18.16  | 18.30              |
|           | 50      | HIGH      | Q16        | 18.10  | 18.17  | 18.01  | 18.30              |
|           |         | LOW       | Q16        | 18.12  | 18.16  | 18.09  | 18.30              |
|           |         | MID       | Q16        | 18.12  | 18.16  | 18.09  | 18.30              |
|           | 100     | LOW       | Q16        | 18.12  | 18.16  | 18.09  | 18.30              |
|           |         | LOW       | 64QAM      | 18.23  | 17.85  | 18.11  | 18.30              |
|           |         | MID       | 64QAM      | 17.94  | 17.92  | 18.17  | 18.30              |
| 20        | 1       | HIGH      | 64QAM      | 17.97  | 18.01  | 18.13  | 18.30              |
|           |         | LOW       | 64QAM      | 18.20  | 18.24  | 18.19  | 18.30              |
|           |         | MID       | 64QAM      | 18.01  | 18.15  | 18.05  | 18.30              |
|           | 50      | HIGH      | 64QAM      | 18.12  | 18.23  | 18.15  | 18.30              |
|           |         | LOW       | 64QAM      | 18.12  | 18.23  | 18.15  | 18.30              |
|           |         | MID       | 64QAM      | 18.12  | 18.23  | 18.15  | 18.30              |
|           | 100     | LOW       | 64QAM      | 18.09  | 18.30  | 18.13  | 18.30              |
|           |         | MID       | 64QAM      | 18.09  | 18.30  | 18.13  | 18.30              |
|           |         | HIGH      | 64QAM      | 18.09  | 18.30  | 18.13  | 18.30              |

| LTE B66-State 5 -Ant.1(NSA) |         |           |            |        |        |        |                    |       |
|-----------------------------|---------|-----------|------------|--------|--------|--------|--------------------|-------|
| Bandwidth                   | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |       |
| 1.4                         | 1       | LOW       | QPSK       | 16.08  | 15.88  | 15.95  | 16.80              |       |
|                             |         | MID       | QPSK       | 15.97  | 15.99  | 16.04  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 15.99  | 15.90  | 15.73  | 16.80              |       |
|                             | 3       | LOW       | QPSK       | 16.01  | 16.18  | 15.97  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.14  | 16.06  | 16.07  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.21  | 16.25  | 16.04  | 16.80              |       |
|                             | 6       | LOW       | QPSK       | 15.96  | 16.02  | 15.88  | 16.80              |       |
|                             | 1.4     | 1         | LOW        | Q16    | 16.14  | 16.01  | 16.01              | 16.80 |
|                             |         |           | MID        | Q16    | 16.12  | 16.24  | 16.16              | 16.80 |
|                             |         | HIGH      | Q16        | 15.88  | 16.02  | 16.02  | 16.80              |       |
|                             |         | LOW       | Q16        | 16.00  | 16.02  | 16.09  | 16.80              |       |
| 1.4                         | 3       | MID       | Q16        | 15.94  | 16.10  | 16.19  | 16.80              |       |
|                             |         | HIGH      | Q16        | 15.96  | 16.14  | 16.03  | 16.80              |       |
|                             |         | 6         | LOW        | Q16    | 15.96  | 15.98  | 15.93              | 16.80 |
|                             | 1.4     | 1         | LOW        | 64QAM  | 15.91  | 16.16  | 15.81              | 16.80 |
|                             |         |           | MID        | 64QAM  | 15.98  | 16.30  | 16.21              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.88  | 15.96  | 15.67              | 16.80 |
|                             |         | 3         | LOW        | 64QAM  | 15.85  | 16.07  | 16.13              | 16.80 |
|                             |         |           | MID        | 64QAM  | 16.00  | 16.23  | 16.12              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.99  | 16.01  | 16.02              | 16.80 |
| 6                           | LOW     | 64QAM     | 15.62      | 15.87  | 15.82  | 16.80  |                    |       |
| Bandwidth                   | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |       |
| 3                           | 1       | LOW       | QPSK       | 16.04  | 15.96  | 15.96  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.05  | 15.94  | 16.09  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.01  | 15.87  | 15.86  | 16.80              |       |
|                             | 8       | LOW       | QPSK       | 16.01  | 16.13  | 16.08  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.06  | 16.20  | 16.09  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.18  | 16.15  | 15.96  | 16.80              |       |
|                             | 15      | LOW       | QPSK       | 15.99  | 15.96  | 16.02  | 16.80              |       |
|                             | 3       | 1         | LOW        | Q16    | 16.10  | 15.93  | 16.20              | 16.80 |
|                             |         |           | MID        | Q16    | 16.26  | 16.25  | 16.39              | 16.80 |
|                             |         | HIGH      | Q16        | 15.93  | 16.02  | 15.96  | 16.80              |       |
|                             |         | LOW       | Q16        | 15.88  | 16.17  | 15.96  | 16.80              |       |
| 3                           | 8       | MID       | Q16        | 16.00  | 16.01  | 16.18  | 16.80              |       |
|                             |         | HIGH      | Q16        | 16.06  | 16.04  | 16.05  | 16.80              |       |
|                             |         | 15        | LOW        | Q16    | 16.02  | 15.82  | 15.96              | 16.80 |
|                             | 3       | 1         | LOW        | 64QAM  | 15.99  | 16.16  | 15.79              | 16.80 |
|                             |         |           | MID        | 64QAM  | 16.01  | 16.23  | 16.09              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.92  | 16.05  | 15.78              | 16.80 |
|                             |         | 8         | LOW        | 64QAM  | 15.84  | 16.02  | 16.03              | 16.80 |
|                             |         |           | MID        | 64QAM  | 15.90  | 16.21  | 15.98              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.80  | 15.98  | 15.99              | 16.80 |
| 15                          | LOW     | 64QAM     | 15.63      | 15.85  | 15.80  | 16.80  |                    |       |
| Bandwidth                   | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |       |
| 5                           | 1       | LOW       | QPSK       | 15.92  | 16.01  | 15.91  | 16.80              |       |
|                             |         | MID       | QPSK       | 15.97  | 16.10  | 15.88  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.13  | 15.83  | 15.94  | 16.80              |       |
|                             | 12      | LOW       | QPSK       | 16.06  | 16.15  | 15.98  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.25  | 16.22  | 16.22  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.13  | 16.25  | 15.94  | 16.80              |       |
|                             | 25      | LOW       | QPSK       | 15.86  | 15.91  | 16.10  | 16.80              |       |
|                             | 5       | 1         | LOW        | Q16    | 16.09  | 16.06  | 16.12              | 16.80 |
|                             |         |           | MID        | Q16    | 16.25  | 16.07  | 16.17              | 16.80 |
|                             |         | HIGH      | Q16        | 15.87  | 15.93  | 15.99  | 16.80              |       |
|                             |         | LOW       | Q16        | 15.86  | 16.17  | 16.08  | 16.80              |       |
| 5                           | 12      | MID       | Q16        | 15.89  | 16.02  | 16.19  | 16.80              |       |
|                             |         | HIGH      | Q16        | 16.15  | 16.19  | 16.05  | 16.80              |       |
|                             |         | 25        | LOW        | Q16    | 15.99  | 15.95  | 16.06              | 16.80 |
|                             | 5       | 1         | LOW        | 64QAM  | 16.07  | 16.06  | 15.84              | 16.80 |
|                             |         |           | MID        | 64QAM  | 16.18  | 16.25  | 16.29              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.99  | 16.04  | 15.81              | 16.80 |
|                             |         | 12        | LOW        | 64QAM  | 15.77  | 16.04  | 15.89              | 16.80 |
|                             |         |           | MID        | 64QAM  | 15.79  | 16.04  | 16.12              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.86  | 16.17  | 16.04              | 16.80 |
| 25                          | LOW     | 64QAM     | 15.84      | 15.93  | 15.90  | 16.80  |                    |       |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 15.86  | 15.88  | 15.88  | 16.80              |
|           |         | MID       | QPSK       | 16.06  | 15.94  | 15.94  | 16.80              |
|           |         | HIGH      | QPSK       | 15.91  | 15.91  | 15.97  | 16.80              |
|           | 25      | LOW       | QPSK       | 16.02  | 16.08  | 15.93  | 16.80              |
|           |         | MID       | QPSK       | 16.04  | 16.22  | 16.06  | 16.80              |
|           |         | HIGH      | QPSK       | 16.01  | 16.10  | 15.91  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.12  | 16.13  | 16.12  | 16.80              |
|           |         | LOW       | Q16        | 16.19  | 16.09  | 16.22  | 16.80              |
|           |         | MID       | Q16        | 16.30  | 16.22  | 16.34  | 16.80              |
| 10        | 1       | MID       | Q16        | 16.09  | 16.10  | 15.97  | 16.80              |
|           |         | LOW       | Q16        | 15.76  | 16.02  | 15.95  | 16.80              |
|           |         | HIGH      | Q16        | 16.15  | 16.21  | 16.08  | 16.80              |
|           | 25      | LOW       | Q16        | 15.94  | 15.90  | 15.90  | 16.80              |
|           |         | MID       | Q16        | 16.00  | 15.99  | 16.09  | 16.80              |
|           |         | HIGH      | Q16        | 16.15  | 16.21  | 16.08  | 16.80              |
|           | 50      | LOW       | Q16        | 15.94  | 15.90  | 15.90  | 16.80              |
|           |         | MID       | Q16        | 16.00  | 15.99  | 16.09  | 16.80              |
|           |         | HIGH      | Q16        | 16.15  | 16.21  | 16.08  | 16.80              |
| 10        | 1       | LOW       | 64QAM      | 16.02  | 16.03  | 15.76  | 16.80              |
|           |         | MID       | 64QAM      | 16.05  | 16.35  | 16.22  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.86  | 16.18  | 15.67  | 16.80              |
|           | 25      | LOW       | 64QAM      | 15.69  | 15.99  | 16.11  | 16.80              |
|           |         | MID       | 64QAM      | 16.00  | 16.12  | 15.91  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.83  | 16.06  | 15.86  | 16.80              |
|           | 50      | LOW       | 64QAM      | 15.67  | 15.74  | 16.06  | 16.80              |
|           |         | MID       | 64QAM      | 16.05  | 16.35  | 16.22  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.86  | 16.18  | 15.67  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 16.08  | 15.98  | 15.88  | 16.80              |
|           |         | MID       | QPSK       | 16.06  | 15.97  | 15.90  | 16.80              |
|           |         | HIGH      | QPSK       | 16.04  | 16.04  | 15.91  | 16.80              |
|           | 36      | LOW       | QPSK       | 16.04  | 16.21  | 15.97  | 16.80              |
|           |         | MID       | QPSK       | 16.08  | 16.16  | 16.23  | 16.80              |
|           |         | HIGH      | QPSK       | 16.11  | 16.05  | 16.04  | 16.80              |
|           | 75      | LOW       | QPSK       | 15.88  | 15.96  | 16.07  | 16.80              |
|           |         | LOW       | Q16        | 16.12  | 15.95  | 16.11  | 16.80              |
|           |         | MID       | Q16        | 16.30  | 16.16  | 16.19  | 16.80              |
| 15        | 1       | HIGH      | Q16        | 15.95  | 16.07  | 15.83  | 16.80              |
|           |         | LOW       | Q16        | 15.83  | 16.01  | 16.00  | 16.80              |
|           |         | MID       | Q16        | 15.81  | 16.07  | 16.06  | 16.80              |
|           | 36      | HIGH      | Q16        | 16.12  | 16.03  | 16.01  | 16.80              |
|           |         | LOW       | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
|           |         | MID       | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
|           | 75      | LOW       | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
|           |         | MID       | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
|           |         | HIGH      | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
| 15        | 1       | LOW       | 64QAM      | 15.94  | 16.06  | 15.76  | 16.80              |
|           |         | MID       | 64QAM      | 16.14  | 16.38  | 16.21  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.02  | 16.18  | 15.78  | 16.80              |
|           | 36      | LOW       | 64QAM      | 15.85  | 16.07  | 16.05  | 16.80              |
|           |         | MID       | 64QAM      | 15.97  | 16.17  | 15.99  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.89  | 15.95  | 15.99  | 16.80              |
|           | 75      | LOW       | 64QAM      | 15.82  | 15.76  | 16.00  | 16.80              |
|           |         | MID       | 64QAM      | 16.14  | 16.38  | 16.21  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.02  | 16.18  | 15.78  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 16.02  | 16.01  | 15.93  | 16.80              |
|           |         | MID       | QPSK       | 16.11  | 16.12  | 16.04  | 16.80              |
|           |         | HIGH      | QPSK       | 16.07  | 16.01  | 15.91  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.12  | 16.18  | 16.11  | 16.80              |
|           |         | MID       | QPSK       | 16.19  | 16.22  | 16.17  | 16.80              |
|           |         | HIGH      | QPSK       | 16.16  | 16.20  | 16.09  | 16.80              |
|           | 100     | LOW       | QPSK       | 16.04  | 16.07  | 16.04  | 16.80              |
|           |         | LOW       | Q16        | 16.25  | 16.06  | 16.14  | 16.80              |
|           |         | MID       | Q16        | 16.28  | 16.22  | 16.32  | 16.80              |
| 20        | 1       | HIGH      | Q16        | 16.01  | 16.04  | 15.99  | 16.80              |
|           |         | LOW       | Q16        | 15.94  | 16.17  | 16.06  | 16.80              |
|           |         | MID       | Q16        | 15.94  | 16.12  | 16.24  | 16.80              |
|           | 50      | HIGH      | Q16        | 16.12  | 16.19  | 16.03  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
|           |         | MID       | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
|           | 100     | LOW       | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
|           |         | MID       | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
|           |         | HIGH      | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
| 20        | 1       | LOW       | 64QAM      | 16.04  | 16.08  | 15.89  | 16.80              |
|           |         | MID       | 64QAM      | 16.16  | 16.30  | 16.24  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.02  | 16.10  | 15.75  | 16.80              |
|           | 50      | LOW       | 64QAM      | 15.82  | 16.10  | 16.05  | 16.80              |
|           |         | MID       | 64QAM      | 15.95  | 16.15  | 16.09  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.94  | 16.09  | 15.96  | 16.80              |
|           | 100     | LOW       | 64QAM      | 15.76  | 15.90  | 15.98  | 16.80              |
|           |         | MID       | 64QAM      | 16.16  | 16.30  | 16.24  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.02  | 16.10  | 15.75  | 16.80              |

| LTE B66-State 6 -Ant.1(NSA) |         |           |            |        |        |        |                    |       |
|-----------------------------|---------|-----------|------------|--------|--------|--------|--------------------|-------|
| Bandwidth                   | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |       |
| 1.4                         | 1       | LOW       | QPSK       | 16.08  | 15.88  | 15.95  | 16.80              |       |
|                             |         | MID       | QPSK       | 15.97  | 15.99  | 16.04  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 15.99  | 15.90  | 15.73  | 16.80              |       |
|                             | 3       | LOW       | QPSK       | 16.01  | 16.18  | 15.97  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.14  | 16.06  | 16.07  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.21  | 16.25  | 16.04  | 16.80              |       |
|                             | 6       | LOW       | QPSK       | 15.96  | 16.02  | 15.88  | 16.80              |       |
|                             | 1.4     | 1         | LOW        | Q16    | 16.14  | 16.01  | 16.01              | 16.80 |
|                             |         |           | MID        | Q16    | 16.12  | 16.24  | 16.16              | 16.80 |
|                             |         | HIGH      | Q16        | 15.88  | 16.02  | 16.02  | 16.80              |       |
|                             |         | LOW       | Q16        | 16.00  | 16.02  | 16.09  | 16.80              |       |
| 1.4                         | 3       | MID       | Q16        | 15.94  | 16.10  | 16.19  | 16.80              |       |
|                             |         | HIGH      | Q16        | 15.96  | 16.14  | 16.03  | 16.80              |       |
|                             |         | 6         | LOW        | Q16    | 15.96  | 15.98  | 15.93              | 16.80 |
|                             | 1.4     | 1         | LOW        | 64QAM  | 15.91  | 16.16  | 15.81              | 16.80 |
|                             |         |           | MID        | 64QAM  | 15.98  | 16.30  | 16.21              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.88  | 15.96  | 15.67              | 16.80 |
|                             |         | 3         | LOW        | 64QAM  | 15.85  | 16.07  | 16.13              | 16.80 |
|                             |         |           | MID        | 64QAM  | 16.00  | 16.23  | 16.12              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.99  | 16.01  | 16.02              | 16.80 |
| 6                           | LOW     | 64QAM     | 15.62      | 15.87  | 15.82  | 16.80  |                    |       |
| Bandwidth                   | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |       |
| 3                           | 1       | LOW       | QPSK       | 16.04  | 15.96  | 15.96  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.05  | 15.94  | 16.09  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.01  | 15.87  | 15.86  | 16.80              |       |
|                             | 8       | LOW       | QPSK       | 16.01  | 16.13  | 16.08  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.06  | 16.20  | 16.09  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.18  | 16.15  | 15.96  | 16.80              |       |
|                             | 15      | LOW       | QPSK       | 15.99  | 15.96  | 16.02  | 16.80              |       |
|                             | 3       | 1         | LOW        | Q16    | 16.10  | 15.93  | 16.20              | 16.80 |
|                             |         |           | MID        | Q16    | 16.26  | 16.25  | 16.39              | 16.80 |
|                             |         | HIGH      | Q16        | 15.93  | 16.02  | 15.96  | 16.80              |       |
|                             |         | LOW       | Q16        | 15.88  | 16.17  | 15.96  | 16.80              |       |
| 3                           | 8       | MID       | Q16        | 16.00  | 16.01  | 16.18  | 16.80              |       |
|                             |         | HIGH      | Q16        | 16.06  | 16.04  | 16.05  | 16.80              |       |
|                             |         | 15        | LOW        | Q16    | 16.02  | 15.82  | 15.96              | 16.80 |
|                             | 3       | 1         | LOW        | 64QAM  | 15.99  | 16.16  | 15.79              | 16.80 |
|                             |         |           | MID        | 64QAM  | 16.01  | 16.23  | 16.09              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.92  | 16.05  | 15.78              | 16.80 |
|                             |         | 8         | LOW        | 64QAM  | 15.84  | 16.02  | 16.03              | 16.80 |
|                             |         |           | MID        | 64QAM  | 15.90  | 16.21  | 15.98              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.80  | 15.98  | 15.99              | 16.80 |
| 15                          | LOW     | 64QAM     | 15.63      | 15.85  | 15.80  | 16.80  |                    |       |
| Bandwidth                   | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |       |
| 5                           | 1       | LOW       | QPSK       | 15.92  | 16.01  | 15.91  | 16.80              |       |
|                             |         | MID       | QPSK       | 15.97  | 16.10  | 15.88  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.13  | 15.83  | 15.94  | 16.80              |       |
|                             | 12      | LOW       | QPSK       | 16.06  | 16.15  | 15.98  | 16.80              |       |
|                             |         | MID       | QPSK       | 16.25  | 16.22  | 16.22  | 16.80              |       |
|                             |         | HIGH      | QPSK       | 16.13  | 16.25  | 15.94  | 16.80              |       |
|                             | 25      | LOW       | QPSK       | 15.86  | 15.91  | 16.10  | 16.80              |       |
|                             | 5       | 1         | LOW        | Q16    | 16.09  | 16.06  | 16.12              | 16.80 |
|                             |         |           | MID        | Q16    | 16.25  | 16.07  | 16.17              | 16.80 |
|                             |         | HIGH      | Q16        | 15.87  | 15.93  | 15.99  | 16.80              |       |
|                             |         | LOW       | Q16        | 15.86  | 16.17  | 16.08  | 16.80              |       |
| 5                           | 12      | MID       | Q16        | 15.89  | 16.02  | 16.19  | 16.80              |       |
|                             |         | HIGH      | Q16        | 16.15  | 16.19  | 16.05  | 16.80              |       |
|                             |         | 25        | LOW        | Q16    | 15.99  | 15.95  | 16.06              | 16.80 |
|                             | 5       | 1         | LOW        | 64QAM  | 16.07  | 16.06  | 15.84              | 16.80 |
|                             |         |           | MID        | 64QAM  | 16.18  | 16.25  | 16.29              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.99  | 16.04  | 15.81              | 16.80 |
|                             |         | 12        | LOW        | 64QAM  | 15.77  | 16.04  | 15.89              | 16.80 |
|                             |         |           | MID        | 64QAM  | 15.79  | 16.04  | 16.12              | 16.80 |
|                             |         |           | HIGH       | 64QAM  | 15.86  | 16.17  | 16.04              | 16.80 |
| 25                          | LOW     | 64QAM     | 15.84      | 15.93  | 15.90  | 16.80  |                    |       |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 15.86  | 15.88  | 15.88  | 16.80              |
|           |         | MID       | QPSK       | 16.06  | 15.94  | 15.94  | 16.80              |
|           |         | HIGH      | QPSK       | 15.91  | 15.91  | 15.97  | 16.80              |
|           | 25      | LOW       | QPSK       | 16.02  | 16.08  | 15.93  | 16.80              |
|           |         | MID       | QPSK       | 16.04  | 16.22  | 16.06  | 16.80              |
|           |         | HIGH      | QPSK       | 16.01  | 16.10  | 15.91  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.12  | 16.13  | 16.12  | 16.80              |
|           |         | LOW       | Q16        | 16.19  | 16.09  | 16.22  | 16.80              |
|           |         | MID       | Q16        | 16.30  | 16.22  | 16.34  | 16.80              |
| 10        | 1       | MID       | Q16        | 16.09  | 16.10  | 15.97  | 16.80              |
|           |         | LOW       | Q16        | 15.76  | 16.02  | 15.95  | 16.80              |
|           |         | HIGH      | Q16        | 16.15  | 16.21  | 16.08  | 16.80              |
|           | 25      | LOW       | Q16        | 15.94  | 15.90  | 15.90  | 16.80              |
|           |         | MID       | Q16        | 16.00  | 15.99  | 16.09  | 16.80              |
|           |         | HIGH      | Q16        | 16.15  | 16.21  | 16.08  | 16.80              |
|           | 50      | LOW       | Q16        | 15.94  | 15.90  | 15.90  | 16.80              |
|           |         | MID       | Q16        | 16.00  | 15.99  | 16.09  | 16.80              |
|           |         | HIGH      | Q16        | 16.15  | 16.21  | 16.08  | 16.80              |
| 10        | 1       | LOW       | 64QAM      | 16.02  | 16.03  | 15.76  | 16.80              |
|           |         | MID       | 64QAM      | 16.05  | 16.35  | 16.22  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.86  | 16.18  | 15.67  | 16.80              |
|           | 25      | LOW       | 64QAM      | 15.69  | 15.99  | 16.11  | 16.80              |
|           |         | MID       | 64QAM      | 16.00  | 16.12  | 15.91  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.83  | 16.06  | 15.86  | 16.80              |
|           | 50      | LOW       | 64QAM      | 15.67  | 15.74  | 16.06  | 16.80              |
|           |         | LOW       | 64QAM      | 15.67  | 15.74  | 16.06  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.67  | 15.74  | 16.06  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 16.08  | 15.98  | 15.88  | 16.80              |
|           |         | MID       | QPSK       | 16.06  | 15.97  | 15.90  | 16.80              |
|           |         | HIGH      | QPSK       | 16.04  | 16.04  | 15.91  | 16.80              |
|           | 36      | LOW       | QPSK       | 16.04  | 16.21  | 15.97  | 16.80              |
|           |         | MID       | QPSK       | 16.08  | 16.16  | 16.23  | 16.80              |
|           |         | HIGH      | QPSK       | 16.11  | 16.05  | 16.04  | 16.80              |
|           | 75      | LOW       | QPSK       | 15.88  | 15.96  | 16.07  | 16.80              |
|           |         | LOW       | Q16        | 16.12  | 15.95  | 16.11  | 16.80              |
|           |         | MID       | Q16        | 16.30  | 16.16  | 16.19  | 16.80              |
| 15        | 1       | HIGH      | Q16        | 15.95  | 16.07  | 15.83  | 16.80              |
|           |         | LOW       | Q16        | 15.83  | 16.01  | 16.00  | 16.80              |
|           |         | MID       | Q16        | 15.81  | 16.07  | 16.06  | 16.80              |
|           | 36      | HIGH      | Q16        | 16.12  | 16.03  | 16.01  | 16.80              |
|           |         | LOW       | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
|           |         | MID       | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
|           | 75      | LOW       | Q16        | 16.12  | 15.98  | 15.91  | 16.80              |
|           |         | LOW       | 64QAM      | 15.94  | 16.06  | 15.76  | 16.80              |
|           |         | MID       | 64QAM      | 16.14  | 16.38  | 16.21  | 16.80              |
| 15        | 1       | HIGH      | 64QAM      | 16.02  | 16.18  | 15.78  | 16.80              |
|           |         | LOW       | 64QAM      | 15.85  | 16.07  | 16.05  | 16.80              |
|           |         | MID       | 64QAM      | 15.97  | 16.17  | 15.99  | 16.80              |
|           | 36      | HIGH      | 64QAM      | 15.89  | 15.95  | 15.99  | 16.80              |
|           |         | LOW       | 64QAM      | 15.82  | 15.76  | 16.00  | 16.80              |
|           |         | MID       | 64QAM      | 15.82  | 15.76  | 16.00  | 16.80              |
|           | 75      | LOW       | 64QAM      | 15.82  | 15.76  | 16.00  | 16.80              |
|           |         | LOW       | 64QAM      | 15.82  | 15.76  | 16.00  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.82  | 15.76  | 16.00  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 16.02  | 16.01  | 15.93  | 16.80              |
|           |         | MID       | QPSK       | 16.11  | 16.12  | 16.04  | 16.80              |
|           |         | HIGH      | QPSK       | 16.07  | 16.01  | 15.91  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.12  | 16.18  | 16.11  | 16.80              |
|           |         | MID       | QPSK       | 16.19  | 16.22  | 16.17  | 16.80              |
|           |         | HIGH      | QPSK       | 16.16  | 16.20  | 16.09  | 16.80              |
|           | 100     | LOW       | QPSK       | 16.04  | 16.07  | 16.04  | 16.80              |
|           |         | LOW       | Q16        | 16.25  | 16.06  | 16.14  | 16.80              |
|           |         | MID       | Q16        | 16.28  | 16.22  | 16.32  | 16.80              |
| 20        | 1       | HIGH      | Q16        | 16.01  | 16.04  | 15.99  | 16.80              |
|           |         | LOW       | Q16        | 15.94  | 16.17  | 16.06  | 16.80              |
|           |         | MID       | Q16        | 15.94  | 16.12  | 16.24  | 16.80              |
|           | 50      | HIGH      | Q16        | 16.12  | 16.19  | 16.03  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
|           |         | MID       | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
|           | 100     | LOW       | Q16        | 16.07  | 16.00  | 16.04  | 16.80              |
|           |         | LOW       | 64QAM      | 16.04  | 16.08  | 15.89  | 16.80              |
|           |         | MID       | 64QAM      | 16.16  | 16.30  | 16.24  | 16.80              |
| 20        | 1       | HIGH      | 64QAM      | 16.02  | 16.10  | 15.75  | 16.80              |
|           |         | LOW       | 64QAM      | 15.82  | 16.10  | 16.05  | 16.80              |
|           |         | MID       | 64QAM      | 15.95  | 16.15  | 16.09  | 16.80              |
|           | 50      | HIGH      | 64QAM      | 15.94  | 16.09  | 15.96  | 16.80              |
|           |         | LOW       | 64QAM      | 15.94  | 16.09  | 15.96  | 16.80              |
|           |         | MID       | 64QAM      | 15.94  | 16.09  | 15.96  | 16.80              |
|           | 100     | LOW       | 64QAM      | 15.76  | 15.90  | 15.98  | 16.80              |
|           |         | LOW       | 64QAM      | 15.76  | 15.90  | 15.98  | 16.80              |
|           |         | HIGH      | 64QAM      | 15.76  | 15.90  | 15.98  | 16.80              |

| LTE B66-State 1 -Ant.0 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.14  | 23.17  | 22.91  | 23.80              |
|                        |         | MID       | QPSK       | 23.10  | 23.33  | 23.20  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.30  | 23.32  | 22.93  | 23.80              |
|                        | 3       | LOW       | QPSK       | 23.23  | 23.37  | 23.16  | 23.80              |
|                        |         | MID       | QPSK       | 23.44  | 23.27  | 23.48  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.38  | 23.38  | 23.21  | 23.80              |
|                        | 6       | LOW       | QPSK       | 22.17  | 22.27  | 22.22  | 22.80              |
|                        | 1       | LOW       | Q16        | 22.62  | 22.29  | 22.62  | 22.80              |
|                        |         | MID       | Q16        | 22.69  | 22.64  | 22.56  | 22.80              |
| HIGH                   |         | Q16       | 22.52      | 22.75  | 22.47  | 22.80  |                    |
| LOW                    |         | Q16       | 22.05      | 22.36  | 22.34  | 22.80  |                    |
| 3                      | MID     | Q16       | 22.21      | 22.34  | 22.17  | 22.80  |                    |
|                        | HIGH    | Q16       | 22.31      | 22.54  | 22.33  | 22.80  |                    |
|                        | 6       | LOW       | Q16        | 21.00  | 21.11  | 21.10  | 21.80              |
|                        | 1.4     | 1         | LOW        | 64QAM  | 21.53  | 21.55  | 21.66              |
| MID                    |         |           | 64QAM      | 21.69  | 21.65  | 21.60  | 21.80              |
| HIGH                   |         |           | 64QAM      | 21.27  | 21.54  | 21.35  | 21.80              |
| 3                      |         | LOW       | 64QAM      | 20.96  | 21.29  | 21.17  | 21.80              |
|                        |         | MID       | 64QAM      | 21.58  | 21.32  | 21.59  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.29  | 21.32  | 21.01  | 21.80              |
| 6                      |         | LOW       | 64QAM      | 20.24  | 20.46  | 20.55  | 20.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.28  | 23.10  | 23.09  | 23.80              |
|                        |         | MID       | QPSK       | 23.05  | 23.40  | 23.44  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.02  | 23.18  | 23.05  | 23.80              |
|                        | 8       | LOW       | QPSK       | 22.23  | 22.08  | 22.25  | 22.80              |
|                        |         | MID       | QPSK       | 22.42  | 22.23  | 22.23  | 22.80              |
|                        |         | HIGH      | QPSK       | 22.27  | 22.06  | 22.28  | 22.80              |
|                        | 15      | LOW       | QPSK       | 22.33  | 22.38  | 22.39  | 22.80              |
| 3                      | 1       | LOW       | Q16        | 22.74  | 22.43  | 22.62  | 22.80              |
|                        |         | MID       | Q16        | 22.63  | 22.52  | 22.67  | 22.80              |
|                        |         | HIGH      | Q16        | 22.70  | 22.66  | 22.33  | 22.80              |
|                        | 8       | LOW       | Q16        | 21.12  | 21.23  | 21.23  | 21.80              |
|                        |         | MID       | Q16        | 21.09  | 21.45  | 21.29  | 21.80              |
|                        |         | HIGH      | Q16        | 21.23  | 21.43  | 21.22  | 21.80              |
|                        | 15      | LOW       | Q16        | 21.29  | 21.38  | 21.35  | 21.80              |
| 3                      | 1       | LOW       | 64QAM      | 21.38  | 21.48  | 21.70  | 21.80              |
|                        |         | MID       | 64QAM      | 21.76  | 21.76  | 21.76  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.29  | 21.73  | 21.35  | 21.80              |
|                        | 8       | LOW       | 64QAM      | 20.12  | 20.27  | 20.03  | 20.80              |
|                        |         | MID       | 64QAM      | 20.46  | 20.30  | 20.69  | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.49  | 20.26  | 19.95  | 20.80              |
|                        | 15      | LOW       | 64QAM      | 20.22  | 20.69  | 20.47  | 20.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.28  | 22.98  | 23.23  | 23.80              |
|                        |         | MID       | QPSK       | 23.03  | 23.40  | 23.13  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.23  | 23.18  | 23.26  | 23.80              |
|                        | 12      | LOW       | QPSK       | 21.92  | 22.13  | 22.09  | 22.80              |
|                        |         | MID       | QPSK       | 22.19  | 22.54  | 22.28  | 22.80              |
|                        |         | HIGH      | QPSK       | 22.27  | 22.15  | 22.39  | 22.80              |
|                        | 25      | LOW       | QPSK       | 22.33  | 22.29  | 22.33  | 22.80              |
| 5                      | 1       | LOW       | Q16        | 22.61  | 22.49  | 22.37  | 22.80              |
|                        |         | MID       | Q16        | 22.76  | 22.66  | 22.63  | 22.80              |
|                        |         | HIGH      | Q16        | 22.75  | 22.63  | 22.65  | 22.80              |
|                        | 12      | LOW       | Q16        | 21.24  | 21.30  | 21.29  | 21.80              |
|                        |         | MID       | Q16        | 21.09  | 21.19  | 21.25  | 21.80              |
|                        |         | HIGH      | Q16        | 21.33  | 21.41  | 21.12  | 21.80              |
|                        | 25      | LOW       | Q16        | 21.29  | 21.11  | 21.14  | 21.80              |
| 5                      | 1       | LOW       | 64QAM      | 21.33  | 21.42  | 21.70  | 21.80              |
|                        |         | MID       | 64QAM      | 21.74  | 21.78  | 21.56  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.38  | 21.64  | 21.61  | 21.80              |
|                        | 12      | LOW       | 64QAM      | 20.06  | 20.11  | 20.01  | 20.80              |
|                        |         | MID       | 64QAM      | 20.34  | 20.32  | 20.71  | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.24  | 20.26  | 20.15  | 20.80              |
|                        | 25      | LOW       | 64QAM      | 20.16  | 20.49  | 20.39  | 20.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322       | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.18  | 23.21        | 23.14  | 23.80              |
|           |         | MID       | QPSK       | 22.96  | 23.21        | 23.34  | 23.80              |
|           |         | HIGH      | QPSK       | 22.95  | 23.41        | 23.05  | 23.80              |
|           | 25      | LOW       | QPSK       | 22.05  | 22.44        | 22.25  | 22.80              |
|           |         | MID       | QPSK       | 22.13  | 22.21        | 22.19  | 22.80              |
|           |         | HIGH      | QPSK       | 22.33  | 22.33        | 22.37  | 22.80              |
|           | 50      | LOW       | QPSK       | 22.04  | 22.36        | 22.26  | 22.80              |
|           |         | LOW       | Q16        | 22.67  | 22.43        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.56  | 22.61        | 22.61  | 22.80              |
| 10        | 1       | MID       | Q16        | 22.70  | 22.61        | 22.38  | 22.80              |
|           |         | LOW       | Q16        | 21.05  | 21.34        | 21.23  | 21.80              |
|           |         | HIGH      | Q16        | 21.24  | 21.41        | 21.32  | 21.80              |
|           | 25      | MID       | Q16        | 21.10  | 21.32        | 21.27  | 21.80              |
|           |         | LOW       | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           |         | HIGH      | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.44  | 21.55        | 21.77  | 21.80              |
|           |         | MID       | 64QAM      | 21.71  | 21.62        | 21.71  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.34  | 21.54        | 21.50  | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 19.98  | 20.29        | 20.11  | 20.80              |
|           |         | MID       | 64QAM      | 20.29  | 20.20        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.43  | 20.18        | 20.21  | 20.80              |
|           | 25      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322       | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.07  | 23.03        | 23.07  | 23.80              |
|           |         | MID       | QPSK       | 23.12  | 23.45        | 23.13  | 23.80              |
|           |         | HIGH      | QPSK       | 23.09  | 23.11        | 23.00  | 23.80              |
|           | 36      | LOW       | QPSK       | 22.18  | 22.44        | 22.09  | 22.80              |
|           |         | MID       | QPSK       | 22.31  | 22.39        | 22.17  | 22.80              |
|           |         | HIGH      | QPSK       | 22.15  | 22.15        | 22.26  | 22.80              |
|           | 75      | LOW       | QPSK       | 22.28  | 22.25        | 22.22  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.29        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.60  | 22.73        | 22.74  | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.68  | 22.61        | 22.33  | 22.80              |
|           |         | LOW       | Q16        | 21.10  | 21.40        | 21.16  | 21.80              |
|           |         | MID       | Q16        | 21.07  | 21.32        | 21.32  | 21.80              |
|           | 36      | HIGH      | Q16        | 21.18  | 21.54        | 21.08  | 21.80              |
|           |         | LOW       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           |         | MID       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           | 75      | LOW       | 64QAM      | 21.63  | 21.53        | 21.59  | 21.80              |
|           |         | MID       | 64QAM      | 21.65  | 21.69        | 21.62  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.42  | 21.80        | 21.37  | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 20.20  | 20.25        | 20.17  | 20.80              |
|           |         | MID       | 64QAM      | 20.62  | 20.24        | 20.73  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.27  | 20.28        | 20.05  | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322       | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.16  | 23.19        | 23.16  | 23.80              |
|           |         | MID       | QPSK       | 23.19  | <b>23.40</b> | 23.32  | 23.80              |
|           |         | HIGH      | QPSK       | 23.18  | 23.32        | 23.14  | 23.80              |
|           | 50      | LOW       | QPSK       | 22.14  | 22.33        | 22.34  | 22.80              |
|           |         | MID       | QPSK       | 22.35  | <b>22.43</b> | 22.39  | 22.80              |
|           |         | HIGH      | QPSK       | 22.31  | 22.31        | 22.37  | 22.80              |
|           | 100     | LOW       | QPSK       | 22.26  | <b>22.36</b> | 22.35  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.54        | 22.60  | 22.80              |
|           |         | MID       | Q16        | 22.74  | 22.75        | 22.72  | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.68  | 22.68        | 22.58  | 22.80              |
|           |         | LOW       | Q16        | 21.18  | 21.36        | 21.40  | 21.80              |
|           |         | MID       | Q16        | 21.30  | 21.43        | 21.38  | 21.80              |
|           | 50      | HIGH      | Q16        | 21.29  | 21.43        | 21.31  | 21.80              |
|           |         | LOW       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           |         | MID       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           | 100     | LOW       | 64QAM      | 21.57  | 21.59        | 21.79  | 21.80              |
|           |         | MID       | 64QAM      | 21.78  | 21.78        | 21.80  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.40  | 21.71        | 21.52  | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.18  | 20.19        | 20.23  | 20.80              |
|           |         | MID       | 64QAM      | 20.52  | 20.38        | 20.63  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.47  | 20.40        | 20.17  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |

| LTE B66-State 2 -Ant.0 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.14  | 23.17  | 22.91  | 23.80              |
|                        |         | MID       | QPSK       | 23.10  | 23.33  | 23.20  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.30  | 23.32  | 22.93  | 23.80              |
|                        | 3       | LOW       | QPSK       | 23.23  | 23.37  | 23.16  | 23.80              |
|                        |         | MID       | QPSK       | 23.44  | 23.27  | 23.48  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.38  | 23.38  | 23.21  | 23.80              |
| 1.4                    | 6       | LOW       | QPSK       | 22.17  | 22.27  | 22.22  | 22.80              |
|                        |         | LOW       | Q16        | 22.62  | 22.29  | 22.62  | 22.80              |
|                        |         | MID       | Q16        | 22.69  | 22.64  | 22.56  | 22.80              |
|                        | 1       | HIGH      | Q16        | 22.52  | 22.75  | 22.47  | 22.80              |
|                        |         | LOW       | Q16        | 22.05  | 22.36  | 22.34  | 22.80              |
|                        |         | MID       | Q16        | 22.21  | 22.34  | 22.17  | 22.80              |
|                        | 3       | HIGH      | Q16        | 22.31  | 22.54  | 22.33  | 22.80              |
|                        |         | LOW       | Q16        | 21.00  | 21.11  | 21.10  | 21.80              |
|                        |         | MID       | Q16        | 21.53  | 21.55  | 21.66  | 21.80              |
| 1.4                    | 1       | MID       | 64QAM      | 21.69  | 21.65  | 21.60  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.27  | 21.54  | 21.35  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.96  | 21.29  | 21.17  | 21.80              |
|                        | 3       | MID       | 64QAM      | 21.58  | 21.32  | 21.59  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.29  | 21.32  | 21.01  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.24  | 20.46  | 20.55  | 20.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.28  | 23.10  | 23.09  | 23.80              |
|                        |         | MID       | QPSK       | 23.05  | 23.40  | 23.44  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.02  | 23.18  | 23.05  | 23.80              |
|                        | 8       | LOW       | QPSK       | 22.23  | 22.08  | 22.25  | 22.80              |
|                        |         | MID       | QPSK       | 22.42  | 22.23  | 22.23  | 22.80              |
|                        |         | HIGH      | QPSK       | 22.27  | 22.06  | 22.28  | 22.80              |
| 3                      | 15      | LOW       | QPSK       | 22.33  | 22.38  | 22.39  | 22.80              |
|                        |         | LOW       | Q16        | 22.74  | 22.43  | 22.62  | 22.80              |
|                        |         | MID       | Q16        | 22.63  | 22.52  | 22.67  | 22.80              |
|                        | 8       | HIGH      | Q16        | 22.70  | 22.66  | 22.33  | 22.80              |
|                        |         | LOW       | Q16        | 21.12  | 21.23  | 21.23  | 21.80              |
|                        |         | MID       | Q16        | 21.09  | 21.45  | 21.29  | 21.80              |
|                        |         | HIGH      | Q16        | 21.23  | 21.43  | 21.22  | 21.80              |
|                        | 15      | LOW       | Q16        | 21.29  | 21.38  | 21.35  | 21.80              |
|                        |         | LOW       | 64QAM      | 21.38  | 21.48  | 21.70  | 21.80              |
| 3                      | 1       | MID       | 64QAM      | 21.76  | 21.76  | 21.76  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.29  | 21.73  | 21.35  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.12  | 20.27  | 20.03  | 20.80              |
|                        | 8       | MID       | 64QAM      | 20.46  | 20.30  | 20.69  | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.49  | 20.26  | 19.95  | 20.80              |
|                        |         | LOW       | 64QAM      | 20.22  | 20.69  | 20.47  | 20.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.28  | 22.98  | 23.23  | 23.80              |
|                        |         | MID       | QPSK       | 23.03  | 23.40  | 23.13  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.23  | 23.18  | 23.26  | 23.80              |
|                        | 12      | LOW       | QPSK       | 21.92  | 22.13  | 22.09  | 22.80              |
|                        |         | MID       | QPSK       | 22.19  | 22.54  | 22.28  | 22.80              |
|                        |         | HIGH      | QPSK       | 22.27  | 22.15  | 22.39  | 22.80              |
| 5                      | 25      | LOW       | QPSK       | 22.33  | 22.29  | 22.33  | 22.80              |
|                        |         | LOW       | Q16        | 22.61  | 22.49  | 22.37  | 22.80              |
|                        |         | MID       | Q16        | 22.76  | 22.66  | 22.63  | 22.80              |
|                        | 1       | HIGH      | Q16        | 22.75  | 22.63  | 22.65  | 22.80              |
|                        |         | LOW       | Q16        | 21.24  | 21.30  | 21.29  | 21.80              |
|                        | 12      | MID       | Q16        | 21.09  | 21.19  | 21.25  | 21.80              |
|                        |         | HIGH      | Q16        | 21.33  | 21.41  | 21.12  | 21.80              |
|                        |         | LOW       | Q16        | 21.29  | 21.11  | 21.14  | 21.80              |
|                        | 25      | LOW       | 64QAM      | 21.33  | 21.42  | 21.70  | 21.80              |
| 5                      | 1       | MID       | 64QAM      | 21.74  | 21.78  | 21.56  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.38  | 21.64  | 21.61  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.06  | 20.11  | 20.01  | 20.80              |
|                        | 12      | MID       | 64QAM      | 20.34  | 20.32  | 20.71  | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.24  | 20.26  | 20.15  | 20.80              |
|                        |         | LOW       | 64QAM      | 20.16  | 20.49  | 20.39  | 20.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322       | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.18  | 23.21        | 23.14  | 23.80              |
|           |         | MID       | QPSK       | 22.96  | 23.21        | 23.34  | 23.80              |
|           |         | HIGH      | QPSK       | 22.95  | 23.41        | 23.05  | 23.80              |
|           | 25      | LOW       | QPSK       | 22.05  | 22.44        | 22.25  | 22.80              |
|           |         | MID       | QPSK       | 22.13  | 22.21        | 22.19  | 22.80              |
|           |         | HIGH      | QPSK       | 22.33  | 22.33        | 22.37  | 22.80              |
|           | 50      | LOW       | QPSK       | 22.04  | 22.36        | 22.26  | 22.80              |
|           |         | LOW       | Q16        | 22.67  | 22.43        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.56  | 22.61        | 22.61  | 22.80              |
| 10        | 1       | MID       | Q16        | 22.70  | 22.61        | 22.38  | 22.80              |
|           |         | LOW       | Q16        | 21.05  | 21.34        | 21.23  | 21.80              |
|           |         | HIGH      | Q16        | 21.24  | 21.41        | 21.32  | 21.80              |
|           | 25      | MID       | Q16        | 21.10  | 21.32        | 21.27  | 21.80              |
|           |         | LOW       | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           |         | HIGH      | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.44  | 21.55        | 21.77  | 21.80              |
|           |         | MID       | 64QAM      | 21.71  | 21.62        | 21.71  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.34  | 21.54        | 21.50  | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 19.98  | 20.29        | 20.11  | 20.80              |
|           |         | MID       | 64QAM      | 20.29  | 20.20        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.43  | 20.18        | 20.21  | 20.80              |
|           | 25      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322       | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.07  | 23.03        | 23.07  | 23.80              |
|           |         | MID       | QPSK       | 23.12  | 23.45        | 23.13  | 23.80              |
|           |         | HIGH      | QPSK       | 23.09  | 23.11        | 23.00  | 23.80              |
|           | 36      | LOW       | QPSK       | 22.18  | 22.44        | 22.09  | 22.80              |
|           |         | MID       | QPSK       | 22.31  | 22.39        | 22.17  | 22.80              |
|           |         | HIGH      | QPSK       | 22.15  | 22.15        | 22.26  | 22.80              |
|           | 75      | LOW       | QPSK       | 22.28  | 22.25        | 22.22  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.29        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.60  | 22.73        | 22.74  | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.68  | 22.61        | 22.33  | 22.80              |
|           |         | LOW       | Q16        | 21.10  | 21.40        | 21.16  | 21.80              |
|           |         | MID       | Q16        | 21.07  | 21.32        | 21.32  | 21.80              |
|           | 36      | HIGH      | Q16        | 21.18  | 21.54        | 21.08  | 21.80              |
|           |         | LOW       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           |         | MID       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           | 75      | LOW       | 64QAM      | 21.63  | 21.53        | 21.59  | 21.80              |
|           |         | MID       | 64QAM      | 21.65  | 21.69        | 21.62  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.42  | 21.80        | 21.37  | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 20.20  | 20.25        | 20.17  | 20.80              |
|           |         | MID       | 64QAM      | 20.62  | 20.24        | 20.73  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.27  | 20.28        | 20.05  | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322       | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.16  | 23.19        | 23.16  | 23.80              |
|           |         | MID       | QPSK       | 23.19  | <b>23.40</b> | 23.32  | 23.80              |
|           |         | HIGH      | QPSK       | 23.18  | 23.32        | 23.14  | 23.80              |
|           | 50      | LOW       | QPSK       | 22.14  | 22.33        | 22.34  | 22.80              |
|           |         | MID       | QPSK       | 22.35  | <b>22.43</b> | 22.39  | 22.80              |
|           |         | HIGH      | QPSK       | 22.31  | 22.31        | 22.37  | 22.80              |
|           | 100     | LOW       | QPSK       | 22.26  | <b>22.36</b> | 22.35  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.54        | 22.60  | 22.80              |
|           |         | MID       | Q16        | 22.74  | 22.75        | 22.72  | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.68  | 22.68        | 22.58  | 22.80              |
|           |         | LOW       | Q16        | 21.18  | 21.36        | 21.40  | 21.80              |
|           |         | MID       | Q16        | 21.30  | 21.43        | 21.38  | 21.80              |
|           | 50      | HIGH      | Q16        | 21.29  | 21.43        | 21.31  | 21.80              |
|           |         | LOW       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           |         | MID       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           | 100     | LOW       | 64QAM      | 21.57  | 21.59        | 21.79  | 21.80              |
|           |         | MID       | 64QAM      | 21.78  | 21.78        | 21.80  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.40  | 21.71        | 21.52  | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.18  | 20.19        | 20.23  | 20.80              |
|           |         | MID       | 64QAM      | 20.52  | 20.38        | 20.63  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.47  | 20.40        | 20.17  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |

| LTE B66-State 3 -Ant.0 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.14  | 23.17  | 22.91  | 23.80              |
|                        |         | MID       | QPSK       | 23.10  | 23.33  | 23.20  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.30  | 23.32  | 22.93  | 23.80              |
|                        | 3       | LOW       | QPSK       | 23.23  | 23.37  | 23.16  | 23.80              |
|                        |         | MID       | QPSK       | 23.44  | 23.27  | 23.48  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.38  | 23.38  | 23.21  | 23.80              |
| 1.4                    | 6       | LOW       | QPSK       | 22.17  | 22.27  | 22.22  | 22.80              |
|                        |         | LOW       | Q16        | 22.62  | 22.29  | 22.62  | 22.80              |
|                        |         | MID       | Q16        | 22.69  | 22.64  | 22.56  | 22.80              |
|                        | 1       | HIGH      | Q16        | 22.52  | 22.75  | 22.47  | 22.80              |
|                        |         | LOW       | Q16        | 22.05  | 22.36  | 22.34  | 22.80              |
|                        |         | MID       | Q16        | 22.21  | 22.34  | 22.17  | 22.80              |
|                        | 3       | HIGH      | Q16        | 22.31  | 22.54  | 22.33  | 22.80              |
|                        |         | LOW       | Q16        | 21.00  | 21.11  | 21.10  | 21.80              |
|                        |         | MID       | Q16        | 21.53  | 21.55  | 21.66  | 21.80              |
| 1.4                    | 1       | MID       | 64QAM      | 21.69  | 21.65  | 21.60  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.27  | 21.54  | 21.35  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.96  | 21.29  | 21.17  | 21.80              |
|                        | 3       | MID       | 64QAM      | 21.58  | 21.32  | 21.59  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.29  | 21.32  | 21.01  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.24  | 20.46  | 20.55  | 20.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.28  | 23.10  | 23.09  | 23.80              |
|                        |         | MID       | QPSK       | 23.05  | 23.40  | 23.44  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.02  | 23.18  | 23.05  | 23.80              |
|                        | 8       | LOW       | QPSK       | 22.23  | 22.08  | 22.25  | 22.80              |
|                        |         | MID       | QPSK       | 22.42  | 22.23  | 22.23  | 22.80              |
|                        |         | HIGH      | QPSK       | 22.27  | 22.06  | 22.28  | 22.80              |
| 3                      | 15      | LOW       | QPSK       | 22.33  | 22.38  | 22.39  | 22.80              |
|                        |         | LOW       | Q16        | 22.74  | 22.43  | 22.62  | 22.80              |
|                        |         | MID       | Q16        | 22.63  | 22.52  | 22.67  | 22.80              |
|                        | 8       | HIGH      | Q16        | 22.70  | 22.66  | 22.33  | 22.80              |
|                        |         | LOW       | Q16        | 21.12  | 21.23  | 21.23  | 21.80              |
|                        |         | MID       | Q16        | 21.09  | 21.45  | 21.29  | 21.80              |
|                        |         | HIGH      | Q16        | 21.23  | 21.43  | 21.22  | 21.80              |
|                        | 15      | LOW       | Q16        | 21.29  | 21.38  | 21.35  | 21.80              |
|                        |         | LOW       | 64QAM      | 21.38  | 21.48  | 21.70  | 21.80              |
| 3                      | 1       | MID       | 64QAM      | 21.76  | 21.76  | 21.76  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.29  | 21.73  | 21.35  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.12  | 20.27  | 20.03  | 20.80              |
|                        | 8       | MID       | 64QAM      | 20.46  | 20.30  | 20.69  | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.49  | 20.26  | 19.95  | 20.80              |
|                        |         | LOW       | 64QAM      | 20.22  | 20.69  | 20.47  | 20.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.28  | 22.98  | 23.23  | 23.80              |
|                        |         | MID       | QPSK       | 23.03  | 23.40  | 23.13  | 23.80              |
|                        |         | HIGH      | QPSK       | 23.23  | 23.18  | 23.26  | 23.80              |
|                        | 12      | LOW       | QPSK       | 21.92  | 22.13  | 22.09  | 22.80              |
|                        |         | MID       | QPSK       | 22.19  | 22.54  | 22.28  | 22.80              |
|                        |         | HIGH      | QPSK       | 22.27  | 22.15  | 22.39  | 22.80              |
| 5                      | 25      | LOW       | QPSK       | 22.33  | 22.29  | 22.33  | 22.80              |
|                        |         | LOW       | Q16        | 22.61  | 22.49  | 22.37  | 22.80              |
|                        |         | MID       | Q16        | 22.76  | 22.66  | 22.63  | 22.80              |
|                        | 1       | HIGH      | Q16        | 22.75  | 22.63  | 22.65  | 22.80              |
|                        |         | LOW       | Q16        | 21.24  | 21.30  | 21.29  | 21.80              |
|                        | 12      | MID       | Q16        | 21.09  | 21.19  | 21.25  | 21.80              |
|                        |         | HIGH      | Q16        | 21.33  | 21.41  | 21.12  | 21.80              |
|                        |         | LOW       | Q16        | 21.29  | 21.11  | 21.14  | 21.80              |
|                        | 25      | LOW       | 64QAM      | 21.33  | 21.42  | 21.70  | 21.80              |
| 5                      | 1       | MID       | 64QAM      | 21.74  | 21.78  | 21.56  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.38  | 21.64  | 21.61  | 21.80              |
|                        |         | LOW       | 64QAM      | 20.06  | 20.11  | 20.01  | 20.80              |
|                        | 12      | MID       | 64QAM      | 20.34  | 20.32  | 20.71  | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.24  | 20.26  | 20.15  | 20.80              |
|                        |         | LOW       | 64QAM      | 20.16  | 20.49  | 20.39  | 20.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322       | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.18  | 23.21        | 23.14  | 23.80              |
|           |         | MID       | QPSK       | 22.96  | 23.21        | 23.34  | 23.80              |
|           |         | HIGH      | QPSK       | 22.95  | 23.41        | 23.05  | 23.80              |
|           | 25      | LOW       | QPSK       | 22.05  | 22.44        | 22.25  | 22.80              |
|           |         | MID       | QPSK       | 22.13  | 22.21        | 22.19  | 22.80              |
|           |         | HIGH      | QPSK       | 22.33  | 22.33        | 22.37  | 22.80              |
|           | 50      | LOW       | QPSK       | 22.04  | 22.36        | 22.26  | 22.80              |
|           |         | LOW       | Q16        | 22.67  | 22.43        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.56  | 22.61        | 22.61  | 22.80              |
| 10        | 1       | MID       | Q16        | 22.70  | 22.61        | 22.38  | 22.80              |
|           |         | LOW       | Q16        | 21.05  | 21.34        | 21.23  | 21.80              |
|           |         | HIGH      | Q16        | 21.24  | 21.41        | 21.32  | 21.80              |
|           | 25      | MID       | Q16        | 21.10  | 21.32        | 21.27  | 21.80              |
|           |         | LOW       | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           |         | HIGH      | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.44  | 21.55        | 21.77  | 21.80              |
|           |         | MID       | 64QAM      | 21.71  | 21.62        | 21.71  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.34  | 21.54        | 21.50  | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 19.98  | 20.29        | 20.11  | 20.80              |
|           |         | MID       | 64QAM      | 20.29  | 20.20        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.43  | 20.18        | 20.21  | 20.80              |
|           | 25      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322       | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.07  | 23.03        | 23.07  | 23.80              |
|           |         | MID       | QPSK       | 23.12  | 23.45        | 23.13  | 23.80              |
|           |         | HIGH      | QPSK       | 23.09  | 23.11        | 23.00  | 23.80              |
|           | 36      | LOW       | QPSK       | 22.18  | 22.44        | 22.09  | 22.80              |
|           |         | MID       | QPSK       | 22.31  | 22.39        | 22.17  | 22.80              |
|           |         | HIGH      | QPSK       | 22.15  | 22.15        | 22.26  | 22.80              |
|           | 75      | LOW       | QPSK       | 22.28  | 22.25        | 22.22  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.29        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.60  | 22.73        | 22.74  | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.68  | 22.61        | 22.33  | 22.80              |
|           |         | LOW       | Q16        | 21.10  | 21.40        | 21.16  | 21.80              |
|           |         | MID       | Q16        | 21.07  | 21.32        | 21.32  | 21.80              |
|           | 36      | HIGH      | Q16        | 21.18  | 21.54        | 21.08  | 21.80              |
|           |         | LOW       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           |         | MID       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           | 75      | LOW       | 64QAM      | 21.63  | 21.53        | 21.59  | 21.80              |
|           |         | MID       | 64QAM      | 21.65  | 21.69        | 21.62  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.42  | 21.80        | 21.37  | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 20.20  | 20.25        | 20.17  | 20.80              |
|           |         | MID       | 64QAM      | 20.62  | 20.24        | 20.73  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.27  | 20.28        | 20.05  | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322       | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.16  | 23.19        | 23.16  | 23.80              |
|           |         | MID       | QPSK       | 23.19  | <b>23.40</b> | 23.32  | 23.80              |
|           |         | HIGH      | QPSK       | 23.18  | 23.32        | 23.14  | 23.80              |
|           | 50      | LOW       | QPSK       | 22.14  | 22.33        | 22.34  | 22.80              |
|           |         | MID       | QPSK       | 22.35  | <b>22.43</b> | 22.39  | 22.80              |
|           |         | HIGH      | QPSK       | 22.31  | 22.31        | 22.37  | 22.80              |
|           | 100     | LOW       | QPSK       | 22.26  | <b>22.36</b> | 22.35  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.54        | 22.60  | 22.80              |
|           |         | MID       | Q16        | 22.74  | 22.75        | 22.72  | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.68  | 22.68        | 22.58  | 22.80              |
|           |         | LOW       | Q16        | 21.18  | 21.36        | 21.40  | 21.80              |
|           |         | MID       | Q16        | 21.30  | 21.43        | 21.38  | 21.80              |
|           | 50      | HIGH      | Q16        | 21.29  | 21.43        | 21.31  | 21.80              |
|           |         | LOW       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           |         | MID       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           | 100     | LOW       | 64QAM      | 21.57  | 21.59        | 21.79  | 21.80              |
|           |         | MID       | 64QAM      | 21.78  | 21.78        | 21.80  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.40  | 21.71        | 21.52  | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.18  | 20.19        | 20.23  | 20.80              |
|           |         | MID       | 64QAM      | 20.52  | 20.38        | 20.63  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.47  | 20.40        | 20.17  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |

| LTE B66-State 4 -Ant.0 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 20.99  | 20.97  | 20.94  | 21.80              |
|                        |         | MID       | QPSK       | 21.07  | 21.27  | 21.18  | 21.80              |
|                        |         | HIGH      | QPSK       | 20.94  | 20.88  | 20.78  | 21.80              |
|                        | 3       | LOW       | QPSK       | 20.92  | 21.03  | 20.83  | 21.80              |
|                        |         | MID       | QPSK       | 21.13  | 21.15  | 20.99  | 21.80              |
|                        |         | HIGH      | QPSK       | 21.09  | 21.22  | 21.07  | 21.80              |
|                        | 6       | LOW       | QPSK       | 21.25  | 21.02  | 21.12  | 21.80              |
|                        | 1       | LOW       | Q16        | 21.15  | 21.28  | 21.17  | 21.80              |
|                        |         | MID       | Q16        | 21.31  | 21.13  | 21.30  | 21.80              |
| HIGH                   |         | Q16       | 21.28      | 21.15  | 21.13  | 21.80  |                    |
| 1.4                    | 3       | LOW       | Q16        | 21.11  | 20.88  | 20.87  | 21.80              |
|                        |         | MID       | Q16        | 21.03  | 21.02  | 21.12  | 21.80              |
|                        |         | HIGH      | Q16        | 21.13  | 21.03  | 20.82  | 21.80              |
|                        | 6       | LOW       | Q16        | 21.13  | 21.21  | 21.10  | 21.80              |
|                        | 1       | LOW       | 64QAM      | 20.92  | 21.08  | 20.68  | 21.80              |
|                        |         | MID       | 64QAM      | 21.26  | 21.26  | 21.41  | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.95  | 21.02  | 20.84  | 21.80              |
|                        | 3       | LOW       | 64QAM      | 21.46  | 21.46  | 21.10  | 21.80              |
|                        |         | MID       | 64QAM      | 21.50  | 21.25  | 21.44  | 21.80              |
| HIGH                   |         | 64QAM     | 21.15      | 21.16  | 21.23  | 21.80  |                    |
| 6                      | LOW     | 64QAM     | 20.26      | 20.77  | 20.23  | 20.80  |                    |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 21.03  | 20.88  | 21.08  | 21.80              |
|                        |         | MID       | QPSK       | 20.96  | 21.15  | 20.99  | 21.80              |
|                        |         | HIGH      | QPSK       | 20.90  | 21.13  | 21.12  | 21.80              |
|                        | 8       | LOW       | QPSK       | 20.87  | 21.11  | 21.18  | 21.80              |
|                        |         | MID       | QPSK       | 21.22  | 21.32  | 21.15  | 21.80              |
|                        |         | HIGH      | QPSK       | 21.16  | 21.25  | 21.27  | 21.80              |
|                        | 15      | LOW       | QPSK       | 20.93  | 21.23  | 21.14  | 21.80              |
|                        | 1       | LOW       | Q16        | 21.24  | 21.13  | 20.91  | 21.80              |
|                        |         | MID       | Q16        | 21.12  | 21.34  | 21.07  | 21.80              |
| HIGH                   |         | Q16       | 21.32      | 21.19  | 21.11  | 21.80  |                    |
| 3                      | 8       | LOW       | Q16        | 21.12  | 21.13  | 21.30  | 21.80              |
|                        |         | MID       | Q16        | 21.10  | 21.21  | 21.17  | 21.80              |
|                        |         | HIGH      | Q16        | 21.17  | 21.20  | 21.28  | 21.80              |
|                        | 15      | LOW       | Q16        | 21.04  | 21.10  | 21.23  | 21.80              |
|                        | 1       | LOW       | 64QAM      | 21.00  | 20.98  | 20.72  | 21.80              |
|                        |         | MID       | 64QAM      | 21.31  | 21.50  | 21.28  | 21.80              |
|                        |         | HIGH      | 64QAM      | 20.97  | 20.98  | 20.86  | 21.80              |
|                        | 8       | LOW       | 64QAM      | 20.60  | 20.30  | 20.06  | 20.80              |
|                        |         | MID       | 64QAM      | 20.39  | 20.30  | 20.50  | 20.80              |
| HIGH                   |         | 64QAM     | 20.19      | 20.30  | 20.05  | 20.80  |                    |
| 15                     | LOW     | 64QAM     | 20.28      | 20.71  | 20.29  | 20.80  |                    |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 20.88  | 20.95  | 20.81  | 21.80              |
|                        |         | MID       | QPSK       | 21.15  | 21.25  | 21.01  | 21.80              |
|                        |         | HIGH      | QPSK       | 20.90  | 21.05  | 20.99  | 21.80              |
|                        | 12      | LOW       | QPSK       | 21.08  | 21.03  | 21.08  | 21.80              |
|                        |         | MID       | QPSK       | 21.16  | 21.41  | 21.32  | 21.80              |
|                        |         | HIGH      | QPSK       | 21.09  | 21.14  | 21.10  | 21.80              |
|                        | 25      | LOW       | QPSK       | 21.25  | 21.29  | 21.20  | 21.80              |
|                        | 1       | LOW       | Q16        | 21.17  | 21.28  | 21.06  | 21.80              |
|                        |         | MID       | Q16        | 21.12  | 21.32  | 21.24  | 21.80              |
| HIGH                   |         | Q16       | 21.24      | 21.06  | 20.86  | 21.80  |                    |
| 5                      | 12      | LOW       | Q16        | 20.97  | 21.07  | 21.34  | 21.80              |
|                        |         | MID       | Q16        | 21.25  | 21.21  | 21.20  | 21.80              |
|                        |         | HIGH      | Q16        | 21.00  | 21.39  | 20.99  | 21.80              |
|                        | 25      | LOW       | Q16        | 21.15  | 21.12  | 21.27  | 21.80              |
|                        | 1       | LOW       | 64QAM      | 20.92  | 21.15  | 20.91  | 21.80              |
|                        |         | MID       | 64QAM      | 21.16  | 21.35  | 21.17  | 21.80              |
|                        |         | HIGH      | 64QAM      | 21.11  | 21.13  | 20.88  | 21.80              |
|                        | 12      | LOW       | 64QAM      | 20.50  | 20.32  | 20.10  | 20.80              |
|                        |         | MID       | 64QAM      | 20.56  | 20.25  | 20.34  | 20.80              |
| HIGH                   |         | 64QAM     | 20.19      | 20.26  | 19.97  | 20.80  |                    |
| 25                     | LOW     | 64QAM     | 20.22      | 20.57  | 20.35  | 20.80  |                    |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| 10              | 1               | LOW       | QPSK       | 20.95      | 21.01  | 20.81  | 21.80              |                    |
|                 |                 | MID       | QPSK       | 20.88      | 20.98  | 21.14  | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.11      | 21.09  | 20.99  | 21.80              |                    |
|                 | 25              | LOW       | QPSK       | 21.10      | 21.11  | 20.89  | 21.80              |                    |
|                 |                 | MID       | QPSK       | 21.30      | 21.11  | 21.24  | 21.80              |                    |
|                 |                 | HIGH      | QPSK       | 21.22      | 21.25  | 21.36  | 21.80              |                    |
|                 | 50              | LOW       | QPSK       | 21.16      | 21.19  | 21.22  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.15      | 21.21  | 21.10  | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.08      | 21.38  | 21.20  | 21.80              |                    |
| 10              | 1               | HIGH      | Q16        | 21.18      | 21.29  | 21.17  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.02      | 21.24  | 21.34  | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.23      | 21.26  | 21.26  | 21.80              |                    |
|                 | 25              | HIGH      | Q16        | 21.10      | 21.14  | 21.18  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 20.94      | 21.02  | 21.23  | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 21.02      | 20.83  | 20.79  | 21.80              |                    |
|                 | 1               | MID       | 64QAM      | 21.41      | 21.50  | 21.21  | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.86      | 21.19  | 20.92  | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 20.62      | 20.44  | 20.06  | 20.80              |                    |
| 10              | 25              | MID       | 64QAM      | 20.54      | 20.38  | 20.44  | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.43      | 20.04  | 20.03  | 20.80              |                    |
|                 |                 | LOW       | 64QAM      | 20.24      | 20.77  | 20.53  | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                 | 15              | 1         | LOW        | QPSK       | 21.09  | 20.80  | 20.98              | 21.80              |
|                 |                 |           | MID        | QPSK       | 21.19  | 21.32  | 21.03              | 21.80              |
|                 |                 |           | HIGH       | QPSK       | 20.94  | 20.96  | 21.01              | 21.80              |
|                 |                 | 36        | LOW        | QPSK       | 21.06  | 21.33  | 21.10              | 21.80              |
|                 |                 |           | MID        | QPSK       | 21.16  | 21.28  | 21.37              | 21.80              |
| HIGH            |                 |           | QPSK       | 20.97      | 21.33  | 21.08  | 21.80              |                    |
| 75              |                 | LOW       | QPSK       | 20.93      | 21.02  | 21.20  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.19      | 21.15  | 20.89  | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.37      | 21.36  | 21.20  | 21.80              |                    |
| 15              | 1               | HIGH      | Q16        | 21.03      | 21.04  | 20.88  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 20.87      | 21.22  | 21.13  | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.08      | 21.28  | 21.32  | 21.80              |                    |
|                 | 36              | HIGH      | Q16        | 21.04      | 21.33  | 21.24  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.06      | 21.25  | 21.17  | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 21.11      | 21.08  | 20.89  | 21.80              |                    |
|                 | 1               | MID       | 64QAM      | 21.37      | 21.30  | 21.17  | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.82      | 21.04  | 21.09  | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 20.66      | 20.44  | 20.10  | 20.80              |                    |
| 15              | 36              | MID       | 64QAM      | 20.60      | 20.40  | 20.22  | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.25      | 20.26  | 20.05  | 20.80              |                    |
|                 |                 | LOW       | 64QAM      | 20.20      | 20.54  | 20.33  | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 21.03  | 21.03  | 21.00              | 21.80              |
|                 |                 |           | MID        | QPSK       | 21.11  | 21.21  | 21.18              | 21.80              |
|                 |                 |           | HIGH       | QPSK       | 21.05  | 21.11  | 21.01              | 21.80              |
|                 |                 | 50        | LOW        | QPSK       | 21.08  | 21.22  | 21.12              | 21.80              |
|                 |                 |           | MID        | QPSK       | 21.24  | 21.32  | 21.28              | 21.80              |
| HIGH            |                 |           | QPSK       | 21.20      | 21.27  | 21.25  | 21.80              |                    |
| 100             |                 | LOW       | QPSK       | 21.14      | 21.21  | 21.20  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.30      | 21.17  | 21.06  | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.31      | 21.32  | 21.26  | 21.80              |                    |
| 20              | 1               | HIGH      | Q16        | 21.24      | 21.23  | 21.09  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.10      | 21.24  | 21.28  | 21.80              |                    |
|                 |                 | MID       | Q16        | 21.23      | 21.30  | 21.26  | 21.80              |                    |
|                 | 50              | HIGH      | Q16        | 21.23      | 21.33  | 21.22  | 21.80              |                    |
|                 |                 | LOW       | Q16        | 21.17      | 21.25  | 21.21  | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 21.13      | 21.04  | 20.87  | 21.80              |                    |
|                 | 1               | MID       | 64QAM      | 21.37      | 21.41  | 21.32  | 21.80              |                    |
|                 |                 | HIGH      | 64QAM      | 21.03      | 21.21  | 21.03  | 21.80              |                    |
|                 |                 | LOW       | 64QAM      | 20.62      | 20.42  | 20.24  | 20.80              |                    |
| 50              | MID             | 64QAM     | 20.58      | 20.48      | 20.42  | 20.80  |                    |                    |
|                 | HIGH            | 64QAM     | 20.33      | 20.24      | 20.15  | 20.80  |                    |                    |
|                 | LOW             | 64QAM     | 20.22      | 20.71      | 20.43  | 20.80  |                    |                    |

| LTE B66-State 5 -Ant.0 |           |           |            |            |        |        |                    |                    |
|------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth              | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                    | 1         | LOW       | QPSK       | 19.00      | 19.05  | 19.00  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.14      | 19.15  | 19.17  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.06      | 18.93  | 18.99  | 19.80              |                    |
|                        | 3         | LOW       | QPSK       | 18.98      | 19.26  | 19.02  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.04      | 19.23  | 19.16  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.21      | 19.07  | 19.24  | 19.80              |                    |
|                        | 6         | LOW       | QPSK       | 19.06      | 19.04  | 19.08  | 19.80              |                    |
|                        | 1.4       | 1         | LOW        | Q16        | 18.99  | 18.84  | 18.81              | 19.80              |
|                        |           |           | MID        | Q16        | 19.26  | 19.07  | 19.11              | 19.80              |
| HIGH                   |           |           | Q16        | 19.01      | 19.10  | 18.89  | 19.80              |                    |
| 3                      |           | LOW       | Q16        | 19.05      | 19.00  | 19.15  | 19.80              |                    |
|                        |           | MID       | Q16        | 19.27      | 19.24  | 19.26  | 19.80              |                    |
| 6                      | HIGH      | Q16       | 19.15      | 19.22      | 19.04  | 19.80  |                    |                    |
| 1.4                    | 1         | LOW       | Q16        | 19.06      | 19.00  | 19.23  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 18.88      | 18.83  | 18.60  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 18.90      | 19.09  | 19.03  | 19.80              |                    |
|                        | 3         | HIGH      | 64QAM      | 18.81      | 18.98  | 18.93  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 19.01      | 19.08  | 19.02  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.00      | 19.38  | 19.13  | 19.80              |                    |
|                        | 6         | HIGH      | 64QAM      | 19.29      | 19.38  | 19.19  | 19.80              |                    |
|                        | 6         | LOW       | 64QAM      | 19.08      | 19.25  | 19.11  | 19.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                      | 1         | LOW       | QPSK       | 18.96      | 18.76  | 19.00  | 19.80              |                    |
|                        |           | MID       | QPSK       | 18.99      | 19.21  | 19.17  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.06      | 19.08  | 19.09  | 19.80              |                    |
|                        | 8         | LOW       | QPSK       | 18.85      | 19.16  | 19.04  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.09      | 19.27  | 19.28  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.17      | 19.11  | 19.30  | 19.80              |                    |
|                        | 15        | LOW       | QPSK       | 19.01      | 19.27  | 19.06  | 19.80              |                    |
|                        | 3         | 1         | LOW        | Q16        | 19.28  | 18.92  | 18.73              | 19.80              |
|                        |           |           | MID        | Q16        | 19.16  | 19.03  | 19.11              | 19.80              |
| HIGH                   |           |           | Q16        | 19.17      | 18.85  | 18.93  | 19.80              |                    |
| 8                      |           | LOW       | Q16        | 19.03      | 19.27  | 19.13  | 19.80              |                    |
|                        |           | MID       | Q16        | 19.29      | 19.28  | 19.30  | 19.80              |                    |
| 15                     | HIGH      | Q16       | 19.04      | 19.09      | 19.21  | 19.80  |                    |                    |
| 3                      | 1         | LOW       | Q16        | 19.10      | 19.29  | 18.96  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 19.13      | 18.81  | 18.86  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.07      | 19.23  | 18.92  | 19.80              |                    |
|                        | 8         | HIGH      | 64QAM      | 18.88      | 18.86  | 18.88  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 19.09      | 19.31  | 19.19  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.07      | 19.34  | 18.97  | 19.80              |                    |
|                        | 15        | HIGH      | 64QAM      | 19.04      | 19.16  | 19.00  | 19.80              |                    |
|                        | 15        | LOW       | 64QAM      | 19.14      | 18.94  | 19.04  | 19.80              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                      | 1         | LOW       | QPSK       | 18.96      | 18.88  | 18.96  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.12      | 19.25  | 19.05  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 18.76      | 18.98  | 19.01  | 19.80              |                    |
|                        | 12        | LOW       | QPSK       | 19.04      | 19.10  | 19.21  | 19.80              |                    |
|                        |           | MID       | QPSK       | 19.15      | 19.08  | 19.28  | 19.80              |                    |
|                        |           | HIGH      | QPSK       | 19.04      | 19.18  | 19.01  | 19.80              |                    |
|                        | 25        | LOW       | QPSK       | 19.01      | 19.15  | 19.03  | 19.80              |                    |
|                        | 5         | 1         | LOW        | Q16        | 19.20  | 18.77  | 18.84              | 19.80              |
|                        |           |           | MID        | Q16        | 19.18  | 19.19  | 19.09              | 19.80              |
| HIGH                   |           |           | Q16        | 18.96      | 18.94  | 19.01  | 19.80              |                    |
| 12                     |           | LOW       | Q16        | 18.95      | 19.06  | 19.13  | 19.80              |                    |
|                        |           | MID       | Q16        | 19.21      | 19.34  | 19.12  | 19.80              |                    |
| 25                     | HIGH      | Q16       | 19.25      | 19.07      | 19.17  | 19.80  |                    |                    |
| 5                      | 1         | LOW       | Q16        | 18.93      | 19.09  | 19.25  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 18.82      | 18.86  | 18.86  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 18.90      | 18.94  | 18.73  | 19.80              |                    |
|                        | 12        | HIGH      | 64QAM      | 18.73      | 18.77  | 18.97  | 19.80              |                    |
|                        |           | LOW       | 64QAM      | 19.09      | 19.33  | 18.92  | 19.80              |                    |
|                        |           | MID       | 64QAM      | 19.00      | 19.20  | 19.09  | 19.80              |                    |
|                        | 25        | HIGH      | 64QAM      | 19.23      | 19.30  | 19.17  | 19.80              |                    |
|                        | 25        | LOW       | 64QAM      | 18.95      | 19.00  | 19.29  | 19.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 18.90  | 18.91  | 18.98  | 19.80              |
|           |         | MID       | QPSK       | 19.14  | 18.98  | 19.13  | 19.80              |
|           |         | HIGH      | QPSK       | 19.06  | 18.89  | 18.88  | 19.80              |
|           | 25      | LOW       | QPSK       | 18.87  | 19.12  | 19.29  | 19.80              |
|           |         | MID       | QPSK       | 19.13  | 19.17  | 19.11  | 19.80              |
|           |         | HIGH      | QPSK       | 19.17  | 19.28  | 19.12  | 19.80              |
|           | 50      | LOW       | QPSK       | 19.22  | 19.02  | 18.99  | 19.80              |
|           |         | LOW       | Q16        | 19.28  | 18.96  | 18.81  | 19.80              |
|           |         | MID       | Q16        | 19.14  | 18.98  | 18.92  | 19.80              |
| 10        | 1       | MID       | Q16        | 19.11  | 18.83  | 18.89  | 19.80              |
|           |         | LOW       | Q16        | 18.92  | 19.08  | 19.17  | 19.80              |
|           |         | MID       | Q16        | 19.23  | 19.32  | 19.30  | 19.80              |
|           | 25      | HIGH      | Q16        | 19.04  | 19.16  | 19.15  | 19.80              |
|           |         | LOW       | Q16        | 19.16  | 19.02  | 19.07  | 19.80              |
|           |         | LOW       | 64QAM      | 18.92  | 18.85  | 18.56  | 19.80              |
|           | 1       | MID       | 64QAM      | 19.11  | 18.96  | 18.92  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.94  | 19.00  | 18.95  | 19.80              |
|           |         | LOW       | 64QAM      | 18.92  | 19.13  | 19.13  | 19.80              |
| 10        | 25      | MID       | 64QAM      | 19.13  | 19.38  | 19.09  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.02  | 19.24  | 19.04  | 19.80              |
|           |         | LOW       | 64QAM      | 19.16  | 19.15  | 19.21  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 18.79  | 18.93  | 18.79  | 19.80              |
|           |         | MID       | QPSK       | 19.12  | 19.00  | 19.13  | 19.80              |
|           |         | HIGH      | QPSK       | 18.84  | 18.93  | 19.01  | 19.80              |
|           | 36      | LOW       | QPSK       | 19.00  | 19.22  | 19.33  | 19.80              |
|           |         | MID       | QPSK       | 19.19  | 19.39  | 19.09  | 19.80              |
|           |         | HIGH      | QPSK       | 19.15  | 19.36  | 19.32  | 19.80              |
|           | 75      | LOW       | QPSK       | 18.95  | 19.15  | 18.99  | 19.80              |
|           |         | LOW       | Q16        | 19.28  | 18.75  | 18.90  | 19.80              |
|           |         | MID       | Q16        | 19.20  | 19.19  | 19.03  | 19.80              |
| 15        | 1       | HIGH      | Q16        | 18.94  | 18.89  | 19.04  | 19.80              |
|           |         | LOW       | Q16        | 18.92  | 19.11  | 19.29  | 19.80              |
|           |         | MID       | Q16        | 19.29  | 19.30  | 19.05  | 19.80              |
|           | 36      | HIGH      | Q16        | 19.04  | 19.11  | 19.11  | 19.80              |
|           |         | LOW       | Q16        | 18.91  | 19.17  | 19.04  | 19.80              |
|           |         | LOW       | 64QAM      | 19.07  | 18.81  | 18.66  | 19.80              |
|           | 1       | MID       | 64QAM      | 19.09  | 19.23  | 19.02  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.94  | 19.03  | 18.84  | 19.80              |
|           |         | LOW       | 64QAM      | 19.01  | 19.25  | 19.13  | 19.80              |
| 15        | 36      | MID       | 64QAM      | 19.15  | 19.22  | 18.86  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.33  | 19.22  | 19.02  | 19.80              |
|           |         | LOW       | 64QAM      | 19.20  | 19.09  | 19.13  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 18.98  | 18.97  | 18.94  | 19.80              |
|           |         | MID       | QPSK       | 19.12  | 19.17  | 19.15  | 19.80              |
|           |         | HIGH      | QPSK       | 18.97  | 19.06  | 19.01  | 19.80              |
|           | 50      | LOW       | QPSK       | 19.04  | 19.18  | 19.23  | 19.80              |
|           |         | MID       | QPSK       | 19.17  | 19.29  | 19.26  | 19.80              |
|           |         | HIGH      | QPSK       | 19.21  | 19.26  | 19.22  | 19.80              |
|           | 100     | LOW       | QPSK       | 19.12  | 19.19  | 19.16  | 19.80              |
|           |         | LOW       | Q16        | 19.20  | 18.92  | 18.92  | 19.80              |
|           |         | MID       | Q16        | 19.18  | 19.13  | 19.07  | 19.80              |
| 20        | 1       | HIGH      | Q16        | 19.11  | 19.00  | 18.95  | 19.80              |
|           |         | LOW       | Q16        | 19.03  | 19.21  | 19.25  | 19.80              |
|           |         | MID       | Q16        | 19.19  | 19.24  | 19.20  | 19.80              |
|           | 50      | HIGH      | Q16        | 19.17  | 19.24  | 19.19  | 19.80              |
|           |         | LOW       | Q16        | 19.12  | 19.19  | 19.17  | 19.80              |
|           |         | LOW       | 64QAM      | 19.03  | 18.77  | 18.77  | 19.80              |
|           | 1       | MID       | 64QAM      | 19.05  | 19.13  | 18.94  | 19.80              |
|           |         | HIGH      | 64QAM      | 18.90  | 18.94  | 18.97  | 19.80              |
|           |         | LOW       | 64QAM      | 19.05  | 19.25  | 19.13  | 19.80              |
| 20        | 50      | MID       | 64QAM      | 19.11  | 19.34  | 19.03  | 19.80              |
|           |         | HIGH      | 64QAM      | 19.23  | 19.30  | 19.19  | 19.80              |
|           |         | LOW       | 64QAM      | 19.10  | 19.15  | 19.23  | 19.80              |

| LTE B66-State 6 -Ant.0 |         |           |            |        |        |        |                    |
|------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 19.00  | 19.05  | 19.00  | 19.80              |
|                        |         | MID       | QPSK       | 19.14  | 19.15  | 19.17  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.06  | 18.93  | 18.99  | 19.80              |
|                        | 3       | LOW       | QPSK       | 18.98  | 19.26  | 19.02  | 19.80              |
|                        |         | MID       | QPSK       | 19.04  | 19.23  | 19.16  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.21  | 19.07  | 19.24  | 19.80              |
|                        | 6       | LOW       | QPSK       | 19.06  | 19.04  | 19.08  | 19.80              |
|                        | 1.4     | LOW       | Q16        | 18.99  | 18.84  | 18.81  | 19.80              |
|                        |         | MID       | Q16        | 19.26  | 19.07  | 19.11  | 19.80              |
| 1.4                    | 1       | HIGH      | Q16        | 19.01  | 19.10  | 18.89  | 19.80              |
|                        |         | LOW       | Q16        | 19.05  | 19.00  | 19.15  | 19.80              |
|                        |         | MID       | Q16        | 19.27  | 19.24  | 19.26  | 19.80              |
|                        | 3       | HIGH      | Q16        | 19.15  | 19.22  | 19.04  | 19.80              |
|                        |         | LOW       | Q16        | 19.06  | 19.00  | 19.23  | 19.80              |
|                        |         | MID       | Q16        | 19.08  | 19.09  | 19.03  | 19.80              |
|                        | 6       | LOW       | Q16        | 19.06  | 19.00  | 19.23  | 19.80              |
| 1.4                    | 1       | LOW       | 64QAM      | 18.88  | 18.83  | 18.60  | 19.80              |
|                        |         | MID       | 64QAM      | 18.90  | 19.09  | 19.03  | 19.80              |
|                        |         | HIGH      | 64QAM      | 18.81  | 18.98  | 18.93  | 19.80              |
|                        | 3       | LOW       | 64QAM      | 19.01  | 19.08  | 19.02  | 19.80              |
|                        |         | MID       | 64QAM      | 19.00  | 19.38  | 19.13  | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.29  | 19.38  | 19.19  | 19.80              |
|                        | 6       | LOW       | 64QAM      | 19.08  | 19.25  | 19.11  | 19.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 18.96  | 18.76  | 19.00  | 19.80              |
|                        |         | MID       | QPSK       | 18.99  | 19.21  | 19.17  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.06  | 19.08  | 19.09  | 19.80              |
|                        | 8       | LOW       | QPSK       | 18.85  | 19.16  | 19.04  | 19.80              |
|                        |         | MID       | QPSK       | 19.09  | 19.27  | 19.28  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.17  | 19.11  | 19.30  | 19.80              |
|                        | 15      | LOW       | QPSK       | 19.01  | 19.27  | 19.06  | 19.80              |
| 3                      | 1       | LOW       | Q16        | 19.28  | 18.92  | 18.73  | 19.80              |
|                        |         | MID       | Q16        | 19.16  | 19.03  | 19.11  | 19.80              |
|                        |         | HIGH      | Q16        | 19.17  | 18.85  | 18.93  | 19.80              |
|                        | 8       | LOW       | Q16        | 19.03  | 19.27  | 19.13  | 19.80              |
|                        |         | MID       | Q16        | 19.29  | 19.28  | 19.30  | 19.80              |
|                        |         | HIGH      | Q16        | 19.04  | 19.09  | 19.21  | 19.80              |
|                        | 15      | LOW       | Q16        | 19.10  | 19.29  | 18.96  | 19.80              |
| 3                      | 1       | LOW       | 64QAM      | 19.13  | 18.81  | 18.86  | 19.80              |
|                        |         | MID       | 64QAM      | 19.07  | 19.23  | 18.92  | 19.80              |
|                        |         | HIGH      | 64QAM      | 18.88  | 18.86  | 18.88  | 19.80              |
|                        | 8       | LOW       | 64QAM      | 19.09  | 19.31  | 19.19  | 19.80              |
|                        |         | MID       | 64QAM      | 19.07  | 19.34  | 18.97  | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.04  | 19.16  | 19.00  | 19.80              |
|                        | 15      | LOW       | 64QAM      | 19.14  | 18.94  | 19.04  | 19.80              |
| Bandwidth              | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 18.96  | 18.88  | 18.96  | 19.80              |
|                        |         | MID       | QPSK       | 19.12  | 19.25  | 19.05  | 19.80              |
|                        |         | HIGH      | QPSK       | 18.76  | 18.98  | 19.01  | 19.80              |
|                        | 12      | LOW       | QPSK       | 19.04  | 19.10  | 19.21  | 19.80              |
|                        |         | MID       | QPSK       | 19.15  | 19.08  | 19.28  | 19.80              |
|                        |         | HIGH      | QPSK       | 19.04  | 19.18  | 19.01  | 19.80              |
|                        | 25      | LOW       | QPSK       | 19.01  | 19.15  | 19.03  | 19.80              |
| 5                      | 1       | LOW       | Q16        | 19.20  | 18.77  | 18.84  | 19.80              |
|                        |         | MID       | Q16        | 19.18  | 19.19  | 19.09  | 19.80              |
|                        |         | HIGH      | Q16        | 18.96  | 18.94  | 19.01  | 19.80              |
|                        | 12      | LOW       | Q16        | 18.95  | 19.06  | 19.13  | 19.80              |
|                        |         | MID       | Q16        | 19.21  | 19.34  | 19.12  | 19.80              |
|                        |         | HIGH      | Q16        | 19.25  | 19.07  | 19.17  | 19.80              |
|                        | 25      | LOW       | Q16        | 18.93  | 19.09  | 19.25  | 19.80              |
| 5                      | 1       | LOW       | 64QAM      | 18.82  | 18.86  | 18.86  | 19.80              |
|                        |         | MID       | 64QAM      | 18.90  | 18.94  | 18.73  | 19.80              |
|                        |         | HIGH      | 64QAM      | 18.73  | 18.77  | 18.97  | 19.80              |
|                        | 12      | LOW       | 64QAM      | 19.09  | 19.33  | 18.92  | 19.80              |
|                        |         | MID       | 64QAM      | 19.00  | 19.20  | 19.09  | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.23  | 19.30  | 19.17  | 19.80              |
|                        | 25      | LOW       | 64QAM      | 18.95  | 19.00  | 19.29  | 19.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 18.90  | 18.91  | 18.98  | 19.80              |
|           |         | MID       | QPSK       | 19.14  | 18.98  | 19.13  | 19.80              |
|           |         | HIGH      | QPSK       | 19.06  | 18.89  | 18.88  | 19.80              |
|           | 25      | LOW       | QPSK       | 18.87  | 19.12  | 19.29  | 19.80              |
|           |         | MID       | QPSK       | 19.13  | 19.17  | 19.11  | 19.80              |
|           |         | HIGH      | QPSK       | 19.17  | 19.28  | 19.12  | 19.80              |
|           | 50      | LOW       | QPSK       | 19.22  | 19.02  | 18.99  | 19.80              |
|           |         | LOW       | Q16        | 19.28  | 18.96  | 18.81  | 19.80              |
|           |         | MID       | Q16        | 19.14  | 18.98  | 18.92  | 19.80              |
| 10        | 1       | MID       | Q16        | 19.11  | 18.83  | 18.89  | 19.80              |
|           |         | LOW       | Q16        | 18.92  | 19.08  | 19.17  | 19.80              |
|           |         | HIGH      | Q16        | 19.23  | 19.32  | 19.30  | 19.80              |
|           | 25      | LOW       | Q16        | 19.04  | 19.16  | 19.15  | 19.80              |
|           |         | LOW       | Q16        | 19.16  | 19.02  | 19.07  | 19.80              |
|           |         | HIGH      | Q16        | 19.23  | 19.32  | 19.30  | 19.80              |
|           | 50      | LOW       | Q16        | 19.16  | 19.02  | 19.07  | 19.80              |
|           |         | LOW       | 64QAM      | 18.92  | 18.85  | 18.56  | 19.80              |
|           |         | MID       | 64QAM      | 19.11  | 18.96  | 18.92  | 19.80              |
| 10        | 1       | HIGH      | 64QAM      | 18.94  | 19.00  | 18.95  | 19.80              |
|           |         | LOW       | 64QAM      | 18.92  | 19.13  | 19.13  | 19.80              |
|           |         | MID       | 64QAM      | 19.13  | 19.38  | 19.09  | 19.80              |
|           | 25      | HIGH      | 64QAM      | 19.02  | 19.24  | 19.04  | 19.80              |
|           |         | LOW       | 64QAM      | 19.16  | 19.15  | 19.21  | 19.80              |
|           |         | LOW       | 64QAM      | 19.16  | 19.15  | 19.21  | 19.80              |
|           | 50      | LOW       | 64QAM      | 19.16  | 19.15  | 19.21  | 19.80              |
|           |         | LOW       | 64QAM      | 19.16  | 19.15  | 19.21  | 19.80              |
|           |         | LOW       | 64QAM      | 19.16  | 19.15  | 19.21  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 18.79  | 18.93  | 18.79  | 19.80              |
|           |         | MID       | QPSK       | 19.12  | 19.00  | 19.13  | 19.80              |
|           |         | HIGH      | QPSK       | 18.84  | 18.93  | 19.01  | 19.80              |
|           | 36      | LOW       | QPSK       | 19.00  | 19.22  | 19.33  | 19.80              |
|           |         | MID       | QPSK       | 19.19  | 19.39  | 19.09  | 19.80              |
|           |         | HIGH      | QPSK       | 19.15  | 19.36  | 19.32  | 19.80              |
|           | 75      | LOW       | QPSK       | 18.95  | 19.15  | 18.99  | 19.80              |
|           |         | LOW       | Q16        | 19.28  | 18.75  | 18.90  | 19.80              |
|           |         | MID       | Q16        | 19.20  | 19.19  | 19.03  | 19.80              |
| 15        | 1       | HIGH      | Q16        | 18.94  | 18.89  | 19.04  | 19.80              |
|           |         | LOW       | Q16        | 18.92  | 19.11  | 19.29  | 19.80              |
|           |         | MID       | Q16        | 19.29  | 19.30  | 19.05  | 19.80              |
|           | 36      | HIGH      | Q16        | 19.04  | 19.11  | 19.11  | 19.80              |
|           |         | LOW       | Q16        | 18.91  | 19.17  | 19.04  | 19.80              |
|           |         | LOW       | Q16        | 18.91  | 19.17  | 19.04  | 19.80              |
|           | 75      | LOW       | Q16        | 18.91  | 19.17  | 19.04  | 19.80              |
|           |         | LOW       | 64QAM      | 19.07  | 18.81  | 18.66  | 19.80              |
|           |         | MID       | 64QAM      | 19.09  | 19.23  | 19.02  | 19.80              |
| 15        | 1       | HIGH      | 64QAM      | 18.94  | 19.03  | 18.84  | 19.80              |
|           |         | LOW       | 64QAM      | 19.01  | 19.25  | 19.13  | 19.80              |
|           |         | MID       | 64QAM      | 19.15  | 19.22  | 18.86  | 19.80              |
|           | 36      | HIGH      | 64QAM      | 19.33  | 19.22  | 19.02  | 19.80              |
|           |         | LOW       | 64QAM      | 19.20  | 19.09  | 19.13  | 19.80              |
|           |         | LOW       | 64QAM      | 19.20  | 19.09  | 19.13  | 19.80              |
|           | 75      | LOW       | 64QAM      | 19.20  | 19.09  | 19.13  | 19.80              |
|           |         | LOW       | 64QAM      | 19.20  | 19.09  | 19.13  | 19.80              |
|           |         | LOW       | 64QAM      | 19.20  | 19.09  | 19.13  | 19.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 18.98  | 18.97  | 18.94  | 19.80              |
|           |         | MID       | QPSK       | 19.12  | 19.17  | 19.15  | 19.80              |
|           |         | HIGH      | QPSK       | 18.97  | 19.06  | 19.01  | 19.80              |
|           | 50      | LOW       | QPSK       | 19.04  | 19.18  | 19.23  | 19.80              |
|           |         | MID       | QPSK       | 19.17  | 19.29  | 19.26  | 19.80              |
|           |         | HIGH      | QPSK       | 19.21  | 19.26  | 19.22  | 19.80              |
|           | 100     | LOW       | QPSK       | 19.12  | 19.19  | 19.16  | 19.80              |
|           |         | LOW       | Q16        | 19.20  | 18.92  | 18.92  | 19.80              |
|           |         | MID       | Q16        | 19.18  | 19.13  | 19.07  | 19.80              |
| 20        | 1       | HIGH      | Q16        | 19.11  | 19.00  | 18.95  | 19.80              |
|           |         | LOW       | Q16        | 19.03  | 19.21  | 19.25  | 19.80              |
|           |         | MID       | Q16        | 19.19  | 19.24  | 19.20  | 19.80              |
|           | 50      | HIGH      | Q16        | 19.17  | 19.24  | 19.19  | 19.80              |
|           |         | LOW       | Q16        | 19.12  | 19.19  | 19.17  | 19.80              |
|           |         | LOW       | Q16        | 19.12  | 19.19  | 19.17  | 19.80              |
|           | 100     | LOW       | Q16        | 19.12  | 19.19  | 19.17  | 19.80              |
|           |         | LOW       | 64QAM      | 19.03  | 18.77  | 18.77  | 19.80              |
|           |         | MID       | 64QAM      | 19.05  | 19.13  | 18.94  | 19.80              |
| 20        | 1       | HIGH      | 64QAM      | 18.90  | 18.94  | 18.97  | 19.80              |
|           |         | LOW       | 64QAM      | 19.05  | 19.25  | 19.13  | 19.80              |
|           |         | MID       | 64QAM      | 19.11  | 19.34  | 19.03  | 19.80              |
|           | 50      | HIGH      | 64QAM      | 19.23  | 19.30  | 19.19  | 19.80              |
|           |         | LOW       | 64QAM      | 19.10  | 19.15  | 19.23  | 19.80              |
|           |         | LOW       | 64QAM      | 19.10  | 19.15  | 19.23  | 19.80              |
|           | 100     | LOW       | 64QAM      | 19.10  | 19.15  | 19.23  | 19.80              |
|           |         | LOW       | 64QAM      | 19.10  | 19.15  | 19.23  | 19.80              |
|           |         | LOW       | 64QAM      | 19.10  | 19.15  | 19.23  | 19.80              |

| LTE B66-State 1 -Ant.0(NSA) |         |           |            |        |        |        |                    |
|-----------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth                   | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                         | 1       | LOW       | QPSK       | 23.14  | 23.17  | 22.91  | 23.80              |
|                             |         | MID       | QPSK       | 23.10  | 23.33  | 23.20  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.30  | 23.32  | 22.93  | 23.80              |
|                             | 3       | LOW       | QPSK       | 23.23  | 23.37  | 23.16  | 23.80              |
|                             |         | MID       | QPSK       | 23.44  | 23.27  | 23.48  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.38  | 23.38  | 23.21  | 23.80              |
|                             | 6       | LOW       | QPSK       | 22.17  | 22.27  | 22.22  | 22.80              |
|                             | 1       | LOW       | Q16        | 22.62  | 22.29  | 22.62  | 22.80              |
|                             |         | MID       | Q16        | 22.69  | 22.64  | 22.56  | 22.80              |
| HIGH                        |         | Q16       | 22.52      | 22.75  | 22.47  | 22.80  |                    |
| LOW                         |         | Q16       | 22.05      | 22.36  | 22.34  | 22.80  |                    |
| 3                           | MID     | Q16       | 22.21      | 22.34  | 22.17  | 22.80  |                    |
|                             | HIGH    | Q16       | 22.31      | 22.54  | 22.33  | 22.80  |                    |
|                             | 6       | LOW       | Q16        | 21.00  | 21.11  | 21.10  | 21.80              |
|                             | 1.4     | 1         | LOW        | 64QAM  | 21.53  | 21.55  | 21.66              |
| MID                         |         |           | 64QAM      | 21.69  | 21.65  | 21.60  | 21.80              |
| HIGH                        |         |           | 64QAM      | 21.27  | 21.54  | 21.35  | 21.80              |
| 3                           |         | LOW       | 64QAM      | 20.96  | 21.29  | 21.17  | 21.80              |
|                             |         | MID       | 64QAM      | 21.58  | 21.32  | 21.59  | 21.80              |
|                             |         | HIGH      | 64QAM      | 21.29  | 21.32  | 21.01  | 21.80              |
| 6                           |         | LOW       | 64QAM      | 20.24  | 20.46  | 20.55  | 20.80              |
| Bandwidth                   | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                           | 1       | LOW       | QPSK       | 23.28  | 23.10  | 23.09  | 23.80              |
|                             |         | MID       | QPSK       | 23.05  | 23.40  | 23.44  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.02  | 23.18  | 23.05  | 23.80              |
|                             | 8       | LOW       | QPSK       | 22.23  | 22.08  | 22.25  | 22.80              |
|                             |         | MID       | QPSK       | 22.42  | 22.23  | 22.23  | 22.80              |
|                             |         | HIGH      | QPSK       | 22.27  | 22.06  | 22.28  | 22.80              |
|                             | 15      | LOW       | QPSK       | 22.33  | 22.38  | 22.39  | 22.80              |
| 3                           | 1       | LOW       | Q16        | 22.74  | 22.43  | 22.62  | 22.80              |
|                             |         | MID       | Q16        | 22.63  | 22.52  | 22.67  | 22.80              |
|                             |         | HIGH      | Q16        | 22.70  | 22.66  | 22.33  | 22.80              |
|                             | 8       | LOW       | Q16        | 21.12  | 21.23  | 21.23  | 21.80              |
|                             |         | MID       | Q16        | 21.09  | 21.45  | 21.29  | 21.80              |
|                             |         | HIGH      | Q16        | 21.23  | 21.43  | 21.22  | 21.80              |
|                             | 15      | LOW       | Q16        | 21.29  | 21.38  | 21.35  | 21.80              |
| 3                           | 1       | LOW       | 64QAM      | 21.38  | 21.48  | 21.70  | 21.80              |
|                             |         | MID       | 64QAM      | 21.76  | 21.76  | 21.76  | 21.80              |
|                             |         | HIGH      | 64QAM      | 21.29  | 21.73  | 21.35  | 21.80              |
|                             | 8       | LOW       | 64QAM      | 20.12  | 20.27  | 20.03  | 20.80              |
|                             |         | MID       | 64QAM      | 20.46  | 20.30  | 20.69  | 20.80              |
|                             |         | HIGH      | 64QAM      | 20.49  | 20.26  | 19.95  | 20.80              |
|                             | 15      | LOW       | 64QAM      | 20.22  | 20.69  | 20.47  | 20.80              |
| Bandwidth                   | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                           | 1       | LOW       | QPSK       | 23.28  | 22.98  | 23.23  | 23.80              |
|                             |         | MID       | QPSK       | 23.03  | 23.40  | 23.13  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.23  | 23.18  | 23.26  | 23.80              |
|                             | 12      | LOW       | QPSK       | 21.92  | 22.13  | 22.09  | 22.80              |
|                             |         | MID       | QPSK       | 22.19  | 22.54  | 22.28  | 22.80              |
|                             |         | HIGH      | QPSK       | 22.27  | 22.15  | 22.39  | 22.80              |
|                             | 25      | LOW       | QPSK       | 22.33  | 22.29  | 22.33  | 22.80              |
| 5                           | 1       | LOW       | Q16        | 22.61  | 22.49  | 22.37  | 22.80              |
|                             |         | MID       | Q16        | 22.76  | 22.66  | 22.63  | 22.80              |
|                             |         | HIGH      | Q16        | 22.75  | 22.63  | 22.65  | 22.80              |
|                             | 12      | LOW       | Q16        | 21.24  | 21.30  | 21.29  | 21.80              |
|                             |         | MID       | Q16        | 21.09  | 21.19  | 21.25  | 21.80              |
|                             |         | HIGH      | Q16        | 21.33  | 21.41  | 21.12  | 21.80              |
|                             | 25      | LOW       | Q16        | 21.29  | 21.11  | 21.14  | 21.80              |
| 5                           | 1       | LOW       | 64QAM      | 21.33  | 21.42  | 21.70  | 21.80              |
|                             |         | MID       | 64QAM      | 21.74  | 21.78  | 21.56  | 21.80              |
|                             |         | HIGH      | 64QAM      | 21.38  | 21.64  | 21.61  | 21.80              |
|                             | 12      | LOW       | 64QAM      | 20.06  | 20.11  | 20.01  | 20.80              |
|                             |         | MID       | 64QAM      | 20.34  | 20.32  | 20.71  | 20.80              |
|                             |         | HIGH      | 64QAM      | 20.24  | 20.26  | 20.15  | 20.80              |
|                             | 25      | LOW       | 64QAM      | 20.16  | 20.49  | 20.39  | 20.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322       | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.18  | 23.21        | 23.14  | 23.80              |
|           |         | MID       | QPSK       | 22.96  | 23.21        | 23.34  | 23.80              |
|           |         | HIGH      | QPSK       | 22.95  | 23.41        | 23.05  | 23.80              |
|           | 25      | LOW       | QPSK       | 22.05  | 22.44        | 22.25  | 22.80              |
|           |         | MID       | QPSK       | 22.13  | 22.21        | 22.19  | 22.80              |
|           |         | HIGH      | QPSK       | 22.33  | 22.33        | 22.37  | 22.80              |
|           | 50      | LOW       | QPSK       | 22.04  | 22.36        | 22.26  | 22.80              |
|           |         | LOW       | Q16        | 22.67  | 22.43        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.56  | 22.61        | 22.61  | 22.80              |
| 10        | 1       | MID       | Q16        | 22.70  | 22.61        | 22.38  | 22.80              |
|           |         | LOW       | Q16        | 21.05  | 21.34        | 21.23  | 21.80              |
|           |         | HIGH      | Q16        | 21.24  | 21.41        | 21.32  | 21.80              |
|           | 25      | MID       | Q16        | 21.10  | 21.32        | 21.27  | 21.80              |
|           |         | LOW       | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           |         | HIGH      | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.44  | 21.55        | 21.77  | 21.80              |
|           |         | MID       | 64QAM      | 21.71  | 21.62        | 21.71  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.34  | 21.54        | 21.50  | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 19.98  | 20.29        | 20.11  | 20.80              |
|           |         | MID       | 64QAM      | 20.29  | 20.20        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.43  | 20.18        | 20.21  | 20.80              |
|           | 25      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322       | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.07  | 23.03        | 23.07  | 23.80              |
|           |         | MID       | QPSK       | 23.12  | 23.45        | 23.13  | 23.80              |
|           |         | HIGH      | QPSK       | 23.09  | 23.11        | 23.00  | 23.80              |
|           | 36      | LOW       | QPSK       | 22.18  | 22.44        | 22.09  | 22.80              |
|           |         | MID       | QPSK       | 22.31  | 22.39        | 22.17  | 22.80              |
|           |         | HIGH      | QPSK       | 22.15  | 22.15        | 22.26  | 22.80              |
|           | 75      | LOW       | QPSK       | 22.28  | 22.25        | 22.22  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.29        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.60  | 22.73        | 22.74  | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.68  | 22.61        | 22.33  | 22.80              |
|           |         | LOW       | Q16        | 21.10  | 21.40        | 21.16  | 21.80              |
|           |         | MID       | Q16        | 21.07  | 21.32        | 21.32  | 21.80              |
|           | 36      | HIGH      | Q16        | 21.18  | 21.54        | 21.08  | 21.80              |
|           |         | LOW       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           |         | MID       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           | 75      | LOW       | 64QAM      | 21.63  | 21.53        | 21.59  | 21.80              |
|           |         | MID       | 64QAM      | 21.65  | 21.69        | 21.62  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.42  | 21.80        | 21.37  | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 20.20  | 20.25        | 20.17  | 20.80              |
|           |         | MID       | 64QAM      | 20.62  | 20.24        | 20.73  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.27  | 20.28        | 20.05  | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322       | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.16  | 23.19        | 23.16  | 23.80              |
|           |         | MID       | QPSK       | 23.19  | <b>23.40</b> | 23.32  | 23.80              |
|           |         | HIGH      | QPSK       | 23.18  | 23.32        | 23.14  | 23.80              |
|           | 50      | LOW       | QPSK       | 22.14  | 22.33        | 22.34  | 22.80              |
|           |         | MID       | QPSK       | 22.35  | <b>22.43</b> | 22.39  | 22.80              |
|           |         | HIGH      | QPSK       | 22.31  | 22.31        | 22.37  | 22.80              |
|           | 100     | LOW       | QPSK       | 22.26  | <b>22.36</b> | 22.35  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.54        | 22.60  | 22.80              |
|           |         | MID       | Q16        | 22.74  | 22.75        | 22.72  | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.68  | 22.68        | 22.58  | 22.80              |
|           |         | LOW       | Q16        | 21.18  | 21.36        | 21.40  | 21.80              |
|           |         | MID       | Q16        | 21.30  | 21.43        | 21.38  | 21.80              |
|           | 50      | HIGH      | Q16        | 21.29  | 21.43        | 21.31  | 21.80              |
|           |         | LOW       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           |         | MID       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           | 100     | LOW       | 64QAM      | 21.57  | 21.59        | 21.79  | 21.80              |
|           |         | MID       | 64QAM      | 21.78  | 21.78        | 21.80  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.40  | 21.71        | 21.52  | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.18  | 20.19        | 20.23  | 20.80              |
|           |         | MID       | 64QAM      | 20.52  | 20.38        | 20.63  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.47  | 20.40        | 20.17  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |

| LTE B66-State 2 -Ant.0(NSA) |         |           |            |        |        |        |                    |
|-----------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth                   | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                         | 1       | LOW       | QPSK       | 23.14  | 23.17  | 22.91  | 23.80              |
|                             |         | MID       | QPSK       | 23.10  | 23.33  | 23.20  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.30  | 23.32  | 22.93  | 23.80              |
|                             | 3       | LOW       | QPSK       | 23.23  | 23.37  | 23.16  | 23.80              |
|                             |         | MID       | QPSK       | 23.44  | 23.27  | 23.48  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.38  | 23.38  | 23.21  | 23.80              |
|                             | 6       | LOW       | QPSK       | 22.17  | 22.27  | 22.22  | 22.80              |
|                             | 1       | LOW       | Q16        | 22.62  | 22.29  | 22.62  | 22.80              |
|                             |         | MID       | Q16        | 22.69  | 22.64  | 22.56  | 22.80              |
| HIGH                        |         | Q16       | 22.52      | 22.75  | 22.47  | 22.80  |                    |
| LOW                         |         | Q16       | 22.05      | 22.36  | 22.34  | 22.80  |                    |
| 3                           | MID     | Q16       | 22.21      | 22.34  | 22.17  | 22.80  |                    |
|                             | HIGH    | Q16       | 22.31      | 22.54  | 22.33  | 22.80  |                    |
|                             | 6       | LOW       | Q16        | 21.00  | 21.11  | 21.10  | 21.80              |
|                             | 1.4     | 1         | LOW        | 64QAM  | 21.53  | 21.55  | 21.66              |
| MID                         |         |           | 64QAM      | 21.69  | 21.65  | 21.60  | 21.80              |
| HIGH                        |         |           | 64QAM      | 21.27  | 21.54  | 21.35  | 21.80              |
| 3                           |         | LOW       | 64QAM      | 20.96  | 21.29  | 21.17  | 21.80              |
|                             |         | MID       | 64QAM      | 21.58  | 21.32  | 21.59  | 21.80              |
|                             |         | HIGH      | 64QAM      | 21.29  | 21.32  | 21.01  | 21.80              |
| 6                           |         | LOW       | 64QAM      | 20.24  | 20.46  | 20.55  | 20.80              |
| Bandwidth                   | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                           | 1       | LOW       | QPSK       | 23.28  | 23.10  | 23.09  | 23.80              |
|                             |         | MID       | QPSK       | 23.05  | 23.40  | 23.44  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.02  | 23.18  | 23.05  | 23.80              |
|                             | 8       | LOW       | QPSK       | 22.23  | 22.08  | 22.25  | 22.80              |
|                             |         | MID       | QPSK       | 22.42  | 22.23  | 22.23  | 22.80              |
|                             |         | HIGH      | QPSK       | 22.27  | 22.06  | 22.28  | 22.80              |
|                             | 15      | LOW       | QPSK       | 22.33  | 22.38  | 22.39  | 22.80              |
|                             | 1       | LOW       | Q16        | 22.74  | 22.43  | 22.62  | 22.80              |
|                             |         | MID       | Q16        | 22.63  | 22.52  | 22.67  | 22.80              |
| HIGH                        |         | Q16       | 22.70      | 22.66  | 22.33  | 22.80  |                    |
| LOW                         |         | Q16       | 21.12      | 21.23  | 21.23  | 21.80  |                    |
| 8                           | MID     | Q16       | 21.09      | 21.45  | 21.29  | 21.80  |                    |
|                             | HIGH    | Q16       | 21.23      | 21.43  | 21.22  | 21.80  |                    |
|                             | 15      | LOW       | Q16        | 21.29  | 21.38  | 21.35  | 21.80              |
|                             | 3       | 1         | LOW        | 64QAM  | 21.38  | 21.48  | 21.70              |
| MID                         |         |           | 64QAM      | 21.76  | 21.76  | 21.76  | 21.80              |
| HIGH                        |         |           | 64QAM      | 21.29  | 21.73  | 21.35  | 21.80              |
| 8                           |         | LOW       | 64QAM      | 20.12  | 20.27  | 20.03  | 20.80              |
|                             |         | MID       | 64QAM      | 20.46  | 20.30  | 20.69  | 20.80              |
|                             |         | HIGH      | 64QAM      | 20.49  | 20.26  | 19.95  | 20.80              |
| 15                          |         | LOW       | 64QAM      | 20.22  | 20.69  | 20.47  | 20.80              |
| Bandwidth                   | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                           | 1       | LOW       | QPSK       | 23.28  | 22.98  | 23.23  | 23.80              |
|                             |         | MID       | QPSK       | 23.03  | 23.40  | 23.13  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.23  | 23.18  | 23.26  | 23.80              |
|                             | 12      | LOW       | QPSK       | 21.92  | 22.13  | 22.09  | 22.80              |
|                             |         | MID       | QPSK       | 22.19  | 22.54  | 22.28  | 22.80              |
|                             |         | HIGH      | QPSK       | 22.27  | 22.15  | 22.39  | 22.80              |
|                             | 25      | LOW       | QPSK       | 22.33  | 22.29  | 22.33  | 22.80              |
|                             | 1       | LOW       | Q16        | 22.61  | 22.49  | 22.37  | 22.80              |
|                             |         | MID       | Q16        | 22.76  | 22.66  | 22.63  | 22.80              |
| HIGH                        |         | Q16       | 22.75      | 22.63  | 22.65  | 22.80  |                    |
| LOW                         |         | Q16       | 21.24      | 21.30  | 21.29  | 21.80  |                    |
| 12                          | MID     | Q16       | 21.09      | 21.19  | 21.25  | 21.80  |                    |
|                             | HIGH    | Q16       | 21.33      | 21.41  | 21.12  | 21.80  |                    |
|                             | 25      | LOW       | Q16        | 21.29  | 21.11  | 21.14  | 21.80              |
|                             | 5       | 1         | LOW        | 64QAM  | 21.33  | 21.42  | 21.70              |
| MID                         |         |           | 64QAM      | 21.74  | 21.78  | 21.56  | 21.80              |
| HIGH                        |         |           | 64QAM      | 21.38  | 21.64  | 21.61  | 21.80              |
| 12                          |         | LOW       | 64QAM      | 20.06  | 20.11  | 20.01  | 20.80              |
|                             |         | MID       | 64QAM      | 20.34  | 20.32  | 20.71  | 20.80              |
|                             |         | HIGH      | 64QAM      | 20.24  | 20.26  | 20.15  | 20.80              |
| 25                          |         | LOW       | 64QAM      | 20.16  | 20.49  | 20.39  | 20.80              |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322       | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.18  | 23.21        | 23.14  | 23.80              |
|           |         | MID       | QPSK       | 22.96  | 23.21        | 23.34  | 23.80              |
|           |         | HIGH      | QPSK       | 22.95  | 23.41        | 23.05  | 23.80              |
|           | 25      | LOW       | QPSK       | 22.05  | 22.44        | 22.25  | 22.80              |
|           |         | MID       | QPSK       | 22.13  | 22.21        | 22.19  | 22.80              |
|           |         | HIGH      | QPSK       | 22.33  | 22.33        | 22.37  | 22.80              |
|           | 50      | LOW       | QPSK       | 22.04  | 22.36        | 22.26  | 22.80              |
|           |         | LOW       | Q16        | 22.67  | 22.43        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.56  | 22.61        | 22.61  | 22.80              |
| 10        | 1       | MID       | Q16        | 22.70  | 22.61        | 22.38  | 22.80              |
|           |         | LOW       | Q16        | 21.05  | 21.34        | 21.23  | 21.80              |
|           |         | HIGH      | Q16        | 21.24  | 21.41        | 21.32  | 21.80              |
|           | 25      | MID       | Q16        | 21.10  | 21.32        | 21.27  | 21.80              |
|           |         | LOW       | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           |         | HIGH      | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.44  | 21.55        | 21.77  | 21.80              |
|           |         | MID       | 64QAM      | 21.71  | 21.62        | 21.71  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.34  | 21.54        | 21.50  | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 19.98  | 20.29        | 20.11  | 20.80              |
|           |         | MID       | 64QAM      | 20.29  | 20.20        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.43  | 20.18        | 20.21  | 20.80              |
|           | 25      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322       | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.07  | 23.03        | 23.07  | 23.80              |
|           |         | MID       | QPSK       | 23.12  | 23.45        | 23.13  | 23.80              |
|           |         | HIGH      | QPSK       | 23.09  | 23.11        | 23.00  | 23.80              |
|           | 36      | LOW       | QPSK       | 22.18  | 22.44        | 22.09  | 22.80              |
|           |         | MID       | QPSK       | 22.31  | 22.39        | 22.17  | 22.80              |
|           |         | HIGH      | QPSK       | 22.15  | 22.15        | 22.26  | 22.80              |
|           | 75      | LOW       | QPSK       | 22.28  | 22.25        | 22.22  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.29        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.60  | 22.73        | 22.74  | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.68  | 22.61        | 22.33  | 22.80              |
|           |         | LOW       | Q16        | 21.10  | 21.40        | 21.16  | 21.80              |
|           |         | MID       | Q16        | 21.07  | 21.32        | 21.32  | 21.80              |
|           | 36      | HIGH      | Q16        | 21.18  | 21.54        | 21.08  | 21.80              |
|           |         | LOW       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           |         | MID       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           | 75      | LOW       | 64QAM      | 21.63  | 21.53        | 21.59  | 21.80              |
|           |         | MID       | 64QAM      | 21.65  | 21.69        | 21.62  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.42  | 21.80        | 21.37  | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 20.20  | 20.25        | 20.17  | 20.80              |
|           |         | MID       | 64QAM      | 20.62  | 20.24        | 20.73  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.27  | 20.28        | 20.05  | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322       | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.16  | 23.19        | 23.16  | 23.80              |
|           |         | MID       | QPSK       | 23.19  | <b>23.40</b> | 23.32  | 23.80              |
|           |         | HIGH      | QPSK       | 23.18  | 23.32        | 23.14  | 23.80              |
|           | 50      | LOW       | QPSK       | 22.14  | 22.33        | 22.34  | 22.80              |
|           |         | MID       | QPSK       | 22.35  | <b>22.43</b> | 22.39  | 22.80              |
|           |         | HIGH      | QPSK       | 22.31  | 22.31        | 22.37  | 22.80              |
|           | 100     | LOW       | QPSK       | 22.26  | <b>22.36</b> | 22.35  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.54        | 22.60  | 22.80              |
|           |         | MID       | Q16        | 22.74  | 22.75        | 22.72  | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.68  | 22.68        | 22.58  | 22.80              |
|           |         | LOW       | Q16        | 21.18  | 21.36        | 21.40  | 21.80              |
|           |         | MID       | Q16        | 21.30  | 21.43        | 21.38  | 21.80              |
|           | 50      | HIGH      | Q16        | 21.29  | 21.43        | 21.31  | 21.80              |
|           |         | LOW       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           |         | MID       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           | 100     | LOW       | 64QAM      | 21.57  | 21.59        | 21.79  | 21.80              |
|           |         | MID       | 64QAM      | 21.78  | 21.78        | 21.80  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.40  | 21.71        | 21.52  | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.18  | 20.19        | 20.23  | 20.80              |
|           |         | MID       | 64QAM      | 20.52  | 20.38        | 20.63  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.47  | 20.40        | 20.17  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |

| LTE B66-State 3 -Ant.0(NSA) |         |           |            |        |        |        |                    |
|-----------------------------|---------|-----------|------------|--------|--------|--------|--------------------|
| Bandwidth (MHz)             | RB Size | RB offset | Modulation | 131979 | 132322 | 132665 | Tune-up power(dBm) |
| 1.4                         | 1       | LOW       | QPSK       | 23.14  | 23.17  | 22.91  | 23.80              |
|                             |         | MID       | QPSK       | 23.10  | 23.33  | 23.20  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.30  | 23.32  | 22.93  | 23.80              |
|                             | 3       | LOW       | QPSK       | 23.23  | 23.37  | 23.16  | 23.80              |
|                             |         | MID       | QPSK       | 23.44  | 23.27  | 23.48  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.38  | 23.38  | 23.21  | 23.80              |
|                             | 6       | LOW       | QPSK       | 22.17  | 22.27  | 22.22  | 22.80              |
|                             | 1       | LOW       | Q16        | 22.62  | 22.29  | 22.62  | 22.80              |
|                             |         | MID       | Q16        | 22.69  | 22.64  | 22.56  | 22.80              |
| HIGH                        |         | Q16       | 22.52      | 22.75  | 22.47  | 22.80  |                    |
| 1.4                         | 3       | LOW       | Q16        | 22.05  | 22.36  | 22.34  | 22.80              |
|                             |         | MID       | Q16        | 22.21  | 22.34  | 22.17  | 22.80              |
|                             |         | HIGH      | Q16        | 22.31  | 22.54  | 22.33  | 22.80              |
|                             | 6       | LOW       | Q16        | 21.00  | 21.11  | 21.10  | 21.80              |
|                             | 1       | LOW       | 64QAM      | 21.53  | 21.55  | 21.66  | 21.80              |
|                             |         | MID       | 64QAM      | 21.69  | 21.65  | 21.60  | 21.80              |
|                             |         | HIGH      | 64QAM      | 21.27  | 21.54  | 21.35  | 21.80              |
|                             | 3       | LOW       | 64QAM      | 20.96  | 21.29  | 21.17  | 21.80              |
|                             |         | MID       | 64QAM      | 21.58  | 21.32  | 21.59  | 21.80              |
| HIGH                        |         | 64QAM     | 21.29      | 21.32  | 21.01  | 21.80  |                    |
| 6                           | LOW     | 64QAM     | 20.24      | 20.46  | 20.55  | 20.80  |                    |
| Bandwidth (MHz)             | RB Size | RB offset | Modulation | 131987 | 132322 | 132657 | Tune-up power(dBm) |
| 3                           | 1       | LOW       | QPSK       | 23.28  | 23.10  | 23.09  | 23.80              |
|                             |         | MID       | QPSK       | 23.05  | 23.40  | 23.44  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.02  | 23.18  | 23.05  | 23.80              |
|                             | 8       | LOW       | QPSK       | 22.23  | 22.08  | 22.25  | 22.80              |
|                             |         | MID       | QPSK       | 22.42  | 22.23  | 22.23  | 22.80              |
|                             |         | HIGH      | QPSK       | 22.27  | 22.06  | 22.28  | 22.80              |
|                             | 15      | LOW       | QPSK       | 22.33  | 22.38  | 22.39  | 22.80              |
|                             | 1       | LOW       | Q16        | 22.74  | 22.43  | 22.62  | 22.80              |
|                             |         | MID       | Q16        | 22.63  | 22.52  | 22.67  | 22.80              |
| HIGH                        |         | Q16       | 22.70      | 22.66  | 22.33  | 22.80  |                    |
| 3                           | 8       | LOW       | Q16        | 21.12  | 21.23  | 21.23  | 21.80              |
|                             |         | MID       | Q16        | 21.09  | 21.45  | 21.29  | 21.80              |
|                             |         | HIGH      | Q16        | 21.23  | 21.43  | 21.22  | 21.80              |
|                             | 15      | LOW       | Q16        | 21.29  | 21.38  | 21.35  | 21.80              |
|                             | 1       | LOW       | 64QAM      | 21.38  | 21.48  | 21.70  | 21.80              |
|                             |         | MID       | 64QAM      | 21.76  | 21.76  | 21.76  | 21.80              |
|                             |         | HIGH      | 64QAM      | 21.29  | 21.73  | 21.35  | 21.80              |
|                             | 8       | LOW       | 64QAM      | 20.12  | 20.27  | 20.03  | 20.80              |
|                             |         | MID       | 64QAM      | 20.46  | 20.30  | 20.69  | 20.80              |
| HIGH                        |         | 64QAM     | 20.49      | 20.26  | 19.95  | 20.80  |                    |
| 15                          | LOW     | 64QAM     | 20.22      | 20.69  | 20.47  | 20.80  |                    |
| Bandwidth (MHz)             | RB Size | RB offset | Modulation | 131997 | 132322 | 132647 | Tune-up power(dBm) |
| 5                           | 1       | LOW       | QPSK       | 23.28  | 22.98  | 23.23  | 23.80              |
|                             |         | MID       | QPSK       | 23.03  | 23.40  | 23.13  | 23.80              |
|                             |         | HIGH      | QPSK       | 23.23  | 23.18  | 23.26  | 23.80              |
|                             | 12      | LOW       | QPSK       | 21.92  | 22.13  | 22.09  | 22.80              |
|                             |         | MID       | QPSK       | 22.19  | 22.54  | 22.28  | 22.80              |
|                             |         | HIGH      | QPSK       | 22.27  | 22.15  | 22.39  | 22.80              |
|                             | 25      | LOW       | QPSK       | 22.33  | 22.29  | 22.33  | 22.80              |
|                             | 1       | LOW       | Q16        | 22.61  | 22.49  | 22.37  | 22.80              |
|                             |         | MID       | Q16        | 22.76  | 22.66  | 22.63  | 22.80              |
| HIGH                        |         | Q16       | 22.75      | 22.63  | 22.65  | 22.80  |                    |
| 5                           | 12      | LOW       | Q16        | 21.24  | 21.30  | 21.29  | 21.80              |
|                             |         | MID       | Q16        | 21.09  | 21.19  | 21.25  | 21.80              |
|                             |         | HIGH      | Q16        | 21.33  | 21.41  | 21.12  | 21.80              |
|                             | 25      | LOW       | Q16        | 21.29  | 21.11  | 21.14  | 21.80              |
|                             | 1       | LOW       | 64QAM      | 21.33  | 21.42  | 21.70  | 21.80              |
|                             |         | MID       | 64QAM      | 21.74  | 21.78  | 21.56  | 21.80              |
|                             |         | HIGH      | 64QAM      | 21.38  | 21.64  | 21.61  | 21.80              |
|                             | 12      | LOW       | 64QAM      | 20.06  | 20.11  | 20.01  | 20.80              |
|                             |         | MID       | 64QAM      | 20.34  | 20.32  | 20.71  | 20.80              |
| HIGH                        |         | 64QAM     | 20.24      | 20.26  | 20.15  | 20.80  |                    |
| 25                          | LOW     | 64QAM     | 20.16      | 20.49  | 20.39  | 20.80  |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322       | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 23.18  | 23.21        | 23.14  | 23.80              |
|           |         | MID       | QPSK       | 22.96  | 23.21        | 23.34  | 23.80              |
|           |         | HIGH      | QPSK       | 22.95  | 23.41        | 23.05  | 23.80              |
|           | 25      | LOW       | QPSK       | 22.05  | 22.44        | 22.25  | 22.80              |
|           |         | MID       | QPSK       | 22.13  | 22.21        | 22.19  | 22.80              |
|           |         | HIGH      | QPSK       | 22.33  | 22.33        | 22.37  | 22.80              |
|           | 50      | LOW       | QPSK       | 22.04  | 22.36        | 22.26  | 22.80              |
|           |         | LOW       | Q16        | 22.67  | 22.43        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.56  | 22.61        | 22.61  | 22.80              |
| 10        | 1       | MID       | Q16        | 22.70  | 22.61        | 22.38  | 22.80              |
|           |         | LOW       | Q16        | 21.05  | 21.34        | 21.23  | 21.80              |
|           |         | HIGH      | Q16        | 21.24  | 21.41        | 21.32  | 21.80              |
|           | 25      | MID       | Q16        | 21.10  | 21.32        | 21.27  | 21.80              |
|           |         | LOW       | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           |         | HIGH      | Q16        | 21.10  | 21.25        | 21.12  | 21.80              |
|           | 50      | LOW       | 64QAM      | 21.44  | 21.55        | 21.77  | 21.80              |
|           |         | MID       | 64QAM      | 21.71  | 21.62        | 21.71  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.34  | 21.54        | 21.50  | 21.80              |
| 10        | 1       | LOW       | 64QAM      | 19.98  | 20.29        | 20.11  | 20.80              |
|           |         | MID       | 64QAM      | 20.29  | 20.20        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.43  | 20.18        | 20.21  | 20.80              |
|           | 25      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.57        | 20.59  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322       | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 23.07  | 23.03        | 23.07  | 23.80              |
|           |         | MID       | QPSK       | 23.12  | 23.45        | 23.13  | 23.80              |
|           |         | HIGH      | QPSK       | 23.09  | 23.11        | 23.00  | 23.80              |
|           | 36      | LOW       | QPSK       | 22.18  | 22.44        | 22.09  | 22.80              |
|           |         | MID       | QPSK       | 22.31  | 22.39        | 22.17  | 22.80              |
|           |         | HIGH      | QPSK       | 22.15  | 22.15        | 22.26  | 22.80              |
|           | 75      | LOW       | QPSK       | 22.28  | 22.25        | 22.22  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.29        | 22.53  | 22.80              |
|           |         | MID       | Q16        | 22.60  | 22.73        | 22.74  | 22.80              |
| 15        | 1       | HIGH      | Q16        | 22.68  | 22.61        | 22.33  | 22.80              |
|           |         | LOW       | Q16        | 21.10  | 21.40        | 21.16  | 21.80              |
|           |         | MID       | Q16        | 21.07  | 21.32        | 21.32  | 21.80              |
|           | 36      | HIGH      | Q16        | 21.18  | 21.54        | 21.08  | 21.80              |
|           |         | LOW       | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           |         | HIGH      | Q16        | 21.25  | 21.36        | 21.08  | 21.80              |
|           | 75      | LOW       | 64QAM      | 21.63  | 21.53        | 21.59  | 21.80              |
|           |         | MID       | 64QAM      | 21.65  | 21.69        | 21.62  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.42  | 21.80        | 21.37  | 21.80              |
| 15        | 1       | LOW       | 64QAM      | 20.20  | 20.25        | 20.17  | 20.80              |
|           |         | MID       | 64QAM      | 20.62  | 20.24        | 20.73  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.27  | 20.28        | 20.05  | 20.80              |
|           | 36      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           | 75      | LOW       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | MID       | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.10  | 20.55        | 20.43  | 20.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322       | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 23.16  | 23.19        | 23.16  | 23.80              |
|           |         | MID       | QPSK       | 23.19  | <b>23.40</b> | 23.32  | 23.80              |
|           |         | HIGH      | QPSK       | 23.18  | 23.32        | 23.14  | 23.80              |
|           | 50      | LOW       | QPSK       | 22.14  | 22.33        | 22.34  | 22.80              |
|           |         | MID       | QPSK       | 22.35  | <b>22.43</b> | 22.39  | 22.80              |
|           |         | HIGH      | QPSK       | 22.31  | 22.31        | 22.37  | 22.80              |
|           | 100     | LOW       | QPSK       | 22.26  | <b>22.36</b> | 22.35  | 22.80              |
|           |         | LOW       | Q16        | 22.76  | 22.54        | 22.60  | 22.80              |
|           |         | MID       | Q16        | 22.74  | 22.75        | 22.72  | 22.80              |
| 20        | 1       | HIGH      | Q16        | 22.68  | 22.68        | 22.58  | 22.80              |
|           |         | LOW       | Q16        | 21.18  | 21.36        | 21.40  | 21.80              |
|           |         | MID       | Q16        | 21.30  | 21.43        | 21.38  | 21.80              |
|           | 50      | HIGH      | Q16        | 21.29  | 21.43        | 21.31  | 21.80              |
|           |         | LOW       | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           |         | HIGH      | Q16        | 21.23  | 21.34        | 21.31  | 21.80              |
|           | 100     | LOW       | 64QAM      | 21.57  | 21.59        | 21.79  | 21.80              |
|           |         | MID       | 64QAM      | 21.78  | 21.78        | 21.80  | 21.80              |
|           |         | HIGH      | 64QAM      | 21.40  | 21.71        | 21.52  | 21.80              |
| 20        | 1       | LOW       | 64QAM      | 20.18  | 20.19        | 20.23  | 20.80              |
|           |         | MID       | 64QAM      | 20.52  | 20.38        | 20.63  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.47  | 20.40        | 20.17  | 20.80              |
|           | 50      | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           | 100     | LOW       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | MID       | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |
|           |         | HIGH      | 64QAM      | 20.18  | 20.63        | 20.55  | 20.80              |

| LTE B66-State 4 -Ant.0(NSA) |           |           |            |            |        |        |                    |                    |
|-----------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth                   | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                         | 1         | LOW       | QPSK       | 17.57      | 17.41  | 17.33  | 18.30              |                    |
|                             |           | MID       | QPSK       | 17.64      | 17.74  | 17.74  | 18.30              |                    |
|                             |           | HIGH      | QPSK       | 17.59      | 17.54  | 17.36  | 18.30              |                    |
|                             | 3         | LOW       | QPSK       | 17.64      | 17.81  | 17.62  | 18.30              |                    |
|                             |           | MID       | QPSK       | 17.65      | 17.90  | 17.78  | 18.30              |                    |
|                             |           | HIGH      | QPSK       | 17.70      | 17.89  | 17.63  | 18.30              |                    |
|                             | 6         | LOW       | QPSK       | 17.63      | 17.90  | 17.73  | 18.30              |                    |
|                             | 1.4       | 1         | LOW        | Q16        | 17.78  | 17.87  | 17.61              | 18.30              |
|                             |           |           | MID        | Q16        | 17.80  | 17.75  | 17.72              | 18.30              |
| HIGH                        |           |           | Q16        | 17.49      | 17.55  | 17.68  | 18.30              |                    |
| 3                           |           | LOW       | Q16        | 17.43      | 17.99  | 17.55  | 18.30              |                    |
|                             |           | MID       | Q16        | 17.68      | 17.81  | 17.94  | 18.30              |                    |
| 6                           | HIGH      | Q16       | 17.74      | 17.88      | 17.75  | 18.30  |                    |                    |
| 1.4                         | 1         | LOW       | Q16        | 17.51      | 17.63  | 17.53  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.80      | 17.76  | 17.73  | 18.30              |                    |
|                             |           | MID       | 64QAM      | 17.87      | 17.66  | 17.84  | 18.30              |                    |
|                             | 3         | HIGH      | 64QAM      | 17.61      | 17.72  | 17.66  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.53      | 17.70  | 17.73  | 18.30              |                    |
|                             |           | MID       | 64QAM      | 17.42      | 17.72  | 17.64  | 18.30              |                    |
|                             | 6         | HIGH      | 64QAM      | 17.58      | 17.92  | 17.73  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.81      | 17.61  | 17.47  | 18.30              |                    |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                           | 1         | LOW       | QPSK       | 17.50      | 17.66  | 17.34  | 18.30              |                    |
|                             |           | MID       | QPSK       | 17.68      | 17.71  | 17.80  | 18.30              |                    |
|                             |           | HIGH      | QPSK       | 17.59      | 17.58  | 17.53  | 18.30              |                    |
|                             | 8         | LOW       | QPSK       | 17.64      | 17.82  | 17.56  | 18.30              |                    |
|                             |           | MID       | QPSK       | 17.73      | 17.96  | 17.85  | 18.30              |                    |
|                             |           | HIGH      | QPSK       | 17.61      | 17.89  | 17.52  | 18.30              |                    |
|                             | 15        | LOW       | QPSK       | 17.85      | 17.72  | 17.78  | 18.30              |                    |
|                             | 3         | 1         | LOW        | Q16        | 17.92  | 17.80  | 17.56              | 18.30              |
|                             |           |           | MID        | Q16        | 17.76  | 17.77  | 17.77              | 18.30              |
| HIGH                        |           |           | Q16        | 17.73      | 17.69  | 17.64  | 18.30              |                    |
| 8                           |           | LOW       | Q16        | 17.61      | 17.90  | 17.71  | 18.30              |                    |
|                             |           | MID       | Q16        | 17.73      | 17.81  | 18.03  | 18.30              |                    |
| 15                          | HIGH      | Q16       | 17.63      | 17.63      | 17.59  | 18.30  |                    |                    |
| 3                           | 1         | LOW       | Q16        | 17.58      | 17.74  | 17.56  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.53      | 17.92  | 17.84  | 18.30              |                    |
|                             |           | MID       | 64QAM      | 17.65      | 17.70  | 17.89  | 18.30              |                    |
|                             | 8         | HIGH      | 64QAM      | 17.75      | 17.90  | 17.61  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.71      | 17.89  | 17.84  | 18.30              |                    |
|                             |           | MID       | 64QAM      | 17.49      | 17.74  | 17.46  | 18.30              |                    |
|                             | 15        | HIGH      | 64QAM      | 17.72      | 17.83  | 17.64  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.61      | 17.63  | 17.63  | 18.30              |                    |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                           | 1         | LOW       | QPSK       | 17.55      | 17.38  | 17.33  | 18.30              |                    |
|                             |           | MID       | QPSK       | 17.80      | 17.63  | 17.67  | 18.30              |                    |
|                             |           | HIGH      | QPSK       | 17.53      | 17.70  | 17.39  | 18.30              |                    |
|                             | 12        | LOW       | QPSK       | 17.62      | 17.93  | 17.83  | 18.30              |                    |
|                             |           | MID       | QPSK       | 17.89      | 17.90  | 17.83  | 18.30              |                    |
|                             |           | HIGH      | QPSK       | 17.82      | 17.66  | 17.67  | 18.30              |                    |
|                             | 25        | LOW       | QPSK       | 17.65      | 17.94  | 17.89  | 18.30              |                    |
|                             | 5         | 1         | LOW        | Q16        | 17.71  | 17.91  | 17.72              | 18.30              |
|                             |           |           | MID        | Q16        | 18.03  | 17.93  | 17.72              | 18.30              |
| HIGH                        |           |           | Q16        | 17.77      | 17.43  | 17.49  | 18.30              |                    |
| 12                          |           | LOW       | Q16        | 17.59      | 17.90  | 17.53  | 18.30              |                    |
|                             |           | MID       | Q16        | 17.77      | 17.84  | 17.94  | 18.30              |                    |
| 25                          | HIGH      | Q16       | 17.74      | 17.81      | 17.61  | 18.30  |                    |                    |
| 5                           | 1         | LOW       | Q16        | 17.48      | 17.77  | 17.54  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.76      | 17.63  | 17.62  | 18.30              |                    |
|                             |           | MID       | 64QAM      | 17.90      | 17.50  | 17.78  | 18.30              |                    |
|                             | 12        | HIGH      | 64QAM      | 17.52      | 17.99  | 17.57  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.60      | 17.72  | 17.68  | 18.30              |                    |
|                             |           | MID       | 64QAM      | 17.38      | 17.97  | 17.66  | 18.30              |                    |
|                             | 25        | HIGH      | 64QAM      | 17.59      | 17.94  | 17.88  | 18.30              |                    |
|                             |           | LOW       | 64QAM      | 17.72      | 17.52  | 17.41  | 18.30              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 17.57  | 17.50  | 17.54  | 18.30              |
|           |         | MID       | QPSK       | 17.66  | 17.79  | 17.71  | 18.30              |
|           |         | HIGH      | QPSK       | 17.38  | 17.58  | 17.39  | 18.30              |
|           | 25      | LOW       | QPSK       | 17.73  | 17.90  | 17.69  | 18.30              |
|           |         | MID       | QPSK       | 17.74  | 17.99  | 17.72  | 18.30              |
|           |         | HIGH      | QPSK       | 17.66  | 17.72  | 17.67  | 18.30              |
|           | 50      | LOW       | QPSK       | 17.83  | 17.90  | 17.94  | 18.30              |
|           |         | LOW       | Q16        | 17.65  | 17.82  | 17.72  | 18.30              |
|           |         | MID       | Q16        | 17.85  | 17.83  | 17.64  | 18.30              |
| 10        | 1       | MID       | Q16        | 17.49  | 17.51  | 17.72  | 18.30              |
|           |         | LOW       | Q16        | 17.66  | 17.74  | 17.57  | 18.30              |
|           |         | MID       | Q16        | 17.61  | 17.95  | 17.78  | 18.30              |
|           | 25      | HIGH      | Q16        | 17.72  | 17.72  | 17.55  | 18.30              |
|           |         | LOW       | Q16        | 17.46  | 17.68  | 17.67  | 18.30              |
|           |         | LOW       | 64QAM      | 17.53  | 17.85  | 17.75  | 18.30              |
|           | 1       | MID       | 64QAM      | 17.83  | 17.59  | 17.91  | 18.30              |
|           |         | HIGH      | 64QAM      | 17.49  | 17.92  | 17.64  | 18.30              |
|           |         | LOW       | 64QAM      | 17.57  | 17.73  | 17.55  | 18.30              |
| 10        | 25      | MID       | 64QAM      | 17.63  | 17.92  | 17.62  | 18.30              |
|           |         | HIGH      | 64QAM      | 17.49  | 17.86  | 17.82  | 18.30              |
|           |         | LOW       | 64QAM      | 17.81  | 17.45  | 17.55  | 18.30              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 17.71  | 17.50  | 17.43  | 18.30              |
|           |         | MID       | QPSK       | 17.64  | 17.87  | 17.87  | 18.30              |
|           |         | HIGH      | QPSK       | 17.57  | 17.61  | 17.36  | 18.30              |
|           | 36      | LOW       | QPSK       | 17.50  | 17.84  | 17.72  | 18.30              |
|           |         | MID       | QPSK       | 17.71  | 17.94  | 17.71  | 18.30              |
|           |         | HIGH      | QPSK       | 17.73  | 17.88  | 17.70  | 18.30              |
|           | 75      | LOW       | QPSK       | 17.74  | 17.99  | 17.94  | 18.30              |
|           |         | LOW       | Q16        | 17.71  | 17.75  | 17.44  | 18.30              |
|           |         | MID       | Q16        | 17.87  | 17.83  | 17.79  | 18.30              |
| 15        | 1       | HIGH      | Q16        | 17.73  | 17.53  | 17.64  | 18.30              |
|           |         | LOW       | Q16        | 17.70  | 17.96  | 17.69  | 18.30              |
|           |         | MID       | Q16        | 17.71  | 17.97  | 17.91  | 18.30              |
|           | 36      | HIGH      | Q16        | 17.58  | 17.85  | 17.82  | 18.30              |
|           |         | LOW       | Q16        | 17.71  | 17.65  | 17.53  | 18.30              |
|           |         | LOW       | 64QAM      | 17.66  | 17.69  | 17.69  | 18.30              |
|           | 1       | MID       | 64QAM      | 17.73  | 17.49  | 17.80  | 18.30              |
|           |         | HIGH      | 64QAM      | 17.77  | 17.88  | 17.52  | 18.30              |
|           |         | LOW       | 64QAM      | 17.67  | 17.82  | 17.75  | 18.30              |
| 15        | 36      | MID       | 64QAM      | 17.45  | 17.90  | 17.45  | 18.30              |
|           |         | HIGH      | 64QAM      | 17.58  | 17.83  | 17.88  | 18.30              |
|           |         | LOW       | 64QAM      | 17.69  | 17.58  | 17.41  | 18.30              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 17.66  | 17.57  | 17.50  | 18.30              |
|           |         | MID       | QPSK       | 17.73  | 17.83  | 17.78  | 18.30              |
|           |         | HIGH      | QPSK       | 17.57  | 17.70  | 17.46  | 18.30              |
|           | 50      | LOW       | QPSK       | 17.69  | 17.86  | 17.76  | 18.30              |
|           |         | MID       | QPSK       | 17.85  | 17.92  | 17.83  | 18.30              |
|           |         | HIGH      | QPSK       | 17.77  | 17.84  | 17.63  | 18.30              |
|           | 100     | LOW       | QPSK       | 17.81  | 17.90  | 17.85  | 18.30              |
|           |         | LOW       | Q16        | 17.85  | 17.89  | 17.63  | 18.30              |
|           |         | MID       | Q16        | 17.96  | 17.88  | 17.84  | 18.30              |
| 20        | 1       | HIGH      | Q16        | 17.68  | 17.62  | 17.68  | 18.30              |
|           |         | LOW       | Q16        | 17.61  | 17.94  | 17.73  | 18.30              |
|           |         | MID       | Q16        | 17.75  | 17.97  | 17.98  | 18.30              |
|           | 50      | HIGH      | Q16        | 17.70  | 17.81  | 17.75  | 18.30              |
|           |         | LOW       | Q16        | 17.62  | 17.79  | 17.72  | 18.30              |
|           |         | LOW       | 64QAM      | 17.71  | 17.83  | 17.80  | 18.30              |
|           | 1       | MID       | 64QAM      | 17.85  | 17.68  | 17.89  | 18.30              |
|           |         | HIGH      | 64QAM      | 17.68  | 17.92  | 17.68  | 18.30              |
|           |         | LOW       | 64QAM      | 17.62  | 17.84  | 17.75  | 18.30              |
| 20        | 50      | MID       | 64QAM      | 17.54  | 17.88  | 17.64  | 18.30              |
|           |         | HIGH      | 64QAM      | 17.63  | 17.90  | 17.84  | 18.30              |
|           |         | LOW       | 64QAM      | 17.81  | 17.63  | 17.59  | 18.30              |

| LTE B66-State 5 -Ant.0(NSA) |           |           |            |            |        |        |                    |                    |
|-----------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth                   | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                         | 1         | LOW       | QPSK       | 16.18      | 16.19  | 16.04  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.27      | 16.39  | 16.17  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.27      | 16.32  | 16.09  | 16.80              |                    |
|                             | 3         | LOW       | QPSK       | 16.06      | 16.35  | 16.01  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.35      | 16.40  | 16.52  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.09      | 16.07  | 16.09  | 16.80              |                    |
|                             | 6         | LOW       | QPSK       | 16.39      | 16.33  | 16.17  | 16.80              |                    |
|                             | 1.4       | 1         | LOW        | Q16        | 16.27  | 16.02  | 16.35              | 16.80              |
|                             |           |           | MID        | Q16        | 16.36  | 16.31  | 16.29              | 16.80              |
| HIGH                        |           |           | Q16        | 16.08      | 16.25  | 16.30  | 16.80              |                    |
| 3                           |           | LOW       | Q16        | 16.15      | 16.17  | 16.12  | 16.80              |                    |
|                             |           | MID       | Q16        | 16.40      | 16.14  | 16.45  | 16.80              |                    |
| 6                           | HIGH      | Q16       | 16.07      | 16.25      | 16.35  | 16.80  |                    |                    |
| 1.4                         | 1         | LOW       | Q16        | 16.25      | 16.47  | 15.98  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 16.31      | 16.34  | 16.17  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.22      | 16.53  | 16.20  | 16.80              |                    |
|                             | 3         | LOW       | 64QAM      | 16.16      | 16.14  | 16.47  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 15.98      | 16.19  | 16.16  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.12      | 16.22  | 16.34  | 16.80              |                    |
|                             | 6         | LOW       | 64QAM      | 16.17      | 16.06  | 16.07  | 16.80              |                    |
|                             | 6         | LOW       | 64QAM      | 16.22      | 16.02  | 16.12  | 16.80              |                    |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                           | 1         | LOW       | QPSK       | 16.13      | 16.15  | 16.06  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.14      | 16.35  | 16.35  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.16      | 16.32  | 16.11  | 16.80              |                    |
|                             | 8         | LOW       | QPSK       | 16.25      | 16.19  | 16.08  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.42      | 16.54  | 16.32  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.12      | 16.12  | 16.14  | 16.80              |                    |
|                             | 15        | LOW       | QPSK       | 16.18      | 16.30  | 16.23  | 16.80              |                    |
|                             | 3         | 1         | LOW        | Q16        | 16.38  | 16.13  | 16.17              | 16.80              |
|                             |           |           | MID        | Q16        | 16.28  | 16.39  | 16.34              | 16.80              |
| HIGH                        |           |           | Q16        | 16.25      | 16.33  | 16.28  | 16.80              |                    |
| 8                           |           | LOW       | Q16        | 16.01      | 16.20  | 16.07  | 16.80              |                    |
|                             |           | MID       | Q16        | 16.35      | 16.28  | 16.40  | 16.80              |                    |
| 15                          | HIGH      | Q16       | 16.28      | 16.18      | 16.33  | 16.80  |                    |                    |
| 3                           | 1         | LOW       | Q16        | 16.15      | 16.44  | 16.21  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 16.41      | 16.18  | 16.04  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.44      | 16.57  | 16.17  | 16.80              |                    |
|                             | 8         | LOW       | 64QAM      | 16.16      | 16.17  | 16.40  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 15.94      | 16.11  | 16.14  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.02      | 16.26  | 16.33  | 16.80              |                    |
|                             | 15        | LOW       | 64QAM      | 16.33      | 16.16  | 16.22  | 16.80              |                    |
|                             | 15        | LOW       | 64QAM      | 16.14      | 15.94  | 16.13  | 16.80              |                    |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                           | 1         | LOW       | QPSK       | 16.10      | 16.20  | 16.06  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.28      | 16.40  | 16.40  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.03      | 16.16  | 16.07  | 16.80              |                    |
|                             | 12        | LOW       | QPSK       | 16.27      | 16.17  | 16.01  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.35      | 16.29  | 16.42  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.21      | 16.12  | 16.07  | 16.80              |                    |
|                             | 25        | LOW       | QPSK       | 16.42      | 16.24  | 16.26  | 16.80              |                    |
|                             | 5         | 1         | LOW        | Q16        | 16.17  | 16.11  | 16.16              | 16.80              |
|                             |           |           | MID        | Q16        | 16.39  | 16.39  | 16.49              | 16.80              |
| HIGH                        |           |           | Q16        | 16.28      | 16.48  | 16.32  | 16.80              |                    |
| 12                          |           | LOW       | Q16        | 16.05      | 16.36  | 16.25  | 16.80              |                    |
|                             |           | MID       | Q16        | 16.17      | 16.22  | 16.47  | 16.80              |                    |
| 25                          | HIGH      | Q16       | 16.19      | 16.25      | 16.22  | 16.80  |                    |                    |
| 5                           | 1         | LOW       | Q16        | 16.33      | 16.24  | 16.16  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 16.28      | 16.11  | 16.27  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.24      | 16.55  | 16.05  | 16.80              |                    |
|                             | 12        | LOW       | 64QAM      | 16.19      | 16.06  | 16.24  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 15.93      | 16.11  | 16.19  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.15      | 16.18  | 16.29  | 16.80              |                    |
|                             | 25        | LOW       | 64QAM      | 16.21      | 16.24  | 16.14  | 16.80              |                    |
|                             | 25        | LOW       | 64QAM      | 16.17      | 15.97  | 16.23  | 16.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 16.07  | 16.15  | 15.96  | 16.80              |
|           |         | MID       | QPSK       | 16.20  | 16.40  | 16.34  | 16.80              |
|           |         | HIGH      | QPSK       | 16.05  | 16.16  | 16.12  | 16.80              |
|           | 25      | LOW       | QPSK       | 16.24  | 16.12  | 16.01  | 16.80              |
|           |         | MID       | QPSK       | 16.42  | 16.54  | 16.42  | 16.80              |
|           |         | HIGH      | QPSK       | 16.20  | 16.02  | 16.17  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.27  | 16.32  | 16.41  | 16.80              |
|           |         | LOW       | Q16        | 16.38  | 15.98  | 16.20  | 16.80              |
|           |         | MID       | Q16        | 16.29  | 16.45  | 16.37  | 16.80              |
| 10        | 1       | MID       | Q16        | 16.21  | 16.40  | 16.12  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.40  | 16.22  | 16.80              |
|           |         | HIGH      | Q16        | 16.27  | 16.30  | 16.40  | 16.80              |
|           | 25      | LOW       | Q16        | 16.27  | 16.15  | 16.41  | 16.80              |
|           |         | MID       | Q16        | 16.27  | 16.34  | 16.19  | 16.80              |
|           |         | HIGH      | Q16        | 16.27  | 16.34  | 16.19  | 16.80              |
|           | 50      | LOW       | Q16        | 16.27  | 16.34  | 16.19  | 16.80              |
|           |         | LOW       | 64QAM      | 16.34  | 16.24  | 16.22  | 16.80              |
|           |         | MID       | 64QAM      | 16.21  | 16.45  | 16.07  | 16.80              |
| 10        | 1       | HIGH      | 64QAM      | 16.32  | 16.09  | 16.42  | 16.80              |
|           |         | LOW       | 64QAM      | 16.10  | 16.31  | 16.19  | 16.80              |
|           |         | MID       | 64QAM      | 16.18  | 16.26  | 16.31  | 16.80              |
|           | 25      | HIGH      | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
|           |         | LOW       | 64QAM      | 16.08  | 16.14  | 16.10  | 16.80              |
|           |         | MID       | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
|           | 50      | LOW       | 64QAM      | 16.08  | 16.14  | 16.10  | 16.80              |
|           |         | MID       | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 15.98  | 16.06  | 15.91  | 16.80              |
|           |         | MID       | QPSK       | 16.27  | 16.55  | 16.30  | 16.80              |
|           |         | HIGH      | QPSK       | 16.05  | 16.18  | 16.09  | 16.80              |
|           | 36      | LOW       | QPSK       | 16.11  | 16.34  | 16.19  | 16.80              |
|           |         | MID       | QPSK       | 16.35  | 16.34  | 16.26  | 16.80              |
|           |         | HIGH      | QPSK       | 16.18  | 16.26  | 16.25  | 16.80              |
|           | 75      | LOW       | QPSK       | 16.32  | 16.48  | 16.20  | 16.80              |
|           |         | LOW       | Q16        | 16.35  | 15.92  | 16.19  | 16.80              |
|           |         | MID       | Q16        | 16.29  | 16.44  | 16.37  | 16.80              |
| 15        | 1       | HIGH      | Q16        | 16.08  | 16.41  | 16.07  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.30  | 16.19  | 16.80              |
|           |         | MID       | Q16        | 16.25  | 16.30  | 16.38  | 16.80              |
|           | 36      | HIGH      | Q16        | 16.07  | 16.15  | 16.23  | 16.80              |
|           |         | LOW       | Q16        | 16.27  | 16.21  | 16.01  | 16.80              |
|           |         | MID       | Q16        | 16.27  | 16.21  | 16.01  | 16.80              |
|           | 75      | LOW       | Q16        | 16.27  | 16.21  | 16.01  | 16.80              |
|           |         | LOW       | 64QAM      | 16.31  | 16.36  | 16.17  | 16.80              |
|           |         | MID       | 64QAM      | 16.22  | 16.42  | 16.17  | 16.80              |
| 15        | 1       | HIGH      | 64QAM      | 16.27  | 16.16  | 16.29  | 16.80              |
|           |         | LOW       | 64QAM      | 16.04  | 16.28  | 16.17  | 16.80              |
|           |         | MID       | 64QAM      | 16.12  | 16.02  | 16.15  | 16.80              |
|           | 36      | HIGH      | 64QAM      | 16.31  | 16.19  | 16.07  | 16.80              |
|           |         | LOW       | 64QAM      | 15.96  | 15.94  | 16.28  | 16.80              |
|           |         | MID       | 64QAM      | 16.22  | 16.42  | 16.17  | 16.80              |
|           | 75      | LOW       | 64QAM      | 15.96  | 15.94  | 16.28  | 16.80              |
|           |         | MID       | 64QAM      | 16.22  | 16.42  | 16.17  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.27  | 16.16  | 16.29  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 16.13  | 16.17  | 16.01  | 16.80              |
|           |         | MID       | QPSK       | 16.25  | 16.47  | 16.32  | 16.80              |
|           |         | HIGH      | QPSK       | 16.21  | 16.29  | 16.09  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.22  | 16.27  | 16.19  | 16.80              |
|           |         | MID       | QPSK       | 16.35  | 16.47  | 16.44  | 16.80              |
|           |         | HIGH      | QPSK       | 16.15  | 16.18  | 16.22  | 16.80              |
|           | 100     | LOW       | QPSK       | 16.34  | 16.40  | 16.33  | 16.80              |
|           |         | LOW       | Q16        | 16.30  | 16.08  | 16.27  | 16.80              |
|           |         | MID       | Q16        | 16.44  | 16.47  | 16.47  | 16.80              |
| 20        | 1       | HIGH      | Q16        | 16.23  | 16.43  | 16.25  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.33  | 16.22  | 16.80              |
|           |         | MID       | Q16        | 16.35  | 16.30  | 16.40  | 16.80              |
|           | 50      | HIGH      | Q16        | 16.22  | 16.33  | 16.33  | 16.80              |
|           |         | LOW       | Q16        | 16.25  | 16.39  | 16.16  | 16.80              |
|           |         | MID       | Q16        | 16.25  | 16.39  | 16.16  | 16.80              |
|           | 100     | LOW       | Q16        | 16.25  | 16.39  | 16.16  | 16.80              |
|           |         | LOW       | 64QAM      | 16.44  | 16.29  | 16.22  | 16.80              |
|           |         | MID       | 64QAM      | 16.37  | 16.50  | 16.23  | 16.80              |
| 20        | 1       | HIGH      | 64QAM      | 16.34  | 16.22  | 16.42  | 16.80              |
|           |         | LOW       | 64QAM      | 16.04  | 16.26  | 16.27  | 16.80              |
|           |         | MID       | 64QAM      | 16.12  | 16.20  | 16.31  | 16.80              |
|           | 50      | HIGH      | 64QAM      | 16.28  | 16.24  | 16.20  | 16.80              |
|           |         | LOW       | 64QAM      | 16.14  | 16.12  | 16.28  | 16.80              |
|           |         | MID       | 64QAM      | 16.14  | 16.12  | 16.28  | 16.80              |
|           | 100     | LOW       | 64QAM      | 16.14  | 16.12  | 16.28  | 16.80              |
|           |         | MID       | 64QAM      | 16.14  | 16.12  | 16.28  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.14  | 16.12  | 16.28  | 16.80              |

| LTE B66-State 6 -Ant.0(NSA) |           |           |            |            |        |        |                    |                    |
|-----------------------------|-----------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth                   | RB Size   | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                         | 1         | LOW       | QPSK       | 16.18      | 16.19  | 16.04  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.27      | 16.39  | 16.17  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.27      | 16.32  | 16.09  | 16.80              |                    |
|                             | 3         | LOW       | QPSK       | 16.06      | 16.35  | 16.01  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.35      | 16.40  | 16.52  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.09      | 16.07  | 16.09  | 16.80              |                    |
|                             | 6         | LOW       | QPSK       | 16.39      | 16.33  | 16.17  | 16.80              |                    |
|                             | 1.4       | 1         | LOW        | Q16        | 16.27  | 16.02  | 16.35              | 16.80              |
|                             |           |           | MID        | Q16        | 16.36  | 16.31  | 16.29              | 16.80              |
| HIGH                        |           |           | Q16        | 16.08      | 16.25  | 16.30  | 16.80              |                    |
| 3                           |           | LOW       | Q16        | 16.15      | 16.17  | 16.12  | 16.80              |                    |
|                             |           | MID       | Q16        | 16.40      | 16.14  | 16.45  | 16.80              |                    |
| 6                           | HIGH      | Q16       | 16.07      | 16.25      | 16.35  | 16.80  |                    |                    |
| 1.4                         | 1         | LOW       | Q16        | 16.25      | 16.47  | 15.98  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 16.31      | 16.34  | 16.17  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.22      | 16.53  | 16.20  | 16.80              |                    |
|                             | 3         | LOW       | 64QAM      | 16.16      | 16.14  | 16.47  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 15.98      | 16.19  | 16.16  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.12      | 16.22  | 16.34  | 16.80              |                    |
|                             | 6         | LOW       | 64QAM      | 16.17      | 16.06  | 16.07  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.22      | 16.02  | 16.12  | 16.80              |                    |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
| 3                           | 1         | LOW       | QPSK       | 16.13      | 16.15  | 16.06  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.14      | 16.35  | 16.35  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.16      | 16.32  | 16.11  | 16.80              |                    |
|                             | 8         | LOW       | QPSK       | 16.25      | 16.19  | 16.08  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.42      | 16.54  | 16.32  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.12      | 16.12  | 16.14  | 16.80              |                    |
|                             | 15        | LOW       | QPSK       | 16.18      | 16.30  | 16.23  | 16.80              |                    |
|                             | 3         | 1         | LOW        | Q16        | 16.38  | 16.13  | 16.17              | 16.80              |
|                             |           |           | MID        | Q16        | 16.28  | 16.39  | 16.34              | 16.80              |
| HIGH                        |           |           | Q16        | 16.25      | 16.33  | 16.28  | 16.80              |                    |
| 8                           |           | LOW       | Q16        | 16.01      | 16.20  | 16.07  | 16.80              |                    |
|                             |           | MID       | Q16        | 16.35      | 16.28  | 16.40  | 16.80              |                    |
| 15                          | HIGH      | Q16       | 16.28      | 16.18      | 16.33  | 16.80  |                    |                    |
| 3                           | 1         | LOW       | Q16        | 16.15      | 16.44  | 16.21  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 16.41      | 16.18  | 16.04  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.44      | 16.57  | 16.17  | 16.80              |                    |
|                             | 8         | LOW       | 64QAM      | 16.16      | 16.17  | 16.40  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 15.94      | 16.11  | 16.14  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.02      | 16.26  | 16.33  | 16.80              |                    |
|                             | 15        | LOW       | 64QAM      | 16.33      | 16.16  | 16.22  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.14      | 15.94  | 16.13  | 16.80              |                    |
|                             | Bandwidth | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                           | 1         | LOW       | QPSK       | 16.10      | 16.20  | 16.06  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.28      | 16.40  | 16.40  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.03      | 16.16  | 16.07  | 16.80              |                    |
|                             | 12        | LOW       | QPSK       | 16.27      | 16.17  | 16.01  | 16.80              |                    |
|                             |           | MID       | QPSK       | 16.35      | 16.29  | 16.42  | 16.80              |                    |
|                             |           | HIGH      | QPSK       | 16.21      | 16.12  | 16.07  | 16.80              |                    |
|                             | 25        | LOW       | QPSK       | 16.42      | 16.24  | 16.26  | 16.80              |                    |
|                             | 5         | 1         | LOW        | Q16        | 16.17  | 16.11  | 16.16              | 16.80              |
|                             |           |           | MID        | Q16        | 16.39  | 16.39  | 16.49              | 16.80              |
| HIGH                        |           |           | Q16        | 16.28      | 16.48  | 16.32  | 16.80              |                    |
| 12                          |           | LOW       | Q16        | 16.05      | 16.36  | 16.25  | 16.80              |                    |
|                             |           | MID       | Q16        | 16.17      | 16.22  | 16.47  | 16.80              |                    |
| 25                          | HIGH      | Q16       | 16.19      | 16.25      | 16.22  | 16.80  |                    |                    |
| 5                           | 1         | LOW       | Q16        | 16.33      | 16.24  | 16.16  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 16.28      | 16.11  | 16.27  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.24      | 16.55  | 16.05  | 16.80              |                    |
|                             | 12        | LOW       | 64QAM      | 16.19      | 16.06  | 16.24  | 16.80              |                    |
|                             |           | MID       | 64QAM      | 15.93      | 16.11  | 16.19  | 16.80              |                    |
|                             |           | HIGH      | 64QAM      | 16.15      | 16.18  | 16.29  | 16.80              |                    |
|                             | 25        | LOW       | 64QAM      | 16.21      | 16.24  | 16.14  | 16.80              |                    |
|                             |           | LOW       | 64QAM      | 16.17      | 15.97  | 16.23  | 16.80              |                    |

| Bandwidth | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |
|-----------|---------|-----------|------------|--------|--------|--------|--------------------|
| 10        | 1       | LOW       | QPSK       | 16.07  | 16.15  | 15.96  | 16.80              |
|           |         | MID       | QPSK       | 16.20  | 16.40  | 16.34  | 16.80              |
|           |         | HIGH      | QPSK       | 16.05  | 16.16  | 16.12  | 16.80              |
|           | 25      | LOW       | QPSK       | 16.24  | 16.12  | 16.01  | 16.80              |
|           |         | MID       | QPSK       | 16.42  | 16.54  | 16.42  | 16.80              |
|           |         | HIGH      | QPSK       | 16.20  | 16.02  | 16.17  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.27  | 16.32  | 16.41  | 16.80              |
|           |         | LOW       | Q16        | 16.38  | 15.98  | 16.20  | 16.80              |
|           |         | MID       | Q16        | 16.29  | 16.45  | 16.37  | 16.80              |
| 10        | 1       | MID       | Q16        | 16.21  | 16.40  | 16.12  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.40  | 16.22  | 16.80              |
|           |         | HIGH      | Q16        | 16.27  | 16.30  | 16.40  | 16.80              |
|           | 25      | LOW       | Q16        | 16.27  | 16.15  | 16.41  | 16.80              |
|           |         | MID       | Q16        | 16.27  | 16.34  | 16.19  | 16.80              |
|           |         | HIGH      | Q16        | 16.27  | 16.34  | 16.19  | 16.80              |
|           | 50      | LOW       | Q16        | 16.27  | 16.34  | 16.19  | 16.80              |
|           |         | LOW       | 64QAM      | 16.34  | 16.24  | 16.22  | 16.80              |
|           |         | MID       | 64QAM      | 16.21  | 16.45  | 16.07  | 16.80              |
| 10        | 1       | HIGH      | 64QAM      | 16.32  | 16.09  | 16.42  | 16.80              |
|           |         | LOW       | 64QAM      | 16.10  | 16.31  | 16.19  | 16.80              |
|           |         | MID       | 64QAM      | 16.18  | 16.26  | 16.31  | 16.80              |
|           | 25      | HIGH      | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
|           |         | LOW       | 64QAM      | 16.08  | 16.14  | 16.10  | 16.80              |
|           |         | MID       | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
|           | 50      | LOW       | 64QAM      | 16.08  | 16.14  | 16.10  | 16.80              |
|           |         | MID       | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.25  | 16.11  | 16.09  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132047 | 132322 | 132597 | Tune-up power(dBm) |
| 15        | 1       | LOW       | QPSK       | 15.98  | 16.06  | 15.91  | 16.80              |
|           |         | MID       | QPSK       | 16.27  | 16.55  | 16.30  | 16.80              |
|           |         | HIGH      | QPSK       | 16.05  | 16.18  | 16.09  | 16.80              |
|           | 36      | LOW       | QPSK       | 16.11  | 16.34  | 16.19  | 16.80              |
|           |         | MID       | QPSK       | 16.35  | 16.34  | 16.26  | 16.80              |
|           |         | HIGH      | QPSK       | 16.18  | 16.26  | 16.25  | 16.80              |
|           | 75      | LOW       | QPSK       | 16.32  | 16.48  | 16.20  | 16.80              |
|           |         | LOW       | Q16        | 16.35  | 15.92  | 16.19  | 16.80              |
|           |         | MID       | Q16        | 16.29  | 16.44  | 16.37  | 16.80              |
| 15        | 1       | HIGH      | Q16        | 16.08  | 16.41  | 16.07  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.30  | 16.19  | 16.80              |
|           |         | MID       | Q16        | 16.25  | 16.30  | 16.38  | 16.80              |
|           | 36      | HIGH      | Q16        | 16.07  | 16.15  | 16.23  | 16.80              |
|           |         | LOW       | Q16        | 16.27  | 16.21  | 16.01  | 16.80              |
|           |         | MID       | Q16        | 16.27  | 16.21  | 16.01  | 16.80              |
|           | 75      | LOW       | Q16        | 16.27  | 16.21  | 16.01  | 16.80              |
|           |         | LOW       | 64QAM      | 16.31  | 16.36  | 16.17  | 16.80              |
|           |         | MID       | 64QAM      | 16.22  | 16.42  | 16.17  | 16.80              |
| 15        | 1       | HIGH      | 64QAM      | 16.27  | 16.16  | 16.29  | 16.80              |
|           |         | LOW       | 64QAM      | 16.04  | 16.28  | 16.17  | 16.80              |
|           |         | MID       | 64QAM      | 16.12  | 16.02  | 16.15  | 16.80              |
|           | 36      | HIGH      | 64QAM      | 16.31  | 16.19  | 16.07  | 16.80              |
|           |         | LOW       | 64QAM      | 15.96  | 15.94  | 16.28  | 16.80              |
|           |         | MID       | 64QAM      | 16.22  | 16.42  | 16.17  | 16.80              |
|           | 75      | LOW       | 64QAM      | 15.96  | 15.94  | 16.28  | 16.80              |
|           |         | MID       | 64QAM      | 16.22  | 16.42  | 16.17  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.27  | 16.16  | 16.29  | 16.80              |
| Bandwidth | RB Size | RB offset | Modulation | 132072 | 132322 | 132572 | Tune-up power(dBm) |
| 20        | 1       | LOW       | QPSK       | 16.13  | 16.17  | 16.01  | 16.80              |
|           |         | MID       | QPSK       | 16.25  | 16.47  | 16.32  | 16.80              |
|           |         | HIGH      | QPSK       | 16.21  | 16.29  | 16.09  | 16.80              |
|           | 50      | LOW       | QPSK       | 16.22  | 16.27  | 16.19  | 16.80              |
|           |         | MID       | QPSK       | 16.35  | 16.47  | 16.44  | 16.80              |
|           |         | HIGH      | QPSK       | 16.15  | 16.18  | 16.22  | 16.80              |
|           | 100     | LOW       | QPSK       | 16.34  | 16.40  | 16.33  | 16.80              |
|           |         | LOW       | Q16        | 16.30  | 16.08  | 16.27  | 16.80              |
|           |         | MID       | Q16        | 16.44  | 16.47  | 16.47  | 16.80              |
| 20        | 1       | HIGH      | Q16        | 16.23  | 16.43  | 16.25  | 16.80              |
|           |         | LOW       | Q16        | 16.07  | 16.33  | 16.22  | 16.80              |
|           |         | MID       | Q16        | 16.35  | 16.30  | 16.40  | 16.80              |
|           | 50      | HIGH      | Q16        | 16.22  | 16.33  | 16.33  | 16.80              |
|           |         | LOW       | Q16        | 16.25  | 16.39  | 16.16  | 16.80              |
|           |         | MID       | Q16        | 16.25  | 16.39  | 16.16  | 16.80              |
|           | 100     | LOW       | Q16        | 16.25  | 16.39  | 16.16  | 16.80              |
|           |         | LOW       | 64QAM      | 16.44  | 16.29  | 16.22  | 16.80              |
|           |         | MID       | 64QAM      | 16.37  | 16.50  | 16.23  | 16.80              |
| 20        | 1       | HIGH      | 64QAM      | 16.34  | 16.22  | 16.42  | 16.80              |
|           |         | LOW       | 64QAM      | 16.04  | 16.26  | 16.27  | 16.80              |
|           |         | MID       | 64QAM      | 16.12  | 16.20  | 16.31  | 16.80              |
|           | 50      | HIGH      | 64QAM      | 16.28  | 16.24  | 16.20  | 16.80              |
|           |         | LOW       | 64QAM      | 16.14  | 16.12  | 16.28  | 16.80              |
|           |         | MID       | 64QAM      | 16.37  | 16.50  | 16.23  | 16.80              |
|           | 100     | LOW       | 64QAM      | 16.04  | 16.26  | 16.27  | 16.80              |
|           |         | MID       | 64QAM      | 16.12  | 16.20  | 16.31  | 16.80              |
|           |         | HIGH      | 64QAM      | 16.28  | 16.24  | 16.20  | 16.80              |

### 8.3.9 LTE Band38 Output Power

BL-SZ2220432-701

| LTE B38-State 1 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 20.20 | 20.44 | 20.58 | 20.80              |
|                        |         | MID       | QPSK       | 20.50 | 20.44 | 20.64 | 20.80              |
|                        |         | HIGH      | QPSK       | 20.44 | 20.45 | 20.19 | 20.80              |
|                        | 12      | LOW       | QPSK       | 20.46 | 20.59 | 20.49 | 20.80              |
|                        |         | MID       | QPSK       | 20.48 | 20.55 | 20.31 | 20.80              |
|                        |         | HIGH      | QPSK       | 20.79 | 20.68 | 20.55 | 20.80              |
|                        | 25      | LOW       | QPSK       | 20.57 | 20.46 | 20.35 | 20.80              |
|                        | 5       | LOW       | Q16        | 20.65 | 20.62 | 20.66 | 20.80              |
|                        |         | MID       | Q16        | 20.59 | 20.14 | 20.47 | 20.80              |
|                        |         | HIGH      | Q16        | 20.29 | 20.23 | 20.47 | 20.80              |
|                        | 12      | LOW       | Q16        | 20.71 | 20.53 | 20.56 | 20.80              |
|                        |         | MID       | Q16        | 20.56 | 20.46 | 20.54 | 20.80              |
|                        |         | HIGH      | Q16        | 20.56 | 20.37 | 20.53 | 20.80              |
|                        | 25      | LOW       | Q16        | 20.36 | 20.66 | 20.16 | 20.80              |
| 5                      | 1       | LOW       | 64QAM      | 20.72 | 20.26 | 20.55 | 20.80              |
|                        |         | MID       | 64QAM      | 20.32 | 20.42 | 20.45 | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.64 | 19.88 | 20.41 | 20.80              |
|                        | 12      | LOW       | 64QAM      | 20.31 | 20.73 | 20.65 | 20.80              |
|                        |         | MID       | 64QAM      | 20.47 | 20.45 | 20.11 | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.44 | 20.43 | 20.15 | 20.80              |
|                        | 25      | LOW       | 64QAM      | 20.55 | 20.74 | 20.43 | 20.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 20.26 | 20.58 | 20.52 | 20.80              |
|                        |         | MID       | QPSK       | 20.71 | 20.58 | 20.49 | 20.80              |
|                        |         | HIGH      | QPSK       | 20.24 | 20.26 | 20.21 | 20.80              |
|                        | 25      | LOW       | QPSK       | 20.61 | 20.59 | 20.45 | 20.80              |
|                        |         | MID       | QPSK       | 20.48 | 20.51 | 20.35 | 20.80              |
|                        |         | HIGH      | QPSK       | 20.77 | 20.72 | 20.57 | 20.80              |
| 10                     | 50      | LOW       | QPSK       | 20.59 | 20.46 | 20.19 | 20.80              |
|                        | 1       | LOW       | Q16        | 20.65 | 20.33 | 20.80 | 20.80              |
|                        |         | MID       | Q16        | 20.61 | 20.30 | 20.72 | 20.80              |
|                        |         | HIGH      | Q16        | 20.45 | 20.29 | 20.31 | 20.80              |
|                        | 25      | LOW       | Q16        | 20.42 | 20.76 | 20.58 | 20.80              |
|                        |         | MID       | Q16        | 20.25 | 20.50 | 20.48 | 20.80              |
|                        |         | HIGH      | Q16        | 20.30 | 20.43 | 20.63 | 20.80              |
|                        | 50      | LOW       | Q16        | 20.38 | 20.50 | 20.30 | 20.80              |
|                        | 10      | LOW       | 64QAM      | 20.56 | 20.35 | 20.47 | 20.80              |
|                        |         | MID       | 64QAM      | 20.35 | 20.20 | 20.74 | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.43 | 19.94 | 20.29 | 20.80              |
|                        | 25      | LOW       | 64QAM      | 20.34 | 20.63 | 20.55 | 20.80              |
|                        |         | MID       | 64QAM      | 20.27 | 20.47 | 19.99 | 20.80              |
|                        |         | HIGH      | 64QAM      | 20.26 | 20.29 | 20.07 | 20.80              |
|                        | 50      | LOW       | 64QAM      | 20.35 | 20.45 | 20.68 | 20.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 20.32      | 20.48 | 20.64 | 20.80              |                    |
|                 |                 | MID       | QPSK       | 20.69      | 20.52 | 20.76 | 20.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.48      | 20.35 | 20.17 | 20.80              |                    |
|                 | 36              | LOW       | QPSK       | 20.65      | 20.55 | 20.23 | 20.80              |                    |
|                 |                 | MID       | QPSK       | 20.35      | 20.51 | 20.29 | 20.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.58      | 20.47 | 20.61 | 20.80              |                    |
|                 | 75              | LOW       | QPSK       | 20.44      | 20.46 | 20.33 | 20.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 20.32 | 20.58 | 20.62              | 20.80              |
|                 |                 |           | MID        | Q16        | 20.47 | 20.22 | 20.54              | 20.80              |
| HIGH            |                 |           | Q16        | 20.39      | 20.43 | 20.57 | 20.80              |                    |
| 36              |                 | LOW       | Q16        | 20.59      | 20.53 | 20.48 | 20.80              |                    |
|                 |                 | MID       | Q16        | 20.46      | 20.50 | 20.42 | 20.80              |                    |
|                 |                 | HIGH      | Q16        | 20.34      | 20.47 | 20.63 | 20.80              |                    |
| 75              |                 | LOW       | Q16        | 20.51      | 20.48 | 20.42 | 20.80              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 20.47 | 20.45 | 20.53              | 20.80              |
|                 |                 |           | MID        | 64QAM      | 20.35 | 20.50 | 20.60              | 20.80              |
|                 | HIGH            |           | 64QAM      | 20.39      | 20.00 | 20.53 | 20.80              |                    |
|                 | 36              | LOW       | 64QAM      | 20.36      | 20.49 | 20.53 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.37      | 20.47 | 20.11 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.50      | 20.31 | 20.27 | 20.80              |                    |
|                 | 75              | LOW       | 64QAM      | 20.49      | 20.54 | 20.43 | 20.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 20.42 | 20.54 | 20.56              | 20.80              |
| MID             |                 |           | QPSK       | 20.67      | 20.48 | 20.66 | 20.80              |                    |
| HIGH            |                 |           | QPSK       | 20.42      | 20.49 | 20.39 | 20.80              |                    |
| 50              |                 | LOW       | QPSK       | 20.63      | 20.65 | 20.41 | 20.80              |                    |
|                 |                 | MID       | QPSK       | 20.58      | 20.47 | 20.39 | 20.80              |                    |
|                 |                 | HIGH      | QPSK       | 20.75      | 20.66 | 20.65 | 20.80              |                    |
| 100             |                 | LOW       | QPSK       | 20.63      | 20.46 | 20.33 | 20.80              |                    |
| 20              |                 | 1         | LOW        | Q16        | 20.55 | 20.56 | 20.70              | 20.80              |
|                 |                 |           | MID        | Q16        | 20.55 | 20.26 | 20.64              | 20.80              |
|                 | HIGH            |           | Q16        | 20.47      | 20.41 | 20.47 | 20.80              |                    |
|                 | 50              | LOW       | Q16        | 20.65      | 20.72 | 20.58 | 20.80              |                    |
|                 |                 | MID       | Q16        | 20.48      | 20.62 | 20.44 | 20.80              |                    |
|                 |                 | HIGH      | Q16        | 20.50      | 20.49 | 20.61 | 20.80              |                    |
|                 | 100             | LOW       | Q16        | 20.59      | 20.60 | 20.36 | 20.80              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 20.64 | 20.49 | 20.55              | 20.80              |
|                 |                 |           | MID        | 64QAM      | 20.53 | 20.40 | 20.64              | 20.80              |
| HIGH            |                 |           | 64QAM      | 20.62      | 20.06 | 20.45 | 20.80              |                    |
| 50              |                 | LOW       | 64QAM      | 20.52      | 20.63 | 20.55 | 20.80              |                    |
|                 |                 | MID       | 64QAM      | 20.39      | 20.66 | 20.17 | 20.80              |                    |
|                 |                 | HIGH      | 64QAM      | 20.42      | 20.33 | 20.19 | 20.80              |                    |
| 100             |                 | LOW       | 64QAM      | 20.47      | 20.66 | 20.62 | 20.80              |                    |

| LTE B38-State 2 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 19.42 | 19.54 | 19.35 | 19.80              |
|                        |         | MID       | QPSK       | 19.69 | 19.53 | 19.62 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.77 | 19.30 | 19.36 | 19.80              |
|                        | 12      | LOW       | QPSK       | 19.43 | 19.53 | 19.31 | 19.80              |
|                        |         | MID       | QPSK       | 19.50 | 19.24 | 19.36 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.53 | 19.60 | 19.49 | 19.80              |
|                        | 25      | LOW       | QPSK       | 19.49 | 19.28 | 19.33 | 19.80              |
| 5                      | 1       | LOW       | Q16        | 19.61 | 19.42 | 19.32 | 19.80              |
|                        |         | MID       | Q16        | 19.76 | 19.25 | 19.80 | 19.80              |
|                        |         | HIGH      | Q16        | 19.34 | 19.43 | 19.52 | 19.80              |
|                        | 12      | LOW       | Q16        | 19.51 | 19.54 | 19.30 | 19.80              |
|                        |         | MID       | Q16        | 19.26 | 19.40 | 19.54 | 19.80              |
|                        |         | HIGH      | Q16        | 19.52 | 19.47 | 19.45 | 19.80              |
|                        | 25      | LOW       | Q16        | 19.24 | 19.62 | 19.50 | 19.80              |
| 5                      | 1       | LOW       | 64QAM      | 19.66 | 19.29 | 19.59 | 19.80              |
|                        |         | MID       | 64QAM      | 19.32 | 19.32 | 19.62 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.44 | 19.14 | 19.28 | 19.80              |
|                        | 12      | LOW       | 64QAM      | 19.20 | 19.45 | 19.39 | 19.80              |
|                        |         | MID       | 64QAM      | 19.11 | 19.74 | 19.15 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.26 | 19.34 | 19.29 | 19.80              |
|                        | 25      | LOW       | 64QAM      | 19.31 | 19.50 | 19.64 | 19.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 19.42 | 19.42 | 19.57 | 19.80              |
|                        |         | MID       | QPSK       | 19.65 | 19.47 | 19.56 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.67 | 19.57 | 19.32 | 19.80              |
|                        | 25      | LOW       | QPSK       | 19.18 | 19.51 | 19.29 | 19.80              |
|                        |         | MID       | QPSK       | 19.36 | 19.49 | 19.38 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.69 | 19.42 | 19.41 | 19.80              |
|                        | 50      | LOW       | QPSK       | 19.37 | 19.54 | 19.24 | 19.80              |
| 10                     | 1       | LOW       | Q16        | 19.51 | 19.42 | 19.42 | 19.80              |
|                        |         | MID       | Q16        | 19.66 | 19.27 | 19.68 | 19.80              |
|                        |         | HIGH      | Q16        | 19.52 | 19.47 | 19.54 | 19.80              |
|                        | 25      | LOW       | Q16        | 19.43 | 19.54 | 19.38 | 19.80              |
|                        |         | MID       | Q16        | 19.21 | 19.48 | 19.66 | 19.80              |
|                        |         | HIGH      | Q16        | 19.48 | 19.55 | 19.59 | 19.80              |
|                        | 50      | LOW       | Q16        | 19.31 | 19.52 | 19.48 | 19.80              |
| 10                     | 1       | LOW       | 64QAM      | 19.52 | 19.22 | 19.61 | 19.80              |
|                        |         | MID       | 64QAM      | 19.41 | 19.28 | 19.50 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.62 | 19.13 | 19.09 | 19.80              |
|                        | 25      | LOW       | 64QAM      | 19.38 | 19.49 | 19.57 | 19.80              |
|                        |         | MID       | 64QAM      | 19.32 | 19.68 | 19.27 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.22 | 19.30 | 19.27 | 19.80              |
|                        | 50      | LOW       | 64QAM      | 19.19 | 19.46 | 19.58 | 19.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.24      | 19.29 | 19.31 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.69      | 19.55 | 19.56 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.59      | 19.30 | 19.28 | 19.80              |                    |
|                 | 36              | LOW       | QPSK       | 19.20      | 19.33 | 19.41 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.42      | 19.49 | 19.44 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.73      | 19.44 | 19.55 | 19.80              |                    |
|                 | 75              | LOW       | QPSK       | 19.30      | 19.50 | 19.41 | 19.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 19.57 | 19.46 | 19.30              | 19.80              |
|                 |                 |           | MID        | Q16        | 19.66 | 19.27 | 19.80              | 19.80              |
| HIGH            |                 |           | Q16        | 19.60      | 19.51 | 19.50 | 19.80              |                    |
| 36              |                 | LOW       | Q16        | 19.41      | 19.64 | 19.19 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.21      | 19.42 | 19.56 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.60      | 19.49 | 19.39 | 19.80              |                    |
| 75              | LOW             | Q16       | 19.37      | 19.40      | 19.50 | 19.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 19.50      | 19.39 | 19.65 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.45      | 19.52 | 19.70 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.44      | 19.14 | 19.34 | 19.80              |                    |
|                 | 36              | LOW       | 64QAM      | 19.30      | 19.51 | 19.55 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.22      | 19.60 | 19.15 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.30      | 19.24 | 19.27 | 19.80              |                    |
|                 | 75              | LOW       | 64QAM      | 19.23      | 19.60 | 19.68 | 19.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
| 20              | 1               | LOW       | QPSK       | 19.38      | 19.48 | 19.49 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.75      | 19.59 | 19.66 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.67      | 19.49 | 19.38 | 19.80              |                    |
|                 | 50              | LOW       | QPSK       | 19.39      | 19.55 | 19.47 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.48      | 19.41 | 19.38 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.65      | 19.64 | 19.55 | 19.80              |                    |
| 20              | 100             | LOW       | QPSK       | 19.49      | 19.44 | 19.41 | 19.80              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.50 | 19.38 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.76      | 19.33 | 19.72 | 19.80              |                    |
|                 | 1               | HIGH      | Q16        | 19.56      | 19.51 | 19.60 | 19.80              |                    |
|                 |                 | LOW       | Q16        | 19.43      | 19.70 | 19.38 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.42      | 19.50 | 19.64 | 19.80              |                    |
|                 | 50              | HIGH      | Q16        | 19.64      | 19.63 | 19.61 | 19.80              |                    |
|                 |                 | LOW       | Q16        | 19.45      | 19.54 | 19.56 | 19.80              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 19.70 | 19.43 | 19.57              | 19.80              |
|                 | MID             |           | 64QAM      | 19.53      | 19.44 | 19.64 | 19.80              |                    |
|                 | HIGH            |           | 64QAM      | 19.52      | 19.26 | 19.28 | 19.80              |                    |
|                 | 50              | LOW       | 64QAM      | 19.34      | 19.59 | 19.57 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.30      | 19.76 | 19.23 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.30      | 19.36 | 19.29 | 19.80              |                    |
| 100             | LOW             | 64QAM     | 19.29      | 19.64      | 19.60 | 19.80 |                    |                    |

| LTE B38-State 3 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 19.42 | 19.54 | 19.35 | 19.80              |
|                        |         | MID       | QPSK       | 19.69 | 19.53 | 19.62 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.77 | 19.30 | 19.36 | 19.80              |
|                        | 12      | LOW       | QPSK       | 19.43 | 19.53 | 19.31 | 19.80              |
|                        |         | MID       | QPSK       | 19.50 | 19.24 | 19.36 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.53 | 19.60 | 19.49 | 19.80              |
|                        | 25      | LOW       | QPSK       | 19.49 | 19.28 | 19.33 | 19.80              |
|                        | 5       | LOW       | Q16        | 19.61 | 19.42 | 19.32 | 19.80              |
|                        |         | MID       | Q16        | 19.76 | 19.25 | 19.80 | 19.80              |
|                        |         | HIGH      | Q16        | 19.34 | 19.43 | 19.52 | 19.80              |
|                        |         | LOW       | Q16        | 19.51 | 19.54 | 19.30 | 19.80              |
|                        |         | MID       | Q16        | 19.26 | 19.40 | 19.54 | 19.80              |
|                        |         | HIGH      | Q16        | 19.52 | 19.47 | 19.45 | 19.80              |
|                        | 25      | LOW       | Q16        | 19.24 | 19.62 | 19.50 | 19.80              |
| 5                      | 1       | LOW       | 64QAM      | 19.66 | 19.29 | 19.59 | 19.80              |
|                        |         | MID       | 64QAM      | 19.32 | 19.32 | 19.62 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.44 | 19.14 | 19.28 | 19.80              |
|                        | 12      | LOW       | 64QAM      | 19.20 | 19.45 | 19.39 | 19.80              |
|                        |         | MID       | 64QAM      | 19.11 | 19.74 | 19.15 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.26 | 19.34 | 19.29 | 19.80              |
|                        | 25      | LOW       | 64QAM      | 19.31 | 19.50 | 19.64 | 19.80              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 19.42 | 19.42 | 19.57 | 19.80              |
|                        |         | MID       | QPSK       | 19.65 | 19.47 | 19.56 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.67 | 19.57 | 19.32 | 19.80              |
|                        | 25      | LOW       | QPSK       | 19.18 | 19.51 | 19.29 | 19.80              |
|                        |         | MID       | QPSK       | 19.36 | 19.49 | 19.38 | 19.80              |
|                        |         | HIGH      | QPSK       | 19.69 | 19.42 | 19.41 | 19.80              |
| 10                     | 50      | LOW       | QPSK       | 19.37 | 19.54 | 19.24 | 19.80              |
|                        | 1       | LOW       | Q16        | 19.51 | 19.42 | 19.42 | 19.80              |
|                        |         | MID       | Q16        | 19.66 | 19.27 | 19.68 | 19.80              |
|                        |         | HIGH      | Q16        | 19.52 | 19.47 | 19.54 | 19.80              |
|                        | 25      | LOW       | Q16        | 19.43 | 19.54 | 19.38 | 19.80              |
|                        |         | MID       | Q16        | 19.21 | 19.48 | 19.66 | 19.80              |
|                        |         | HIGH      | Q16        | 19.48 | 19.55 | 19.59 | 19.80              |
|                        | 50      | LOW       | Q16        | 19.31 | 19.52 | 19.48 | 19.80              |
|                        | 10      | LOW       | 64QAM      | 19.52 | 19.22 | 19.61 | 19.80              |
|                        |         | MID       | 64QAM      | 19.41 | 19.28 | 19.50 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.62 | 19.13 | 19.09 | 19.80              |
|                        |         | LOW       | 64QAM      | 19.38 | 19.49 | 19.57 | 19.80              |
|                        |         | MID       | 64QAM      | 19.32 | 19.68 | 19.27 | 19.80              |
|                        |         | HIGH      | 64QAM      | 19.22 | 19.30 | 19.27 | 19.80              |
|                        | 50      | LOW       | 64QAM      | 19.19 | 19.46 | 19.58 | 19.80              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.24      | 19.29 | 19.31 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.69      | 19.55 | 19.56 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.59      | 19.30 | 19.28 | 19.80              |                    |
|                 | 36              | LOW       | QPSK       | 19.20      | 19.33 | 19.41 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.42      | 19.49 | 19.44 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.73      | 19.44 | 19.55 | 19.80              |                    |
|                 | 75              | LOW       | QPSK       | 19.30      | 19.50 | 19.41 | 19.80              |                    |
|                 | 15              | 1         | LOW        | Q16        | 19.57 | 19.46 | 19.30              | 19.80              |
|                 |                 |           | MID        | Q16        | 19.66 | 19.27 | 19.80              | 19.80              |
| HIGH            |                 |           | Q16        | 19.60      | 19.51 | 19.50 | 19.80              |                    |
| 36              |                 | LOW       | Q16        | 19.41      | 19.64 | 19.19 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.21      | 19.42 | 19.56 | 19.80              |                    |
|                 |                 | HIGH      | Q16        | 19.60      | 19.49 | 19.39 | 19.80              |                    |
| 75              | LOW             | Q16       | 19.37      | 19.40      | 19.50 | 19.80 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 19.50      | 19.39 | 19.65 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.45      | 19.52 | 19.70 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.44      | 19.14 | 19.34 | 19.80              |                    |
|                 | 36              | LOW       | 64QAM      | 19.30      | 19.51 | 19.55 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.22      | 19.60 | 19.15 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.30      | 19.24 | 19.27 | 19.80              |                    |
|                 | 75              | LOW       | 64QAM      | 19.23      | 19.60 | 19.68 | 19.80              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
| 20              | 1               | LOW       | QPSK       | 19.38      | 19.48 | 19.49 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.75      | 19.59 | 19.66 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.67      | 19.49 | 19.38 | 19.80              |                    |
|                 | 50              | LOW       | QPSK       | 19.39      | 19.55 | 19.47 | 19.80              |                    |
|                 |                 | MID       | QPSK       | 19.48      | 19.41 | 19.38 | 19.80              |                    |
|                 |                 | HIGH      | QPSK       | 19.65      | 19.64 | 19.55 | 19.80              |                    |
| 20              | 100             | LOW       | QPSK       | 19.49      | 19.44 | 19.41 | 19.80              |                    |
|                 |                 | LOW       | Q16        | 19.51      | 19.50 | 19.38 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.76      | 19.33 | 19.72 | 19.80              |                    |
|                 | 1               | HIGH      | Q16        | 19.56      | 19.51 | 19.60 | 19.80              |                    |
|                 |                 | LOW       | Q16        | 19.43      | 19.70 | 19.38 | 19.80              |                    |
|                 |                 | MID       | Q16        | 19.42      | 19.50 | 19.64 | 19.80              |                    |
|                 | 50              | HIGH      | Q16        | 19.64      | 19.63 | 19.61 | 19.80              |                    |
|                 |                 | LOW       | Q16        | 19.45      | 19.54 | 19.56 | 19.80              |                    |
| 20              |                 | 1         | LOW        | 64QAM      | 19.70 | 19.43 | 19.57              | 19.80              |
|                 | MID             |           | 64QAM      | 19.53      | 19.44 | 19.64 | 19.80              |                    |
|                 | HIGH            |           | 64QAM      | 19.52      | 19.26 | 19.28 | 19.80              |                    |
|                 | 50              | LOW       | 64QAM      | 19.34      | 19.59 | 19.57 | 19.80              |                    |
|                 |                 | MID       | 64QAM      | 19.30      | 19.76 | 19.23 | 19.80              |                    |
|                 |                 | HIGH      | 64QAM      | 19.30      | 19.36 | 19.29 | 19.80              |                    |
| 100             | LOW             | 64QAM     | 19.29      | 19.64      | 19.60 | 19.80 |                    |                    |

| LTE B38-State 4 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.86 | 24.18 | 23.78 | 24.30              |
|                        |         | MID       | QPSK       | 24.28 | 24.01 | 24.28 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.18 | 23.77 | 24.03 | 24.30              |
|                        | 12      | LOW       | QPSK       | 22.86 | 22.88 | 22.84 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 23.07 | 22.85 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.27 | 22.96 | 23.07 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.95 | 23.11 | 22.76 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.20 | 22.73 | 22.98 | 23.30              |
|                        |         | MID       | Q16        | 23.19 | 22.74 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.07 | 22.68 | 23.00 | 23.30              |
|                        |         | LOW       | Q16        | 22.02 | 22.25 | 22.01 | 22.30              |
|                        |         | MID       | Q16        | 22.01 | 22.03 | 21.99 | 22.30              |
|                        |         | HIGH      | Q16        | 21.88 | 22.15 | 22.00 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.05 | 22.08 | 22.11 | 22.30              |
|                        |         | MID       | 64QAM      | 22.04 | 21.96 | 22.19 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.07 | 21.61 | 21.84 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 20.83 | 21.00 | 21.23 | 21.30              |
|                        |         | MID       | 64QAM      | 20.80 | 21.22 | 20.79 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.92 | 21.00 | 20.83 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.01 | 20.95 | 21.12 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.86 | 23.89 | 24.06 | 24.30              |
|                        |         | MID       | QPSK       | 24.09 | 23.88 | 24.18 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.96 | 24.10 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.20 | 23.09 | 23.07 | 23.30              |
|                        |         | MID       | QPSK       | 22.94 | 22.84 | 22.96 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.01 | 23.05 | 23.07 | 23.30              |
|                        | 50      | LOW       | QPSK       | 22.90 | 23.15 | 22.99 | 23.30              |
|                        | 10      | LOW       | Q16        | 22.94 | 23.07 | 23.05 | 23.30              |
|                        |         | MID       | Q16        | 23.10 | 22.99 | 23.15 | 23.30              |
|                        |         | HIGH      | Q16        | 22.91 | 22.66 | 23.04 | 23.30              |
|                        |         | LOW       | Q16        | 22.05 | 21.99 | 22.06 | 22.30              |
|                        |         | MID       | Q16        | 22.06 | 22.17 | 21.88 | 22.30              |
|                        |         | HIGH      | Q16        | 21.92 | 21.98 | 22.16 | 22.30              |
| 10                     | 1       | LOW       | Q16        | 21.98 | 22.21 | 22.02 | 22.30              |
|                        |         | LOW       | 64QAM      | 22.16 | 21.88 | 21.89 | 22.30              |
|                        |         | MID       | 64QAM      | 21.91 | 21.98 | 22.28 | 22.30              |
|                        |         | HIGH      | 64QAM      | 21.96 | 21.74 | 21.88 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 20.90 | 21.27 | 21.15 | 21.30              |
|                        |         | MID       | 64QAM      | 20.82 | 21.07 | 20.65 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.98 | 20.91 | 20.75 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.97 | 21.03 | 21.01 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 23.98 | 23.84 | 23.80 | 24.30              |
|                 |         | MID       | QPSK       | 23.94 | 24.08 | 23.94 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.09 | 23.86 | 23.84 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.23 | 23.02 | 23.07 | 23.30              |
|                 |         | MID       | QPSK       | 22.91 | 22.93 | 22.99 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 23.15 | 23.18 | 23.30              |
| 75              | LOW     | QPSK      | 23.06      | 23.15 | 22.87 | 23.30 |                    |
| 15              | 1       | LOW       | Q16        | 23.22 | 22.80 | 22.89 | 23.30              |
|                 |         | MID       | Q16        | 23.19 | 23.08 | 23.19 | 23.30              |
|                 |         | HIGH      | Q16        | 22.89 | 22.73 | 23.23 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.07 | 22.16 | 22.08 | 22.30              |
|                 |         | MID       | Q16        | 21.92 | 22.10 | 22.03 | 22.30              |
|                 |         | HIGH      | Q16        | 21.97 | 22.09 | 22.18 | 22.30              |
| 75              | LOW     | Q16       | 22.09      | 21.94 | 22.00 | 22.30 |                    |
| 15              | 1       | LOW       | 64QAM      | 22.21 | 21.92 | 22.07 | 22.30              |
|                 |         | MID       | 64QAM      | 22.13 | 21.78 | 22.04 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.20 | 21.54 | 22.10 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 20.98 | 21.19 | 21.02 | 21.30              |
|                 |         | MID       | 64QAM      | 20.84 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.83 | 21.04 | 20.89 | 21.30              |
| 75              | LOW     | 64QAM     | 21.01      | 21.14 | 21.10 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.08 | 24.08 | 24.04 | 24.30              |
|                 |         | MID       | QPSK       | 24.21 | 24.15 | 24.18 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.11 | 24.03 | 24.08 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.11 | 23.09 | 23.05 | 23.30              |
|                 |         | MID       | QPSK       | 23.12 | 23.07 | 23.08 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 23.10 | 23.09 | 23.30              |
| 100             | LOW     | QPSK      | 23.11      | 23.06 | 23.01 | 23.30 |                    |
| 20              | 1       | LOW       | Q16        | 23.13 | 22.98 | 23.10 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 22.99 | 23.24 | 23.30              |
|                 |         | HIGH      | Q16        | 23.14 | 22.91 | 23.16 | 23.30              |
|                 | 50      | LOW       | Q16        | 22.09 | 22.14 | 22.08 | 22.30              |
|                 |         | MID       | Q16        | 22.10 | 22.10 | 22.10 | 22.30              |
|                 |         | HIGH      | Q16        | 22.12 | 22.11 | 22.09 | 22.30              |
| 100             | LOW     | Q16       | 22.09      | 22.12 | 22.00 | 22.30 |                    |
| 20              | 1       | LOW       | 64QAM      | 22.14 | 21.99 | 22.07 | 22.30              |
|                 |         | MID       | 64QAM      | 22.13 | 21.96 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.20 | 21.74 | 21.99 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 20.96 | 21.23 | 21.15 | 21.30              |
|                 |         | MID       | 64QAM      | 21.01 | 21.22 | 20.75 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.96 | 21.06 | 20.85 | 21.30              |
| 100             | LOW     | 64QAM     | 20.93      | 21.18 | 21.18 | 21.30 |                    |

| LTE B38-State 5 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.86 | 24.18 | 23.78 | 24.30              |
|                        |         | MID       | QPSK       | 24.28 | 24.01 | 24.28 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.18 | 23.77 | 24.03 | 24.30              |
|                        | 12      | LOW       | QPSK       | 22.86 | 22.88 | 22.84 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 23.07 | 22.85 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.27 | 22.96 | 23.07 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.95 | 23.11 | 22.76 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.20 | 22.73 | 22.98 | 23.30              |
|                        |         | MID       | Q16        | 23.19 | 22.74 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.07 | 22.68 | 23.00 | 23.30              |
|                        |         | LOW       | Q16        | 22.02 | 22.25 | 22.01 | 22.30              |
|                        |         | MID       | Q16        | 22.01 | 22.03 | 21.99 | 22.30              |
|                        |         | HIGH      | Q16        | 21.88 | 22.15 | 22.00 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.05 | 22.08 | 22.11 | 22.30              |
|                        |         | MID       | 64QAM      | 22.04 | 21.96 | 22.19 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.07 | 21.61 | 21.84 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 20.83 | 21.00 | 21.23 | 21.30              |
|                        |         | MID       | 64QAM      | 20.80 | 21.22 | 20.79 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.92 | 21.00 | 20.83 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.01 | 20.95 | 21.12 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.86 | 23.89 | 24.06 | 24.30              |
|                        |         | MID       | QPSK       | 24.09 | 23.88 | 24.18 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.96 | 24.10 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.20 | 23.09 | 23.07 | 23.30              |
|                        |         | MID       | QPSK       | 22.94 | 22.84 | 22.96 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.01 | 23.05 | 23.07 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 22.90 | 23.15 | 22.99 | 23.30              |
|                        | 1       | LOW       | Q16        | 22.94 | 23.07 | 23.05 | 23.30              |
|                        |         | MID       | Q16        | 23.10 | 22.99 | 23.15 | 23.30              |
|                        |         | HIGH      | Q16        | 22.91 | 22.66 | 23.04 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.05 | 21.99 | 22.06 | 22.30              |
|                        |         | MID       | Q16        | 22.06 | 22.17 | 21.88 | 22.30              |
|                        |         | HIGH      | Q16        | 21.92 | 21.98 | 22.16 | 22.30              |
|                        | 50      | LOW       | Q16        | 21.98 | 22.21 | 22.02 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 22.16 | 21.88 | 21.89 | 22.30              |
|                        |         | MID       | 64QAM      | 21.91 | 21.98 | 22.28 | 22.30              |
|                        |         | HIGH      | 64QAM      | 21.96 | 21.74 | 21.88 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 20.90 | 21.27 | 21.15 | 21.30              |
|                        |         | MID       | 64QAM      | 20.82 | 21.07 | 20.65 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.98 | 20.91 | 20.75 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.97 | 21.03 | 21.01 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 23.98 | 23.84 | 23.80 | 24.30              |
|                 |         | MID       | QPSK       | 23.94 | 24.08 | 23.94 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.09 | 23.86 | 23.84 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.23 | 23.02 | 23.07 | 23.30              |
|                 |         | MID       | QPSK       | 22.91 | 22.93 | 22.99 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 23.15 | 23.18 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.06 | 23.15 | 22.87 | 23.30              |
| 15              | 1       | LOW       | Q16        | 23.22 | 22.80 | 22.89 | 23.30              |
|                 |         | MID       | Q16        | 23.19 | 23.08 | 23.19 | 23.30              |
|                 |         | HIGH      | Q16        | 22.89 | 22.73 | 23.23 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.07 | 22.16 | 22.08 | 22.30              |
|                 |         | MID       | Q16        | 21.92 | 22.10 | 22.03 | 22.30              |
|                 |         | HIGH      | Q16        | 21.97 | 22.09 | 22.18 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.09 | 21.94 | 22.00 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 22.21 | 21.92 | 22.07 | 22.30              |
|                 |         | MID       | 64QAM      | 22.13 | 21.78 | 22.04 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.20 | 21.54 | 22.10 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 20.98 | 21.19 | 21.02 | 21.30              |
|                 |         | MID       | 64QAM      | 20.84 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.83 | 21.04 | 20.89 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 21.01 | 21.14 | 21.10 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.08 | 24.08 | 24.04 | 24.30              |
|                 |         | MID       | QPSK       | 24.21 | 24.15 | 24.18 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.11 | 24.03 | 24.08 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.11 | 23.09 | 23.05 | 23.30              |
|                 |         | MID       | QPSK       | 23.12 | 23.07 | 23.08 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 23.10 | 23.09 | 23.30              |
| 20              | 100     | LOW       | QPSK       | 23.11 | 23.06 | 23.01 | 23.30              |
|                 |         | LOW       | Q16        | 23.13 | 22.98 | 23.10 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 22.99 | 23.24 | 23.30              |
|                 | 1       | HIGH      | Q16        | 23.14 | 22.91 | 23.16 | 23.30              |
|                 |         | LOW       | Q16        | 22.09 | 22.14 | 22.08 | 22.30              |
|                 | 50      | MID       | Q16        | 22.10 | 22.10 | 22.10 | 22.30              |
|                 |         | HIGH      | Q16        | 22.12 | 22.11 | 22.09 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.09 | 22.12 | 22.00 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 22.14 | 21.99 | 22.07 | 22.30              |
|                 |         | MID       | 64QAM      | 22.13 | 21.96 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.20 | 21.74 | 21.99 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 20.96 | 21.23 | 21.15 | 21.30              |
|                 |         | MID       | 64QAM      | 21.01 | 21.22 | 20.75 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.96 | 21.06 | 20.85 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 20.93 | 21.18 | 21.18 | 21.30              |

| LTE B38-State 6 -Ant.1 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.86 | 24.18 | 23.78 | 24.30              |
|                        |         | MID       | QPSK       | 24.28 | 24.01 | 24.28 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.18 | 23.77 | 24.03 | 24.30              |
|                        | 12      | LOW       | QPSK       | 22.86 | 22.88 | 22.84 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 23.07 | 22.85 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.27 | 22.96 | 23.07 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.95 | 23.11 | 22.76 | 23.30              |
| 5                      | 1       | LOW       | Q16        | 23.20 | 22.73 | 22.98 | 23.30              |
|                        |         | MID       | Q16        | 23.19 | 22.74 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.07 | 22.68 | 23.00 | 23.30              |
|                        | 12      | LOW       | Q16        | 22.02 | 22.25 | 22.01 | 22.30              |
|                        |         | MID       | Q16        | 22.01 | 22.03 | 21.99 | 22.30              |
|                        |         | HIGH      | Q16        | 21.88 | 22.15 | 22.00 | 22.30              |
|                        | 25      | LOW       | Q16        | 21.91 | 22.16 | 21.93 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.05 | 22.08 | 22.11 | 22.30              |
|                        |         | MID       | 64QAM      | 22.04 | 21.96 | 22.19 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.07 | 21.61 | 21.84 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 20.83 | 21.00 | 21.23 | 21.30              |
|                        |         | MID       | 64QAM      | 20.80 | 21.22 | 20.79 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.92 | 21.00 | 20.83 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.01 | 20.95 | 21.12 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.86 | 23.89 | 24.06 | 24.30              |
|                        |         | MID       | QPSK       | 24.09 | 23.88 | 24.18 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.96 | 24.10 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.20 | 23.09 | 23.07 | 23.30              |
|                        |         | MID       | QPSK       | 22.94 | 22.84 | 22.96 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.01 | 23.05 | 23.07 | 23.30              |
| 10                     | 1       | LOW       | Q16        | 22.94 | 23.07 | 23.05 | 23.30              |
|                        |         | MID       | Q16        | 23.10 | 22.99 | 23.15 | 23.30              |
|                        |         | HIGH      | Q16        | 22.91 | 22.66 | 23.04 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.05 | 21.99 | 22.06 | 22.30              |
|                        |         | MID       | Q16        | 22.06 | 22.17 | 21.88 | 22.30              |
|                        |         | HIGH      | Q16        | 21.92 | 21.98 | 22.16 | 22.30              |
|                        | 50      | LOW       | Q16        | 21.98 | 22.21 | 22.02 | 22.30              |
|                        |         | LOW       | 64QAM      | 22.16 | 21.88 | 21.89 | 22.30              |
| 10                     | 1       | MID       | 64QAM      | 21.91 | 21.98 | 22.28 | 22.30              |
|                        |         | HIGH      | 64QAM      | 21.96 | 21.74 | 21.88 | 22.30              |
|                        |         | LOW       | 64QAM      | 20.90 | 21.27 | 21.15 | 21.30              |
|                        | 25      | MID       | 64QAM      | 20.82 | 21.07 | 20.65 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.98 | 20.91 | 20.75 | 21.30              |
|                        |         | LOW       | 64QAM      | 20.97 | 21.03 | 21.01 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 23.98 | 23.84 | 23.80 | 24.30              |
|                 |         | MID       | QPSK       | 23.94 | 24.08 | 23.94 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.09 | 23.86 | 23.84 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.23 | 23.02 | 23.07 | 23.30              |
|                 |         | MID       | QPSK       | 22.91 | 22.93 | 22.99 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 23.15 | 23.18 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.06 | 23.15 | 22.87 | 23.30              |
| 15              | 1       | LOW       | Q16        | 23.22 | 22.80 | 22.89 | 23.30              |
|                 |         | MID       | Q16        | 23.19 | 23.08 | 23.19 | 23.30              |
|                 |         | HIGH      | Q16        | 22.89 | 22.73 | 23.23 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.07 | 22.16 | 22.08 | 22.30              |
|                 |         | MID       | Q16        | 21.92 | 22.10 | 22.03 | 22.30              |
|                 |         | HIGH      | Q16        | 21.97 | 22.09 | 22.18 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.09 | 21.94 | 22.00 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 22.21 | 21.92 | 22.07 | 22.30              |
|                 |         | MID       | 64QAM      | 22.13 | 21.78 | 22.04 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.20 | 21.54 | 22.10 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 20.98 | 21.19 | 21.02 | 21.30              |
|                 |         | MID       | 64QAM      | 20.84 | 21.16 | 20.65 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.83 | 21.04 | 20.89 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 21.01 | 21.14 | 21.10 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.08 | 24.08 | 24.04 | 24.30              |
|                 |         | MID       | QPSK       | 24.21 | 24.15 | 24.18 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.11 | 24.03 | 24.08 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.11 | 23.09 | 23.05 | 23.30              |
|                 |         | MID       | QPSK       | 23.12 | 23.07 | 23.08 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 23.10 | 23.09 | 23.30              |
| 20              | 100     | LOW       | QPSK       | 23.11 | 23.06 | 23.01 | 23.30              |
|                 |         | LOW       | Q16        | 23.13 | 22.98 | 23.10 | 23.30              |
|                 |         | MID       | Q16        | 23.24 | 22.99 | 23.24 | 23.30              |
|                 | 1       | HIGH      | Q16        | 23.14 | 22.91 | 23.16 | 23.30              |
|                 |         | LOW       | Q16        | 22.09 | 22.14 | 22.08 | 22.30              |
|                 | 50      | MID       | Q16        | 22.10 | 22.10 | 22.10 | 22.30              |
|                 |         | HIGH      | Q16        | 22.12 | 22.11 | 22.09 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.09 | 22.12 | 22.00 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 22.14 | 21.99 | 22.07 | 22.30              |
|                 |         | MID       | 64QAM      | 22.13 | 21.96 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.20 | 21.74 | 21.99 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 20.96 | 21.23 | 21.15 | 21.30              |
|                 |         | MID       | 64QAM      | 21.01 | 21.22 | 20.75 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.96 | 21.06 | 20.85 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 20.93 | 21.18 | 21.18 | 21.30              |

| LTE B38-State 1 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.20 | 24.26 | 24.22 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.30 | 24.15 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.14 | 24.03 | 24.15 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.18 | 22.92 | 23.01 | 23.30              |
|                        |         | MID       | QPSK       | 22.98 | 23.11 | 23.11 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.03 | 22.85 | 23.29 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.98 | 23.23 | 22.93 | 23.30              |
| 5                      | 1       | LOW       | Q16        | 23.19 | 22.88 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.04 | 22.93 | 23.16 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.06 | 23.12 | 23.30              |
|                        | 12      | LOW       | Q16        | 22.19 | 22.11 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.29 | 22.12 | 22.18 | 22.30              |
|                        |         | HIGH      | Q16        | 22.11 | 22.29 | 22.20 | 22.30              |
|                        | 25      | LOW       | Q16        | 22.03 | 22.06 | 22.12 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 21.66 | 21.65 | 21.94 | 22.30              |
|                        |         | MID       | 64QAM      | 22.14 | 21.94 | 22.13 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.23 | 22.09 | 21.98 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.00 | 21.09 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.11 | 20.95 | 21.13 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.81 | 21.15 | 20.81 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.24 | 21.04 | 20.71 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.91 | 24.26 | 24.13 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.06 | 24.08 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.11 | 23.96 | 24.27 | 24.30              |
|                        | 25      | LOW       | QPSK       | 22.97 | 23.25 | 22.96 | 23.30              |
|                        |         | MID       | QPSK       | 23.07 | 23.23 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.10 | 22.85 | 23.22 | 23.30              |
| 10                     | 1       | LOW       | Q16        | 23.14 | 23.07 | 23.09 | 23.30              |
|                        |         | LOW       | Q16        | 23.28 | 23.04 | 23.28 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 23.02 | 23.19 | 23.30              |
|                        | 25      | HIGH      | Q16        | 23.08 | 23.06 | 23.18 | 23.30              |
|                        |         | LOW       | Q16        | 21.97 | 22.04 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.18 | 22.05 | 21.98 | 22.30              |
|                        | 50      | HIGH      | Q16        | 21.98 | 22.07 | 22.20 | 22.30              |
|                        |         | LOW       | Q16        | 22.05 | 22.01 | 22.19 | 22.30              |
|                        |         | 1         | LOW        | 64QAM | 21.70 | 21.72 | 21.92              |
|                        | MID     |           | 64QAM      | 22.25 | 22.05 | 21.98 | 22.30              |
|                        | HIGH    |           | 64QAM      | 22.17 | 21.78 | 22.13 | 22.30              |
| 10                     | 25      | LOW       | 64QAM      | 21.15 | 21.28 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.09 | 21.12 | 20.94 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.94 | 21.17 | 21.08 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 21.12 | 21.02 | 20.66 | 21.30              |
|                        |         | LOW       | 64QAM      | 21.12 | 21.02 | 20.66 | 21.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|
| 15              | 1               | LOW       | QPSK       | 24.20      | 23.92 | 24.05 | 24.30              |
|                 |                 | MID       | QPSK       | 24.17      | 24.18 | 24.10 | 24.30              |
|                 |                 | HIGH      | QPSK       | 24.04      | 23.99 | 24.20 | 24.30              |
|                 | 36              | LOW       | QPSK       | 23.30      | 22.97 | 23.01 | 23.30              |
|                 |                 | MID       | QPSK       | 23.02      | 23.18 | 23.02 | 23.30              |
|                 |                 | HIGH      | QPSK       | 23.24      | 23.19 | 23.26 | 23.30              |
|                 | 75              | LOW       | QPSK       | 23.00      | 23.00 | 22.95 | 23.30              |
| 15              | 1               | LOW       | Q16        | 23.13      | 23.18 | 23.03 | 23.30              |
|                 |                 | MID       | Q16        | 23.19      | 23.14 | 23.14 | 23.30              |
|                 |                 | HIGH      | Q16        | 23.11      | 23.06 | 23.30 | 23.30              |
|                 | 36              | LOW       | Q16        | 22.10      | 22.29 | 22.23 | 22.30              |
|                 |                 | MID       | Q16        | 22.00      | 22.16 | 22.02 | 22.30              |
|                 |                 | HIGH      | Q16        | 22.24      | 22.11 | 22.18 | 22.30              |
|                 | 75              | LOW       | Q16        | 22.09      | 21.93 | 22.08 | 22.30              |
| 15              | 1               | LOW       | 64QAM      | 21.77      | 21.72 | 21.70 | 22.30              |
|                 |                 | MID       | 64QAM      | 21.94      | 21.98 | 22.09 | 22.30              |
|                 |                 | HIGH      | 64QAM      | 22.23      | 21.78 | 22.06 | 22.30              |
|                 | 36              | LOW       | 64QAM      | 21.25      | 21.05 | 21.04 | 21.30              |
|                 |                 | MID       | 64QAM      | 20.94      | 21.18 | 21.17 | 21.30              |
|                 |                 | HIGH      | 64QAM      | 21.04      | 21.22 | 21.06 | 21.30              |
|                 | 75              | LOW       | 64QAM      | 21.03      | 21.27 | 20.77 | 21.30              |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              |
| 20              | 1               | LOW       | QPSK       | 24.18      | 24.19 | 24.15 | 24.30              |
|                 |                 | MID       | QPSK       | 24.29      | 24.23 | 24.27 | 24.30              |
|                 |                 | HIGH      | QPSK       | 24.19      | 24.13 | 24.20 | 24.30              |
|                 | 50              | LOW       | QPSK       | 23.18      | 23.13 | 23.15 | 23.30              |
|                 |                 | MID       | QPSK       | 23.21      | 23.16 | 23.18 | 23.30              |
|                 |                 | HIGH      | QPSK       | 23.19      | 23.10 | 23.17 | 23.30              |
| 20              | 100             | LOW       | QPSK       | 23.19      | 23.16 | 23.07 | 23.30              |
|                 |                 | LOW       | Q16        | 23.21      | 23.06 | 23.19 | 23.30              |
|                 |                 | MID       | Q16        | 23.30      | 23.09 | 23.28 | 23.30              |
|                 | 50              | LOW       | Q16        | 23.24      | 22.99 | 23.25 | 23.30              |
|                 |                 | LOW       | Q16        | 22.17      | 22.20 | 22.16 | 22.30              |
|                 |                 | MID       | Q16        | 22.20      | 22.23 | 22.18 | 22.30              |
| 20              | 100             | HIGH      | Q16        | 22.20      | 22.20 | 22.18 | 22.30              |
|                 |                 | LOW       | Q16        | 22.16      | 22.17 | 22.12 | 22.30              |
|                 |                 | LOW       | 64QAM      | 21.90      | 21.76 | 21.90 | 22.30              |
|                 | 1               | MID       | 64QAM      | 22.18      | 22.05 | 22.11 | 22.30              |
|                 |                 | HIGH      | 64QAM      | 22.21      | 22.00 | 22.22 | 22.30              |
|                 |                 | LOW       | 64QAM      | 21.19      | 21.24 | 21.10 | 21.30              |
|                 | 50              | MID       | 64QAM      | 21.13      | 21.14 | 21.15 | 21.30              |
|                 |                 | HIGH      | 64QAM      | 20.98      | 21.28 | 20.98 | 21.30              |
| 100             | LOW             | 64QAM     | 21.16      | 21.19      | 20.83 | 21.30 |                    |

| LTE B38-State 2 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.20 | 24.26 | 24.22 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.30 | 24.15 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.14 | 24.03 | 24.15 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.18 | 22.92 | 23.01 | 23.30              |
|                        |         | MID       | QPSK       | 22.98 | 23.11 | 23.11 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.03 | 22.85 | 23.29 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.98 | 23.23 | 22.93 | 23.30              |
| 5                      | 1       | LOW       | Q16        | 23.19 | 22.88 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.04 | 22.93 | 23.16 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.06 | 23.12 | 23.30              |
|                        | 12      | LOW       | Q16        | 22.19 | 22.11 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.29 | 22.12 | 22.18 | 22.30              |
|                        |         | HIGH      | Q16        | 22.11 | 22.29 | 22.20 | 22.30              |
|                        | 25      | LOW       | Q16        | 22.03 | 22.06 | 22.12 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 21.66 | 21.65 | 21.94 | 22.30              |
|                        |         | MID       | 64QAM      | 22.14 | 21.94 | 22.13 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.23 | 22.09 | 21.98 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.00 | 21.09 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.11 | 20.95 | 21.13 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.81 | 21.15 | 20.81 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.24 | 21.04 | 20.71 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.91 | 24.26 | 24.13 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.06 | 24.08 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.11 | 23.96 | 24.27 | 24.30              |
|                        | 25      | LOW       | QPSK       | 22.97 | 23.25 | 22.96 | 23.30              |
|                        |         | MID       | QPSK       | 23.07 | 23.23 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.10 | 22.85 | 23.22 | 23.30              |
| 10                     | 1       | LOW       | QPSK       | 23.14 | 23.07 | 23.09 | 23.30              |
|                        |         | LOW       | Q16        | 23.28 | 23.04 | 23.28 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 23.02 | 23.19 | 23.30              |
|                        | 25      | HIGH      | Q16        | 23.08 | 23.06 | 23.18 | 23.30              |
|                        |         | LOW       | Q16        | 21.97 | 22.04 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.18 | 22.05 | 21.98 | 22.30              |
|                        | 50      | HIGH      | Q16        | 21.98 | 22.07 | 22.20 | 22.30              |
|                        |         | LOW       | Q16        | 22.05 | 22.01 | 22.19 | 22.30              |
| 10                     |         | 1         | LOW        | 64QAM | 21.70 | 21.72 | 21.92              |
|                        | MID     |           | 64QAM      | 22.25 | 22.05 | 21.98 | 22.30              |
|                        | HIGH    |           | 64QAM      | 22.17 | 21.78 | 22.13 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.15 | 21.28 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.09 | 21.12 | 20.94 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.94 | 21.17 | 21.08 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 21.12 | 21.02 | 20.66 | 21.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 24.20      | 23.92 | 24.05 | 24.30              |                    |
|                 |                 | MID       | QPSK       | 24.17      | 24.18 | 24.10 | 24.30              |                    |
|                 |                 | HIGH      | QPSK       | 24.04      | 23.99 | 24.20 | 24.30              |                    |
|                 | 36              | LOW       | QPSK       | 23.30      | 22.97 | 23.01 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 23.02      | 23.18 | 23.02 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 23.24      | 23.19 | 23.26 | 23.30              |                    |
|                 | 75              | LOW       | QPSK       | 23.00      | 23.00 | 22.95 | 23.30              |                    |
|                 | 15              | 1         | LOW        | Q16        | 23.13 | 23.18 | 23.03              | 23.30              |
|                 |                 |           | MID        | Q16        | 23.19 | 23.14 | 23.14              | 23.30              |
| HIGH            |                 |           | Q16        | 23.11      | 23.06 | 23.30 | 23.30              |                    |
| 36              |                 | LOW       | Q16        | 22.10      | 22.29 | 22.23 | 22.30              |                    |
|                 |                 | MID       | Q16        | 22.00      | 22.16 | 22.02 | 22.30              |                    |
|                 |                 | HIGH      | Q16        | 22.24      | 22.11 | 22.18 | 22.30              |                    |
| 75              | LOW             | Q16       | 22.09      | 21.93      | 22.08 | 22.30 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 21.77      | 21.72 | 21.70 | 22.30              |                    |
|                 |                 | MID       | 64QAM      | 21.94      | 21.98 | 22.09 | 22.30              |                    |
|                 |                 | HIGH      | 64QAM      | 22.23      | 21.78 | 22.06 | 22.30              |                    |
|                 | 36              | LOW       | 64QAM      | 21.25      | 21.05 | 21.04 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 20.94      | 21.18 | 21.17 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 21.04      | 21.22 | 21.06 | 21.30              |                    |
|                 | 75              | LOW       | 64QAM      | 21.03      | 21.27 | 20.77 | 21.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 24.18 | 24.19 | 24.15              | 24.30              |
| MID             |                 |           | QPSK       | 24.29      | 24.23 | 24.27 | 24.30              |                    |
| HIGH            |                 |           | QPSK       | 24.19      | 24.13 | 24.20 | 24.30              |                    |
| 50              |                 | LOW       | QPSK       | 23.18      | 23.13 | 23.15 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 23.21      | 23.16 | 23.18 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 23.19      | 23.10 | 23.17 | 23.30              |                    |
| 20              | 100             | LOW       | QPSK       | 23.19      | 23.16 | 23.07 | 23.30              |                    |
|                 |                 | LOW       | Q16        | 23.21      | 23.06 | 23.19 | 23.30              |                    |
|                 |                 | MID       | Q16        | 23.30      | 23.09 | 23.28 | 23.30              |                    |
|                 | 1               | HIGH      | Q16        | 23.24      | 22.99 | 23.25 | 23.30              |                    |
|                 |                 | LOW       | Q16        | 22.17      | 22.20 | 22.16 | 22.30              |                    |
|                 | 50              | MID       | Q16        | 22.20      | 22.23 | 22.18 | 22.30              |                    |
|                 |                 | HIGH      | Q16        | 22.20      | 22.20 | 22.18 | 22.30              |                    |
|                 | 100             | LOW       | Q16        | 22.16      | 22.17 | 22.12 | 22.30              |                    |
| 20              | 1               | LOW       | 64QAM      | 21.90      | 21.76 | 21.90 | 22.30              |                    |
|                 |                 | MID       | 64QAM      | 22.18      | 22.05 | 22.11 | 22.30              |                    |
|                 |                 | HIGH      | 64QAM      | 22.21      | 22.00 | 22.22 | 22.30              |                    |
|                 | 50              | LOW       | 64QAM      | 21.19      | 21.24 | 21.10 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.13      | 21.14 | 21.15 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 20.98      | 21.28 | 20.98 | 21.30              |                    |
|                 | 100             | LOW       | 64QAM      | 21.16      | 21.19 | 20.83 | 21.30              |                    |

| LTE B38-State 3 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.20 | 24.26 | 24.22 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.30 | 24.15 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.14 | 24.03 | 24.15 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.18 | 22.92 | 23.01 | 23.30              |
|                        |         | MID       | QPSK       | 22.98 | 23.11 | 23.11 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.03 | 22.85 | 23.29 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.98 | 23.23 | 22.93 | 23.30              |
| 5                      | 1       | LOW       | Q16        | 23.19 | 22.88 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.04 | 22.93 | 23.16 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.06 | 23.12 | 23.30              |
|                        | 12      | LOW       | Q16        | 22.19 | 22.11 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.29 | 22.12 | 22.18 | 22.30              |
|                        |         | HIGH      | Q16        | 22.11 | 22.29 | 22.20 | 22.30              |
|                        | 25      | LOW       | Q16        | 22.03 | 22.06 | 22.12 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 21.66 | 21.65 | 21.94 | 22.30              |
|                        |         | MID       | 64QAM      | 22.14 | 21.94 | 22.13 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.23 | 22.09 | 21.98 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.00 | 21.09 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.11 | 20.95 | 21.13 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.81 | 21.15 | 20.81 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.24 | 21.04 | 20.71 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.91 | 24.26 | 24.13 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.06 | 24.08 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.11 | 23.96 | 24.27 | 24.30              |
|                        | 25      | LOW       | QPSK       | 22.97 | 23.25 | 22.96 | 23.30              |
|                        |         | MID       | QPSK       | 23.07 | 23.23 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.10 | 22.85 | 23.22 | 23.30              |
| 10                     | 1       | LOW       | QPSK       | 23.14 | 23.07 | 23.09 | 23.30              |
|                        |         | LOW       | Q16        | 23.28 | 23.04 | 23.28 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 23.02 | 23.19 | 23.30              |
|                        | 25      | HIGH      | Q16        | 23.08 | 23.06 | 23.18 | 23.30              |
|                        |         | LOW       | Q16        | 21.97 | 22.04 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.18 | 22.05 | 21.98 | 22.30              |
|                        | 50      | HIGH      | Q16        | 21.98 | 22.07 | 22.20 | 22.30              |
|                        |         | LOW       | Q16        | 22.05 | 22.01 | 22.19 | 22.30              |
|                        |         | LOW       | 64QAM      | 21.70 | 21.72 | 21.92 | 22.30              |
|                        | 1       | MID       | 64QAM      | 22.25 | 22.05 | 21.98 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.17 | 21.78 | 22.13 | 22.30              |
| 25                     |         | LOW       | 64QAM      | 21.15 | 21.28 | 21.16 | 21.30              |
|                        | MID     | 64QAM     | 21.09      | 21.12 | 20.94 | 21.30 |                    |
|                        | HIGH    | 64QAM     | 20.94      | 21.17 | 21.08 | 21.30 |                    |
| 50                     | LOW     | 64QAM     | 21.12      | 21.02 | 20.66 | 21.30 |                    |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.20 | 23.92 | 24.05 | 24.30              |
|                 |         | MID       | QPSK       | 24.17 | 24.18 | 24.10 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.04 | 23.99 | 24.20 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.30 | 22.97 | 23.01 | 23.30              |
|                 |         | MID       | QPSK       | 23.02 | 23.18 | 23.02 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.24 | 23.19 | 23.26 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.00 | 23.00 | 22.95 | 23.30              |
| 15              | 1       | LOW       | Q16        | 23.13 | 23.18 | 23.03 | 23.30              |
|                 |         | MID       | Q16        | 23.19 | 23.14 | 23.14 | 23.30              |
|                 |         | HIGH      | Q16        | 23.11 | 23.06 | 23.30 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.10 | 22.29 | 22.23 | 22.30              |
|                 |         | MID       | Q16        | 22.00 | 22.16 | 22.02 | 22.30              |
|                 |         | HIGH      | Q16        | 22.24 | 22.11 | 22.18 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.09 | 21.93 | 22.08 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 21.77 | 21.72 | 21.70 | 22.30              |
|                 |         | MID       | 64QAM      | 21.94 | 21.98 | 22.09 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.23 | 21.78 | 22.06 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.25 | 21.05 | 21.04 | 21.30              |
|                 |         | MID       | 64QAM      | 20.94 | 21.18 | 21.17 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.04 | 21.22 | 21.06 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 21.03 | 21.27 | 20.77 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.18 | 24.19 | 24.15 | 24.30              |
|                 |         | MID       | QPSK       | 24.29 | 24.23 | 24.27 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.19 | 24.13 | 24.20 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.18 | 23.13 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.21 | 23.16 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.19 | 23.10 | 23.17 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.19 | 23.16 | 23.07 | 23.30              |
| 20              | 1       | LOW       | Q16        | 23.21 | 23.06 | 23.19 | 23.30              |
|                 |         | MID       | Q16        | 23.30 | 23.09 | 23.28 | 23.30              |
|                 |         | HIGH      | Q16        | 23.24 | 22.99 | 23.25 | 23.30              |
|                 | 50      | LOW       | Q16        | 22.17 | 22.20 | 22.16 | 22.30              |
|                 |         | MID       | Q16        | 22.20 | 22.23 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.20 | 22.20 | 22.18 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.16 | 22.17 | 22.12 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 21.90 | 21.76 | 21.90 | 22.30              |
|                 |         | MID       | 64QAM      | 22.18 | 22.05 | 22.11 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.21 | 22.00 | 22.22 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.19 | 21.24 | 21.10 | 21.30              |
|                 |         | MID       | 64QAM      | 21.13 | 21.14 | 21.15 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.98 | 21.28 | 20.98 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 21.16 | 21.19 | 20.83 | 21.30              |

| LTE B38-State 4 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.20 | 24.26 | 24.22 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.30 | 24.15 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.14 | 24.03 | 24.15 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.18 | 22.92 | 23.01 | 23.30              |
|                        |         | MID       | QPSK       | 22.98 | 23.11 | 23.11 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.03 | 22.85 | 23.29 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.98 | 23.23 | 22.93 | 23.30              |
| 5                      | 1       | LOW       | Q16        | 23.19 | 22.88 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.04 | 22.93 | 23.16 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.06 | 23.12 | 23.30              |
|                        | 12      | LOW       | Q16        | 22.19 | 22.11 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.29 | 22.12 | 22.18 | 22.30              |
|                        |         | HIGH      | Q16        | 22.11 | 22.29 | 22.20 | 22.30              |
|                        | 25      | LOW       | Q16        | 22.03 | 22.06 | 22.12 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 21.66 | 21.65 | 21.94 | 22.30              |
|                        |         | MID       | 64QAM      | 22.14 | 21.94 | 22.13 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.23 | 22.09 | 21.98 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.00 | 21.09 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.11 | 20.95 | 21.13 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.81 | 21.15 | 20.81 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.24 | 21.04 | 20.71 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.91 | 24.26 | 24.13 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.06 | 24.08 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.11 | 23.96 | 24.27 | 24.30              |
|                        | 25      | LOW       | QPSK       | 22.97 | 23.25 | 22.96 | 23.30              |
|                        |         | MID       | QPSK       | 23.07 | 23.23 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.10 | 22.85 | 23.22 | 23.30              |
| 10                     | 1       | LOW       | QPSK       | 23.14 | 23.07 | 23.09 | 23.30              |
|                        |         | LOW       | Q16        | 23.28 | 23.04 | 23.28 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 23.02 | 23.19 | 23.30              |
|                        | 25      | HIGH      | Q16        | 23.08 | 23.06 | 23.18 | 23.30              |
|                        |         | LOW       | Q16        | 21.97 | 22.04 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.18 | 22.05 | 21.98 | 22.30              |
|                        | 50      | HIGH      | Q16        | 21.98 | 22.07 | 22.20 | 22.30              |
|                        |         | LOW       | Q16        | 22.05 | 22.01 | 22.19 | 22.30              |
| 10                     |         | 1         | LOW        | 64QAM | 21.70 | 21.72 | 21.92              |
|                        | MID     |           | 64QAM      | 22.25 | 22.05 | 21.98 | 22.30              |
|                        | HIGH    |           | 64QAM      | 22.17 | 21.78 | 22.13 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.15 | 21.28 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.09 | 21.12 | 20.94 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.94 | 21.17 | 21.08 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 21.12 | 21.02 | 20.66 | 21.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 24.20      | 23.92 | 24.05 | 24.30              |                    |
|                 |                 | MID       | QPSK       | 24.17      | 24.18 | 24.10 | 24.30              |                    |
|                 |                 | HIGH      | QPSK       | 24.04      | 23.99 | 24.20 | 24.30              |                    |
|                 | 36              | LOW       | QPSK       | 23.30      | 22.97 | 23.01 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 23.02      | 23.18 | 23.02 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 23.24      | 23.19 | 23.26 | 23.30              |                    |
|                 | 75              | LOW       | QPSK       | 23.00      | 23.00 | 22.95 | 23.30              |                    |
|                 | 15              | 1         | LOW        | Q16        | 23.13 | 23.18 | 23.03              | 23.30              |
|                 |                 |           | MID        | Q16        | 23.19 | 23.14 | 23.14              | 23.30              |
| HIGH            |                 |           | Q16        | 23.11      | 23.06 | 23.30 | 23.30              |                    |
| 36              |                 | LOW       | Q16        | 22.10      | 22.29 | 22.23 | 22.30              |                    |
|                 |                 | MID       | Q16        | 22.00      | 22.16 | 22.02 | 22.30              |                    |
|                 |                 | HIGH      | Q16        | 22.24      | 22.11 | 22.18 | 22.30              |                    |
| 75              | LOW             | Q16       | 22.09      | 21.93      | 22.08 | 22.30 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 21.77      | 21.72 | 21.70 | 22.30              |                    |
|                 |                 | MID       | 64QAM      | 21.94      | 21.98 | 22.09 | 22.30              |                    |
|                 |                 | HIGH      | 64QAM      | 22.23      | 21.78 | 22.06 | 22.30              |                    |
|                 | 36              | LOW       | 64QAM      | 21.25      | 21.05 | 21.04 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 20.94      | 21.18 | 21.17 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 21.04      | 21.22 | 21.06 | 21.30              |                    |
|                 | 75              | LOW       | 64QAM      | 21.03      | 21.27 | 20.77 | 21.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 24.18 | 24.19 | 24.15              | 24.30              |
| MID             |                 |           | QPSK       | 24.29      | 24.23 | 24.27 | 24.30              |                    |
| HIGH            |                 |           | QPSK       | 24.19      | 24.13 | 24.20 | 24.30              |                    |
| 50              |                 | LOW       | QPSK       | 23.18      | 23.13 | 23.15 | 23.30              |                    |
|                 |                 | MID       | QPSK       | 23.21      | 23.16 | 23.18 | 23.30              |                    |
|                 |                 | HIGH      | QPSK       | 23.19      | 23.10 | 23.17 | 23.30              |                    |
| 20              | 100             | LOW       | QPSK       | 23.19      | 23.16 | 23.07 | 23.30              |                    |
|                 |                 | LOW       | Q16        | 23.21      | 23.06 | 23.19 | 23.30              |                    |
|                 |                 | MID       | Q16        | 23.30      | 23.09 | 23.28 | 23.30              |                    |
|                 | 1               | HIGH      | Q16        | 23.24      | 22.99 | 23.25 | 23.30              |                    |
|                 |                 | LOW       | Q16        | 22.17      | 22.20 | 22.16 | 22.30              |                    |
|                 |                 | MID       | Q16        | 22.20      | 22.23 | 22.18 | 22.30              |                    |
| 20              | 50              | HIGH      | Q16        | 22.20      | 22.20 | 22.18 | 22.30              |                    |
|                 |                 | LOW       | Q16        | 22.16      | 22.17 | 22.12 | 22.30              |                    |
|                 |                 | LOW       | 64QAM      | 21.90      | 21.76 | 21.90 | 22.30              |                    |
|                 | 1               | MID       | 64QAM      | 22.18      | 22.05 | 22.11 | 22.30              |                    |
|                 |                 | HIGH      | 64QAM      | 22.21      | 22.00 | 22.22 | 22.30              |                    |
|                 |                 | LOW       | 64QAM      | 21.19      | 21.24 | 21.10 | 21.30              |                    |
|                 | 50              | MID       | 64QAM      | 21.13      | 21.14 | 21.15 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 20.98      | 21.28 | 20.98 | 21.30              |                    |
|                 |                 | LOW       | 64QAM      | 21.16      | 21.19 | 20.83 | 21.30              |                    |

| LTE B38-State 5 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.20 | 24.26 | 24.22 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.30 | 24.15 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.14 | 24.03 | 24.15 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.18 | 22.92 | 23.01 | 23.30              |
|                        |         | MID       | QPSK       | 22.98 | 23.11 | 23.11 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.03 | 22.85 | 23.29 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.98 | 23.23 | 22.93 | 23.30              |
| 5                      | 1       | LOW       | Q16        | 23.19 | 22.88 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.04 | 22.93 | 23.16 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.06 | 23.12 | 23.30              |
|                        | 12      | LOW       | Q16        | 22.19 | 22.11 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.29 | 22.12 | 22.18 | 22.30              |
|                        |         | HIGH      | Q16        | 22.11 | 22.29 | 22.20 | 22.30              |
|                        | 25      | LOW       | Q16        | 22.03 | 22.06 | 22.12 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 21.66 | 21.65 | 21.94 | 22.30              |
|                        |         | MID       | 64QAM      | 22.14 | 21.94 | 22.13 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.23 | 22.09 | 21.98 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.00 | 21.09 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.11 | 20.95 | 21.13 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.81 | 21.15 | 20.81 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.24 | 21.04 | 20.71 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.91 | 24.26 | 24.13 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.06 | 24.08 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.11 | 23.96 | 24.27 | 24.30              |
|                        | 25      | LOW       | QPSK       | 22.97 | 23.25 | 22.96 | 23.30              |
|                        |         | MID       | QPSK       | 23.07 | 23.23 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.10 | 22.85 | 23.22 | 23.30              |
|                        | 50      | LOW       | QPSK       | 23.14 | 23.07 | 23.09 | 23.30              |
| 10                     | 1       | LOW       | Q16        | 23.28 | 23.04 | 23.28 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 23.02 | 23.19 | 23.30              |
|                        |         | HIGH      | Q16        | 23.08 | 23.06 | 23.18 | 23.30              |
|                        | 25      | LOW       | Q16        | 21.97 | 22.04 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.18 | 22.05 | 21.98 | 22.30              |
|                        |         | HIGH      | Q16        | 21.98 | 22.07 | 22.20 | 22.30              |
|                        | 50      | LOW       | Q16        | 22.05 | 22.01 | 22.19 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 21.70 | 21.72 | 21.92 | 22.30              |
|                        |         | MID       | 64QAM      | 22.25 | 22.05 | 21.98 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.17 | 21.78 | 22.13 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.15 | 21.28 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.09 | 21.12 | 20.94 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.94 | 21.17 | 21.08 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 21.12 | 21.02 | 20.66 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.20 | 23.92 | 24.05 | 24.30              |
|                 |         | MID       | QPSK       | 24.17 | 24.18 | 24.10 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.04 | 23.99 | 24.20 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.30 | 22.97 | 23.01 | 23.30              |
|                 |         | MID       | QPSK       | 23.02 | 23.18 | 23.02 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.24 | 23.19 | 23.26 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.00 | 23.00 | 22.95 | 23.30              |
| 15              | 1       | LOW       | Q16        | 23.13 | 23.18 | 23.03 | 23.30              |
|                 |         | MID       | Q16        | 23.19 | 23.14 | 23.14 | 23.30              |
|                 |         | HIGH      | Q16        | 23.11 | 23.06 | 23.30 | 23.30              |
|                 | 36      | LOW       | Q16        | 22.10 | 22.29 | 22.23 | 22.30              |
|                 |         | MID       | Q16        | 22.00 | 22.16 | 22.02 | 22.30              |
|                 |         | HIGH      | Q16        | 22.24 | 22.11 | 22.18 | 22.30              |
|                 | 75      | LOW       | Q16        | 22.09 | 21.93 | 22.08 | 22.30              |
| 15              | 1       | LOW       | 64QAM      | 21.77 | 21.72 | 21.70 | 22.30              |
|                 |         | MID       | 64QAM      | 21.94 | 21.98 | 22.09 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.23 | 21.78 | 22.06 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.25 | 21.05 | 21.04 | 21.30              |
|                 |         | MID       | 64QAM      | 20.94 | 21.18 | 21.17 | 21.30              |
|                 |         | HIGH      | 64QAM      | 21.04 | 21.22 | 21.06 | 21.30              |
|                 | 75      | LOW       | 64QAM      | 21.03 | 21.27 | 20.77 | 21.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.18 | 24.19 | 24.15 | 24.30              |
|                 |         | MID       | QPSK       | 24.29 | 24.23 | 24.27 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.19 | 24.13 | 24.20 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.18 | 23.13 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.21 | 23.16 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.19 | 23.10 | 23.17 | 23.30              |
| 20              | 100     | LOW       | QPSK       | 23.19 | 23.16 | 23.07 | 23.30              |
|                 |         | LOW       | Q16        | 23.21 | 23.06 | 23.19 | 23.30              |
|                 |         | MID       | Q16        | 23.30 | 23.09 | 23.28 | 23.30              |
|                 | 1       | HIGH      | Q16        | 23.24 | 22.99 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.17 | 22.20 | 22.16 | 22.30              |
|                 | 50      | MID       | Q16        | 22.20 | 22.23 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.20 | 22.20 | 22.18 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.16 | 22.17 | 22.12 | 22.30              |
| 20              | 1       | LOW       | 64QAM      | 21.90 | 21.76 | 21.90 | 22.30              |
|                 |         | MID       | 64QAM      | 22.18 | 22.05 | 22.11 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.21 | 22.00 | 22.22 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.19 | 21.24 | 21.10 | 21.30              |
|                 |         | MID       | 64QAM      | 21.13 | 21.14 | 21.15 | 21.30              |
|                 |         | HIGH      | 64QAM      | 20.98 | 21.28 | 20.98 | 21.30              |
|                 | 100     | LOW       | 64QAM      | 21.16 | 21.19 | 20.83 | 21.30              |

| LTE B38-State 6 -Ant.0 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.20 | 24.26 | 24.22 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.30 | 24.15 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.14 | 24.03 | 24.15 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.18 | 22.92 | 23.01 | 23.30              |
|                        |         | MID       | QPSK       | 22.98 | 23.11 | 23.11 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.03 | 22.85 | 23.29 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.98 | 23.23 | 22.93 | 23.30              |
| 5                      | 1       | LOW       | Q16        | 23.19 | 22.88 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.04 | 22.93 | 23.16 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.06 | 23.12 | 23.30              |
|                        | 12      | LOW       | Q16        | 22.19 | 22.11 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.29 | 22.12 | 22.18 | 22.30              |
|                        |         | HIGH      | Q16        | 22.11 | 22.29 | 22.20 | 22.30              |
|                        | 25      | LOW       | Q16        | 22.03 | 22.06 | 22.12 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 21.66 | 21.65 | 21.94 | 22.30              |
|                        |         | MID       | 64QAM      | 22.14 | 21.94 | 22.13 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.23 | 22.09 | 21.98 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.00 | 21.09 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.11 | 20.95 | 21.13 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.81 | 21.15 | 20.81 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.24 | 21.04 | 20.71 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 23.91 | 24.26 | 24.13 | 24.30              |
|                        |         | MID       | QPSK       | 24.21 | 24.06 | 24.08 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.11 | 23.96 | 24.27 | 24.30              |
|                        | 25      | LOW       | QPSK       | 22.97 | 23.25 | 22.96 | 23.30              |
|                        |         | MID       | QPSK       | 23.07 | 23.23 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.10 | 22.85 | 23.22 | 23.30              |
| 10                     | 1       | LOW       | QPSK       | 23.14 | 23.07 | 23.09 | 23.30              |
|                        |         | LOW       | Q16        | 23.28 | 23.04 | 23.28 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 23.02 | 23.19 | 23.30              |
|                        | 25      | HIGH      | Q16        | 23.08 | 23.06 | 23.18 | 23.30              |
|                        |         | LOW       | Q16        | 21.97 | 22.04 | 22.03 | 22.30              |
|                        |         | MID       | Q16        | 22.18 | 22.05 | 21.98 | 22.30              |
|                        | 50      | HIGH      | Q16        | 21.98 | 22.07 | 22.20 | 22.30              |
|                        |         | LOW       | Q16        | 22.05 | 22.01 | 22.19 | 22.30              |
| 10                     |         | 1         | LOW        | 64QAM | 21.70 | 21.72 | 21.92              |
|                        | MID     |           | 64QAM      | 22.25 | 22.05 | 21.98 | 22.30              |
|                        | HIGH    |           | 64QAM      | 22.17 | 21.78 | 22.13 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.15 | 21.28 | 21.16 | 21.30              |
|                        |         | MID       | 64QAM      | 21.09 | 21.12 | 20.94 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.94 | 21.17 | 21.08 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 21.12 | 21.02 | 20.66 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |       |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| 15              | 1       | LOW       | QPSK       | 24.20 | 23.92 | 24.05 | 24.30              |       |
|                 |         | MID       | QPSK       | 24.17 | 24.18 | 24.10 | 24.30              |       |
|                 |         | HIGH      | QPSK       | 24.04 | 23.99 | 24.20 | 24.30              |       |
|                 | 36      | LOW       | QPSK       | 23.30 | 22.97 | 23.01 | 23.30              |       |
|                 |         | MID       | QPSK       | 23.02 | 23.18 | 23.02 | 23.30              |       |
|                 |         | HIGH      | QPSK       | 23.24 | 23.19 | 23.26 | 23.30              |       |
|                 | 75      | LOW       | QPSK       | 23.00 | 23.00 | 22.95 | 23.30              |       |
| 15              | 1       | LOW       | Q16        | 23.13 | 23.18 | 23.03 | 23.30              |       |
|                 |         | MID       | Q16        | 23.19 | 23.14 | 23.14 | 23.30              |       |
|                 |         | HIGH      | Q16        | 23.11 | 23.06 | 23.30 | 23.30              |       |
|                 | 36      | LOW       | Q16        | 22.10 | 22.29 | 22.23 | 22.30              |       |
|                 |         | MID       | Q16        | 22.00 | 22.16 | 22.02 | 22.30              |       |
|                 |         | HIGH      | Q16        | 22.24 | 22.11 | 22.18 | 22.30              |       |
|                 | 75      | LOW       | Q16        | 22.09 | 21.93 | 22.08 | 22.30              |       |
| 15              | 1       | LOW       | 64QAM      | 21.77 | 21.72 | 21.70 | 22.30              |       |
|                 |         | MID       | 64QAM      | 21.94 | 21.98 | 22.09 | 22.30              |       |
|                 |         | HIGH      | 64QAM      | 22.23 | 21.78 | 22.06 | 22.30              |       |
|                 | 36      | LOW       | 64QAM      | 21.25 | 21.05 | 21.04 | 21.30              |       |
|                 |         | MID       | 64QAM      | 20.94 | 21.18 | 21.17 | 21.30              |       |
|                 |         | HIGH      | 64QAM      | 21.04 | 21.22 | 21.06 | 21.30              |       |
|                 | 75      | LOW       | 64QAM      | 21.03 | 21.27 | 20.77 | 21.30              |       |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |       |
| 20              | 1       | LOW       | QPSK       | 24.18 | 24.19 | 24.15 | 24.30              |       |
|                 |         | MID       | QPSK       | 24.29 | 24.23 | 24.27 | 24.30              |       |
|                 |         | HIGH      | QPSK       | 24.19 | 24.13 | 24.20 | 24.30              |       |
|                 | 50      | LOW       | QPSK       | 23.18 | 23.13 | 23.15 | 23.30              |       |
|                 |         | MID       | QPSK       | 23.21 | 23.16 | 23.18 | 23.30              |       |
|                 |         | HIGH      | QPSK       | 23.19 | 23.10 | 23.17 | 23.30              |       |
| 20              | 100     | LOW       | QPSK       | 23.19 | 23.16 | 23.07 | 23.30              |       |
|                 |         | LOW       | Q16        | 23.21 | 23.06 | 23.19 | 23.30              |       |
|                 |         | MID       | Q16        | 23.30 | 23.09 | 23.28 | 23.30              |       |
|                 | 50      | HIGH      | Q16        | 23.24 | 22.99 | 23.25 | 23.30              |       |
|                 |         | LOW       | Q16        | 22.17 | 22.20 | 22.16 | 22.30              |       |
|                 |         | MID       | Q16        | 22.20 | 22.23 | 22.18 | 22.30              |       |
|                 | 20      | 1         | HIGH       | Q16   | 22.20 | 22.20 | 22.18              | 22.30 |
|                 |         |           | LOW        | Q16   | 22.16 | 22.17 | 22.12              | 22.30 |
| LOW             |         |           | 64QAM      | 21.90 | 21.76 | 21.90 | 22.30              |       |
| 50              |         | MID       | 64QAM      | 22.18 | 22.05 | 22.11 | 22.30              |       |
|                 |         | HIGH      | 64QAM      | 22.21 | 22.00 | 22.22 | 22.30              |       |
|                 |         | LOW       | 64QAM      | 21.19 | 21.24 | 21.10 | 21.30              |       |
| 100             |         | MID       | 64QAM      | 21.13 | 21.14 | 21.15 | 21.30              |       |
| HIGH            | 64QAM   | 20.98     | 21.28      | 20.98 | 21.30 |       |                    |       |
| 100             | LOW     | 64QAM     | 21.16      | 21.19 | 20.83 | 21.30 |                    |       |

| LTE B38-State 1 -Ant.4 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 19.44 | 19.48 | 19.39 | 20.00              |
|                        |         | MID       | QPSK       | 19.44 | 19.44 | 19.55 | 20.00              |
|                        |         | HIGH      | QPSK       | 19.40 | 19.19 | 19.66 | 20.00              |
|                        | 12      | LOW       | QPSK       | 18.50 | 18.33 | 18.15 | 20.00              |
|                        |         | MID       | QPSK       | 18.42 | 18.16 | 18.33 | 20.00              |
|                        |         | HIGH      | QPSK       | 18.11 | 18.25 | 18.23 | 20.00              |
|                        | 25      | LOW       | QPSK       | 18.55 | 18.23 | 18.09 | 20.00              |
| 5                      | 1       | LOW       | Q16        | 18.31 | 18.23 | 18.12 | 20.00              |
|                        |         | MID       | Q16        | 18.37 | 18.13 | 18.14 | 20.00              |
|                        |         | HIGH      | Q16        | 18.40 | 18.32 | 18.07 | 20.00              |
|                        | 12      | LOW       | Q16        | 17.35 | 17.51 | 17.46 | 19.00              |
|                        |         | MID       | Q16        | 17.22 | 17.37 | 17.29 | 19.00              |
|                        |         | HIGH      | Q16        | 17.52 | 17.16 | 17.42 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.43 | 17.12 | 17.15 | 19.00              |
| 5                      | 1       | LOW       | 64QAM      | 17.63 | 17.60 | 17.61 | 19.00              |
|                        |         | MID       | 64QAM      | 17.64 | 17.41 | 17.47 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.44 | 17.38 | 17.67 | 19.00              |
|                        | 12      | LOW       | 64QAM      | 17.40 | 17.77 | 17.38 | 18.00              |
|                        |         | MID       | 64QAM      | 17.72 | 17.47 | 17.63 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.10 | 17.35 | 17.40 | 18.00              |
|                        | 25      | LOW       | 64QAM      | 17.72 | 17.43 | 17.60 | 18.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 19.42 | 19.40 | 19.57 | 20.00              |
|                        |         | MID       | QPSK       | 19.54 | 19.50 | 19.32 | 20.00              |
|                        |         | HIGH      | QPSK       | 19.50 | 19.17 | 19.40 | 20.00              |
|                        | 25      | LOW       | QPSK       | 18.55 | 18.48 | 18.33 | 20.00              |
|                        |         | MID       | QPSK       | 18.38 | 18.34 | 18.29 | 20.00              |
|                        |         | HIGH      | QPSK       | 18.22 | 18.39 | 18.05 | 20.00              |
|                        | 50      | LOW       | QPSK       | 18.40 | 18.38 | 18.05 | 20.00              |
| 10                     | 1       | LOW       | Q16        | 18.55 | 18.38 | 18.30 | 20.00              |
|                        |         | MID       | Q16        | 18.44 | 18.31 | 18.14 | 20.00              |
|                        |         | HIGH      | Q16        | 18.40 | 18.31 | 18.03 | 20.00              |
|                        | 25      | LOW       | Q16        | 17.52 | 17.55 | 17.27 | 19.00              |
|                        |         | MID       | Q16        | 17.25 | 17.37 | 17.36 | 19.00              |
|                        |         | HIGH      | Q16        | 17.29 | 17.08 | 17.27 | 19.00              |
|                        | 50      | LOW       | Q16        | 17.54 | 17.27 | 17.25 | 19.00              |
| 10                     | 1       | LOW       | 64QAM      | 17.65 | 17.69 | 17.63 | 19.00              |
|                        |         | MID       | 64QAM      | 17.91 | 17.51 | 17.37 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.62 | 17.26 | 17.74 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 17.65 | 17.68 | 17.50 | 18.00              |
|                        |         | MID       | 64QAM      | 17.76 | 17.25 | 17.63 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.23 | 17.49 | 17.47 | 18.00              |
|                        | 50      | LOW       | 64QAM      | 17.82 | 17.53 | 17.57 | 18.00              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.54      | 19.56 | 19.63 | 20.00              |                    |
|                 |                 | MID       | QPSK       | 19.62      | 19.50 | 19.43 | 20.00              |                    |
|                 |                 | HIGH      | QPSK       | 19.64      | 19.34 | 19.62 | 20.00              |                    |
|                 | 36              | LOW       | QPSK       | 18.44      | 18.46 | 18.42 | 20.00              |                    |
|                 |                 | MID       | QPSK       | 18.51      | 18.36 | 18.34 | 20.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.22      | 18.19 | 18.13 | 20.00              |                    |
|                 | 75              | LOW       | QPSK       | 18.33      | 18.17 | 18.29 | 20.00              |                    |
|                 | 15              | 1         | LOW        | Q16        | 18.48 | 18.36 | 18.27              | 20.00              |
|                 |                 |           | MID        | Q16        | 18.33 | 18.13 | 18.18              | 20.00              |
| HIGH            |                 |           | Q16        | 18.44      | 18.27 | 18.12 | 20.00              |                    |
| 36              |                 | LOW       | Q16        | 17.49      | 17.41 | 17.48 | 19.00              |                    |
|                 |                 | MID       | Q16        | 17.34      | 17.12 | 17.20 | 19.00              |                    |
|                 |                 | HIGH      | Q16        | 17.45      | 17.20 | 17.28 | 19.00              |                    |
| 75              | LOW             | Q16       | 17.56      | 17.36      | 17.41 | 19.00 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 17.56      | 17.56 | 17.57 | 19.00              |                    |
|                 |                 | MID       | 64QAM      | 17.87      | 17.55 | 17.56 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.39      | 17.28 | 17.68 | 19.00              |                    |
|                 | 36              | LOW       | 64QAM      | 17.49      | 17.70 | 17.40 | 18.00              |                    |
|                 |                 | MID       | 64QAM      | 17.62      | 17.27 | 17.52 | 18.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.10      | 17.38 | 17.60 | 18.00              |                    |
|                 | 75              | LOW       | 64QAM      | 17.79      | 17.29 | 17.60 | 18.00              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
| 20              | 1               | LOW       | QPSK       | 19.64      | 19.48 | 19.59 | 20.00              |                    |
|                 |                 | MID       | QPSK       | 19.60      | 19.46 | 19.53 | 20.00              |                    |
|                 |                 | HIGH      | QPSK       | 19.60      | 19.34 | 19.56 | 20.00              |                    |
|                 | 50              | LOW       | QPSK       | 18.48      | 18.42 | 18.33 | 20.00              |                    |
|                 |                 | MID       | QPSK       | 18.44      | 18.34 | 18.29 | 20.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.13      | 18.30 | 18.18 | 20.00              |                    |
| 20              | 100             | LOW       | QPSK       | 18.46      | 18.34 | 18.25 | 20.00              |                    |
|                 |                 | LOW       | Q16        | 18.46      | 18.40 | 18.25 | 20.00              |                    |
|                 |                 | MID       | Q16        | 18.37      | 18.31 | 18.16 | 20.00              |                    |
|                 | 50              | LOW       | Q16        | 18.46      | 18.27 | 18.14 | 20.00              |                    |
|                 |                 | LOW       | Q16        | 17.54      | 17.46 | 17.41 | 19.00              |                    |
|                 |                 | MID       | Q16        | 17.34      | 17.28 | 17.27 | 19.00              |                    |
| 20              | 1               | HIGH      | Q16        | 17.43      | 17.18 | 17.44 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 17.54      | 17.29 | 17.34 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 17.70      | 17.60 | 17.59 | 19.00              |                    |
|                 | 50              | MID       | 64QAM      | 17.82      | 17.46 | 17.47 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.55      | 17.38 | 17.72 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 17.56      | 17.84 | 17.45 | 18.00              |                    |
|                 | 100             | MID       | 64QAM      | 17.74      | 17.44 | 17.59 | 18.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.26      | 17.40 | 17.56 | 18.00              |                    |
|                 |                 | LOW       | 64QAM      | 17.86      | 17.46 | 17.53 | 18.00              |                    |

| LTE B38-State 2 -Ant.4 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 18.43 | 18.46 | 18.69 | 19.00              |
|                        |         | MID       | QPSK       | 18.56 | 18.48 | 18.59 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.37 | 18.30 | 18.52 | 19.00              |
|                        | 12      | LOW       | QPSK       | 18.51 | 18.24 | 18.27 | 19.00              |
|                        |         | MID       | QPSK       | 18.54 | 18.16 | 18.30 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.50 | 18.14 | 18.12 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.31 | 17.98 | 18.41 | 19.00              |
|                        | 5       | LOW       | Q16        | 18.21 | 18.25 | 18.05 | 19.00              |
|                        |         | MID       | Q16        | 18.39 | 18.36 | 17.83 | 19.00              |
|                        |         | HIGH      | Q16        | 18.08 | 18.05 | 17.96 | 19.00              |
|                        |         | LOW       | Q16        | 17.49 | 17.38 | 17.19 | 19.00              |
|                        |         | MID       | Q16        | 17.42 | 17.07 | 17.08 | 19.00              |
|                        |         | HIGH      | Q16        | 17.20 | 17.03 | 17.20 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.39 | 17.33 | 17.27 | 19.00              |
| 5                      | 1       | LOW       | 64QAM      | 17.61 | 17.67 | 17.45 | 19.00              |
|                        |         | MID       | 64QAM      | 17.64 | 17.50 | 17.42 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.66 | 17.33 | 17.58 | 19.00              |
|                        | 12      | LOW       | 64QAM      | 17.52 | 17.50 | 17.32 | 18.00              |
|                        |         | MID       | 64QAM      | 17.80 | 17.56 | 17.52 | 18.00              |
|                        |         | HIGH      | 64QAM      | 16.92 | 17.25 | 17.60 | 18.00              |
|                        | 25      | LOW       | 64QAM      | 17.72 | 17.34 | 17.57 | 18.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 18.70 | 18.42 | 18.55 | 19.00              |
|                        |         | MID       | QPSK       | 18.43 | 18.24 | 18.57 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.26 | 18.25 | 18.30 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.44 | 18.39 | 18.40 | 19.00              |
|                        |         | MID       | QPSK       | 18.57 | 18.35 | 18.38 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.24 | 17.96 | 18.18 | 19.00              |
| 10                     | 50      | LOW       | QPSK       | 18.18 | 18.07 | 18.23 | 19.00              |
|                        | 1       | LOW       | Q16        | 18.33 | 18.27 | 18.10 | 19.00              |
|                        |         | MID       | Q16        | 18.48 | 18.42 | 18.10 | 19.00              |
|                        |         | HIGH      | Q16        | 18.24 | 18.16 | 18.10 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.70 | 17.48 | 17.03 | 19.00              |
|                        |         | MID       | Q16        | 17.27 | 17.15 | 17.15 | 19.00              |
|                        |         | HIGH      | Q16        | 17.15 | 17.08 | 17.35 | 19.00              |
|                        | 50      | LOW       | Q16        | 17.51 | 17.31 | 17.23 | 19.00              |
|                        | 10      | LOW       | 64QAM      | 17.54 | 17.60 | 17.50 | 19.00              |
|                        |         | MID       | 64QAM      | 17.77 | 17.55 | 17.52 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.55 | 17.31 | 17.83 | 19.00              |
|                        |         | LOW       | 64QAM      | 17.42 | 17.52 | 17.36 | 18.00              |
|                        |         | MID       | 64QAM      | 17.85 | 17.33 | 17.50 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.02 | 17.20 | 17.49 | 18.00              |
|                        | 50      | LOW       | 64QAM      | 17.72 | 17.51 | 17.37 | 18.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 18.55 | 18.37 | 18.51 | 19.00              |
|                 |         | MID       | QPSK       | 18.45 | 18.32 | 18.46 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.28 | 18.29 | 18.34 | 19.00              |
|                 | 36      | LOW       | QPSK       | 18.51 | 18.46 | 18.36 | 19.00              |
|                 |         | MID       | QPSK       | 18.57 | 18.40 | 18.18 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.50 | 18.10 | 18.29 | 19.00              |
|                 | 75      | LOW       | QPSK       | 18.44 | 18.21 | 18.28 | 19.00              |
| 15              | 1       | LOW       | Q16        | 18.31 | 18.38 | 18.26 | 19.00              |
|                 |         | MID       | Q16        | 18.39 | 18.45 | 17.87 | 19.00              |
|                 |         | HIGH      | Q16        | 18.10 | 17.87 | 18.03 | 19.00              |
|                 | 36      | LOW       | Q16        | 17.47 | 17.36 | 17.10 | 19.00              |
|                 |         | MID       | Q16        | 17.44 | 17.09 | 17.20 | 19.00              |
|                 |         | HIGH      | Q16        | 17.31 | 17.08 | 17.35 | 19.00              |
|                 | 75      | LOW       | Q16        | 17.28 | 17.33 | 17.11 | 19.00              |
| 15              | 1       | LOW       | 64QAM      | 17.75 | 17.58 | 17.49 | 19.00              |
|                 |         | MID       | 64QAM      | 17.71 | 17.50 | 17.47 | 19.00              |
|                 |         | HIGH      | 64QAM      | 17.66 | 17.31 | 17.56 | 19.00              |
|                 | 36      | LOW       | 64QAM      | 17.32 | 17.50 | 17.20 | 18.00              |
|                 |         | MID       | 64QAM      | 17.76 | 17.32 | 17.62 | 18.00              |
|                 |         | HIGH      | 64QAM      | 17.16 | 17.23 | 17.60 | 18.00              |
|                 | 75      | LOW       | 64QAM      | 17.93 | 17.37 | 17.39 | 18.00              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 18.64 | 18.48 | 18.62 | 19.00              |
|                 |         | MID       | QPSK       | 18.49 | 18.39 | 18.57 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.43 | 18.36 | 18.43 | 19.00              |
|                 | 50      | LOW       | QPSK       | 18.53 | 18.37 | 18.42 | 19.00              |
|                 |         | MID       | QPSK       | 18.50 | 18.31 | 18.36 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.44 | 18.10 | 18.25 | 19.00              |
|                 | 100     | LOW       | QPSK       | 18.38 | 18.14 | 18.34 | 19.00              |
| 20              | 1       | LOW       | Q16        | 18.26 | 18.38 | 18.21 | 19.00              |
|                 |         | MID       | Q16        | 18.39 | 18.38 | 18.03 | 19.00              |
|                 |         | HIGH      | Q16        | 18.26 | 18.07 | 18.12 | 19.00              |
|                 | 50      | LOW       | Q16        | 17.61 | 17.43 | 17.22 | 19.00              |
|                 |         | MID       | Q16        | 17.39 | 17.12 | 17.13 | 19.00              |
|                 |         | HIGH      | Q16        | 17.29 | 17.03 | 17.30 | 19.00              |
|                 | 100     | LOW       | Q16        | 17.42 | 17.36 | 17.25 | 19.00              |
| 20              | 1       | LOW       | 64QAM      | 17.68 | 17.60 | 17.61 | 19.00              |
|                 |         | MID       | 64QAM      | 17.82 | 17.55 | 17.47 | 19.00              |
|                 |         | HIGH      | 64QAM      | 17.62 | 17.33 | 17.76 | 19.00              |
|                 | 50      | LOW       | 64QAM      | 17.49 | 17.64 | 17.29 | 18.00              |
|                 |         | MID       | 64QAM      | 17.76 | 17.49 | 17.64 | 18.00              |
|                 |         | HIGH      | 64QAM      | 17.09 | 17.37 | 17.56 | 18.00              |
|                 | 100     | LOW       | 64QAM      | 17.88 | 17.44 | 17.55 | 18.00              |

| LTE B38-State 3 -Ant.4 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 18.43 | 18.46 | 18.69 | 19.00              |
|                        |         | MID       | QPSK       | 18.56 | 18.48 | 18.59 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.37 | 18.30 | 18.52 | 19.00              |
|                        | 12      | LOW       | QPSK       | 18.51 | 18.24 | 18.27 | 19.00              |
|                        |         | MID       | QPSK       | 18.54 | 18.16 | 18.30 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.50 | 18.14 | 18.12 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.31 | 17.98 | 18.41 | 19.00              |
|                        | 5       | LOW       | Q16        | 18.21 | 18.25 | 18.05 | 19.00              |
|                        |         | MID       | Q16        | 18.39 | 18.36 | 17.83 | 19.00              |
|                        |         | HIGH      | Q16        | 18.08 | 18.05 | 17.96 | 19.00              |
|                        |         | LOW       | Q16        | 17.49 | 17.38 | 17.19 | 19.00              |
|                        |         | MID       | Q16        | 17.42 | 17.07 | 17.08 | 19.00              |
|                        |         | HIGH      | Q16        | 17.20 | 17.03 | 17.20 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.39 | 17.33 | 17.27 | 19.00              |
| 5                      | 1       | LOW       | 64QAM      | 17.61 | 17.67 | 17.45 | 19.00              |
|                        |         | MID       | 64QAM      | 17.64 | 17.50 | 17.42 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.66 | 17.33 | 17.58 | 19.00              |
|                        | 12      | LOW       | 64QAM      | 17.52 | 17.50 | 17.32 | 18.00              |
|                        |         | MID       | 64QAM      | 17.80 | 17.56 | 17.52 | 18.00              |
|                        |         | HIGH      | 64QAM      | 16.92 | 17.25 | 17.60 | 18.00              |
|                        | 25      | LOW       | 64QAM      | 17.72 | 17.34 | 17.57 | 18.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 18.70 | 18.42 | 18.55 | 19.00              |
|                        |         | MID       | QPSK       | 18.43 | 18.24 | 18.57 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.26 | 18.25 | 18.30 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.44 | 18.39 | 18.40 | 19.00              |
|                        |         | MID       | QPSK       | 18.57 | 18.35 | 18.38 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.24 | 17.96 | 18.18 | 19.00              |
| 10                     | 50      | LOW       | QPSK       | 18.18 | 18.07 | 18.23 | 19.00              |
|                        | 1       | LOW       | Q16        | 18.33 | 18.27 | 18.10 | 19.00              |
|                        |         | MID       | Q16        | 18.48 | 18.42 | 18.10 | 19.00              |
|                        |         | HIGH      | Q16        | 18.24 | 18.16 | 18.10 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.70 | 17.48 | 17.03 | 19.00              |
|                        |         | MID       | Q16        | 17.27 | 17.15 | 17.15 | 19.00              |
|                        |         | HIGH      | Q16        | 17.15 | 17.08 | 17.35 | 19.00              |
|                        | 50      | LOW       | Q16        | 17.51 | 17.31 | 17.23 | 19.00              |
|                        | 10      | LOW       | 64QAM      | 17.54 | 17.60 | 17.50 | 19.00              |
|                        |         | MID       | 64QAM      | 17.77 | 17.55 | 17.52 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.55 | 17.31 | 17.83 | 19.00              |
|                        |         | LOW       | 64QAM      | 17.42 | 17.52 | 17.36 | 18.00              |
|                        |         | MID       | 64QAM      | 17.85 | 17.33 | 17.50 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.02 | 17.20 | 17.49 | 18.00              |
|                        | 50      | LOW       | 64QAM      | 17.72 | 17.51 | 17.37 | 18.00              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 18.55      | 18.37 | 18.51 | 19.00              |                    |
|                 |                 | MID       | QPSK       | 18.45      | 18.32 | 18.46 | 19.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.28      | 18.29 | 18.34 | 19.00              |                    |
|                 | 36              | LOW       | QPSK       | 18.51      | 18.46 | 18.36 | 19.00              |                    |
|                 |                 | MID       | QPSK       | 18.57      | 18.40 | 18.18 | 19.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.50      | 18.10 | 18.29 | 19.00              |                    |
|                 | 75              | LOW       | QPSK       | 18.44      | 18.21 | 18.28 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 18.31      | 18.38 | 18.26 | 19.00              |                    |
|                 |                 | MID       | Q16        | 18.39      | 18.45 | 17.87 | 19.00              |                    |
| 15              | 1               | HIGH      | Q16        | 18.10      | 17.87 | 18.03 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 17.47      | 17.36 | 17.10 | 19.00              |                    |
|                 |                 | MID       | Q16        | 17.44      | 17.09 | 17.20 | 19.00              |                    |
|                 | 36              | HIGH      | Q16        | 17.31      | 17.08 | 17.35 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 17.28      | 17.33 | 17.11 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 17.75      | 17.58 | 17.49 | 19.00              |                    |
|                 | 1               | MID       | 64QAM      | 17.71      | 17.50 | 17.47 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.66      | 17.31 | 17.56 | 19.00              |                    |
|                 | 36              | LOW       | 64QAM      | 17.32      | 17.50 | 17.20 | 18.00              |                    |
| MID             |                 | 64QAM     | 17.76      | 17.32      | 17.62 | 18.00 |                    |                    |
| HIGH            |                 | 64QAM     | 17.16      | 17.23      | 17.60 | 18.00 |                    |                    |
| 75              | LOW             | 64QAM     | 17.93      | 17.37      | 17.39 | 18.00 |                    |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 18.64 | 18.48 | 18.62              | 19.00              |
| MID             |                 |           | QPSK       | 18.49      | 18.39 | 18.57 | 19.00              |                    |
| HIGH            |                 |           | QPSK       | 18.43      | 18.36 | 18.43 | 19.00              |                    |
| 50              |                 | LOW       | QPSK       | 18.53      | 18.37 | 18.42 | 19.00              |                    |
|                 |                 | MID       | QPSK       | 18.50      | 18.31 | 18.36 | 19.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.44      | 18.10 | 18.25 | 19.00              |                    |
| 100             |                 | LOW       | QPSK       | 18.38      | 18.14 | 18.34 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 18.26      | 18.38 | 18.21 | 19.00              |                    |
|                 |                 | MID       | Q16        | 18.39      | 18.38 | 18.03 | 19.00              |                    |
| 20              | 1               | HIGH      | Q16        | 18.26      | 18.07 | 18.12 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 17.61      | 17.43 | 17.22 | 19.00              |                    |
|                 | 50              | MID       | Q16        | 17.39      | 17.12 | 17.13 | 19.00              |                    |
|                 |                 | HIGH      | Q16        | 17.29      | 17.03 | 17.30 | 19.00              |                    |
|                 | 100             | LOW       | Q16        | 17.42      | 17.36 | 17.25 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 17.68      | 17.60 | 17.61 | 19.00              |                    |
|                 | 1               | MID       | 64QAM      | 17.82      | 17.55 | 17.47 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.62      | 17.33 | 17.76 | 19.00              |                    |
|                 | 50              | LOW       | 64QAM      | 17.49      | 17.64 | 17.29 | 18.00              |                    |
| MID             |                 | 64QAM     | 17.76      | 17.49      | 17.64 | 18.00 |                    |                    |
| HIGH            |                 | 64QAM     | 17.09      | 17.37      | 17.56 | 18.00 |                    |                    |
| 100             | LOW             | 64QAM     | 17.88      | 17.44      | 17.55 | 18.00 |                    |                    |

| LTE B38-State 4 -Ant.4 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 19.44 | 19.48 | 19.39 | 20.00              |
|                        |         | MID       | QPSK       | 19.44 | 19.44 | 19.55 | 20.00              |
|                        |         | HIGH      | QPSK       | 19.40 | 19.19 | 19.66 | 20.00              |
|                        | 12      | LOW       | QPSK       | 18.50 | 18.33 | 18.15 | 20.00              |
|                        |         | MID       | QPSK       | 18.42 | 18.16 | 18.33 | 20.00              |
|                        |         | HIGH      | QPSK       | 18.11 | 18.25 | 18.23 | 20.00              |
|                        | 25      | LOW       | QPSK       | 18.55 | 18.23 | 18.09 | 20.00              |
| 5                      | 1       | LOW       | Q16        | 18.31 | 18.23 | 18.12 | 20.00              |
|                        |         | MID       | Q16        | 18.37 | 18.13 | 18.14 | 20.00              |
|                        |         | HIGH      | Q16        | 18.40 | 18.32 | 18.07 | 20.00              |
|                        | 12      | LOW       | Q16        | 17.35 | 17.51 | 17.46 | 19.00              |
|                        |         | MID       | Q16        | 17.22 | 17.37 | 17.29 | 19.00              |
|                        |         | HIGH      | Q16        | 17.52 | 17.16 | 17.42 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.43 | 17.12 | 17.15 | 19.00              |
| 5                      | 1       | LOW       | 64QAM      | 17.63 | 17.60 | 17.61 | 19.00              |
|                        |         | MID       | 64QAM      | 17.64 | 17.41 | 17.47 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.44 | 17.38 | 17.67 | 19.00              |
|                        | 12      | LOW       | 64QAM      | 17.40 | 17.77 | 17.38 | 18.00              |
|                        |         | MID       | 64QAM      | 17.72 | 17.47 | 17.63 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.10 | 17.35 | 17.40 | 18.00              |
|                        | 25      | LOW       | 64QAM      | 17.72 | 17.43 | 17.60 | 18.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 19.42 | 19.40 | 19.57 | 20.00              |
|                        |         | MID       | QPSK       | 19.54 | 19.50 | 19.32 | 20.00              |
|                        |         | HIGH      | QPSK       | 19.50 | 19.17 | 19.40 | 20.00              |
|                        | 25      | LOW       | QPSK       | 18.55 | 18.48 | 18.33 | 20.00              |
|                        |         | MID       | QPSK       | 18.38 | 18.34 | 18.29 | 20.00              |
|                        |         | HIGH      | QPSK       | 18.22 | 18.39 | 18.05 | 20.00              |
|                        | 50      | LOW       | QPSK       | 18.40 | 18.38 | 18.05 | 20.00              |
| 10                     | 1       | LOW       | Q16        | 18.55 | 18.38 | 18.30 | 20.00              |
|                        |         | MID       | Q16        | 18.44 | 18.31 | 18.14 | 20.00              |
|                        |         | HIGH      | Q16        | 18.40 | 18.31 | 18.03 | 20.00              |
|                        | 25      | LOW       | Q16        | 17.52 | 17.55 | 17.27 | 19.00              |
|                        |         | MID       | Q16        | 17.25 | 17.37 | 17.36 | 19.00              |
|                        |         | HIGH      | Q16        | 17.29 | 17.08 | 17.27 | 19.00              |
|                        | 50      | LOW       | Q16        | 17.54 | 17.27 | 17.25 | 19.00              |
| 10                     | 1       | LOW       | 64QAM      | 17.65 | 17.69 | 17.63 | 19.00              |
|                        |         | MID       | 64QAM      | 17.91 | 17.51 | 17.37 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.62 | 17.26 | 17.74 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 17.65 | 17.68 | 17.50 | 18.00              |
|                        |         | MID       | 64QAM      | 17.76 | 17.25 | 17.63 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.23 | 17.49 | 17.47 | 18.00              |
|                        | 50      | LOW       | 64QAM      | 17.82 | 17.53 | 17.57 | 18.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 19.54 | 19.56 | 19.63 | 20.00              |
|                 |         | MID       | QPSK       | 19.62 | 19.50 | 19.43 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.64 | 19.34 | 19.62 | 20.00              |
|                 | 36      | LOW       | QPSK       | 18.44 | 18.46 | 18.42 | 20.00              |
|                 |         | MID       | QPSK       | 18.51 | 18.36 | 18.34 | 20.00              |
|                 |         | HIGH      | QPSK       | 18.22 | 18.19 | 18.13 | 20.00              |
|                 | 75      | LOW       | QPSK       | 18.33 | 18.17 | 18.29 | 20.00              |
|                 |         | LOW       | Q16        | 18.48 | 18.36 | 18.27 | 20.00              |
|                 |         | MID       | Q16        | 18.33 | 18.13 | 18.18 | 20.00              |
| 15              | 1       | HIGH      | Q16        | 18.44 | 18.27 | 18.12 | 20.00              |
|                 |         | LOW       | Q16        | 17.49 | 17.41 | 17.48 | 19.00              |
|                 |         | MID       | Q16        | 17.34 | 17.12 | 17.20 | 19.00              |
|                 | 36      | HIGH      | Q16        | 17.45 | 17.20 | 17.28 | 19.00              |
|                 |         | LOW       | Q16        | 17.56 | 17.36 | 17.41 | 19.00              |
|                 |         | LOW       | 64QAM      | 17.56 | 17.56 | 17.57 | 19.00              |
|                 | 1       | MID       | 64QAM      | 17.87 | 17.55 | 17.56 | 19.00              |
|                 |         | HIGH      | 64QAM      | 17.39 | 17.28 | 17.68 | 19.00              |
|                 |         | LOW       | 64QAM      | 17.49 | 17.70 | 17.40 | 18.00              |
| 15              | 36      | MID       | 64QAM      | 17.62 | 17.27 | 17.52 | 18.00              |
|                 |         | HIGH      | 64QAM      | 17.10 | 17.38 | 17.60 | 18.00              |
|                 | 75      | LOW       | 64QAM      | 17.79 | 17.29 | 17.60 | 18.00              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 19.64 | 19.48 | 19.59 | 20.00              |
|                 |         | MID       | QPSK       | 19.60 | 19.46 | 19.53 | 20.00              |
|                 |         | HIGH      | QPSK       | 19.60 | 19.34 | 19.56 | 20.00              |
|                 | 50      | LOW       | QPSK       | 18.48 | 18.42 | 18.33 | 20.00              |
|                 |         | MID       | QPSK       | 18.44 | 18.34 | 18.29 | 20.00              |
|                 |         | HIGH      | QPSK       | 18.13 | 18.30 | 18.18 | 20.00              |
|                 | 100     | LOW       | QPSK       | 18.46 | 18.34 | 18.25 | 20.00              |
|                 |         | LOW       | Q16        | 18.46 | 18.40 | 18.25 | 20.00              |
|                 |         | MID       | Q16        | 18.37 | 18.31 | 18.16 | 20.00              |
| 20              | 1       | HIGH      | Q16        | 18.46 | 18.27 | 18.14 | 20.00              |
|                 |         | LOW       | Q16        | 17.54 | 17.46 | 17.41 | 19.00              |
|                 | 50      | MID       | Q16        | 17.34 | 17.28 | 17.27 | 19.00              |
|                 |         | HIGH      | Q16        | 17.43 | 17.18 | 17.44 | 19.00              |
|                 | 100     | LOW       | Q16        | 17.54 | 17.29 | 17.34 | 19.00              |
|                 |         | LOW       | 64QAM      | 17.70 | 17.60 | 17.59 | 19.00              |
|                 | 1       | MID       | 64QAM      | 17.82 | 17.46 | 17.47 | 19.00              |
|                 |         | HIGH      | 64QAM      | 17.55 | 17.38 | 17.72 | 19.00              |
|                 |         | LOW       | 64QAM      | 17.56 | 17.84 | 17.45 | 18.00              |
| 20              | 50      | MID       | 64QAM      | 17.74 | 17.44 | 17.59 | 18.00              |
|                 |         | HIGH      | 64QAM      | 17.26 | 17.40 | 17.56 | 18.00              |
|                 | 100     | LOW       | 64QAM      | 17.86 | 17.46 | 17.53 | 18.00              |

| LTE B38-State 5 -Ant.4 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 18.43 | 18.46 | 18.69 | 19.00              |
|                        |         | MID       | QPSK       | 18.56 | 18.48 | 18.59 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.37 | 18.30 | 18.52 | 19.00              |
|                        | 12      | LOW       | QPSK       | 18.51 | 18.24 | 18.27 | 19.00              |
|                        |         | MID       | QPSK       | 18.54 | 18.16 | 18.30 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.50 | 18.14 | 18.12 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.31 | 17.98 | 18.41 | 19.00              |
| 5                      | 1       | LOW       | Q16        | 18.21 | 18.25 | 18.05 | 19.00              |
|                        |         | MID       | Q16        | 18.39 | 18.36 | 17.83 | 19.00              |
|                        |         | HIGH      | Q16        | 18.08 | 18.05 | 17.96 | 19.00              |
|                        | 12      | LOW       | Q16        | 17.49 | 17.38 | 17.19 | 19.00              |
|                        |         | MID       | Q16        | 17.42 | 17.07 | 17.08 | 19.00              |
|                        |         | HIGH      | Q16        | 17.20 | 17.03 | 17.20 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.39 | 17.33 | 17.27 | 19.00              |
| 5                      | 1       | LOW       | 64QAM      | 17.61 | 17.67 | 17.45 | 19.00              |
|                        |         | MID       | 64QAM      | 17.64 | 17.50 | 17.42 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.66 | 17.33 | 17.58 | 19.00              |
|                        | 12      | LOW       | 64QAM      | 17.52 | 17.50 | 17.32 | 18.00              |
|                        |         | MID       | 64QAM      | 17.80 | 17.56 | 17.52 | 18.00              |
|                        |         | HIGH      | 64QAM      | 16.92 | 17.25 | 17.60 | 18.00              |
|                        | 25      | LOW       | 64QAM      | 17.72 | 17.34 | 17.57 | 18.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 18.70 | 18.42 | 18.55 | 19.00              |
|                        |         | MID       | QPSK       | 18.43 | 18.24 | 18.57 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.26 | 18.25 | 18.30 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.44 | 18.39 | 18.40 | 19.00              |
|                        |         | MID       | QPSK       | 18.57 | 18.35 | 18.38 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.24 | 17.96 | 18.18 | 19.00              |
| 10                     | 50      | LOW       | QPSK       | 18.18 | 18.07 | 18.23 | 19.00              |
|                        | 1       | LOW       | Q16        | 18.33 | 18.27 | 18.10 | 19.00              |
|                        |         | MID       | Q16        | 18.48 | 18.42 | 18.10 | 19.00              |
|                        |         | HIGH      | Q16        | 18.24 | 18.16 | 18.10 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.70 | 17.48 | 17.03 | 19.00              |
|                        |         | MID       | Q16        | 17.27 | 17.15 | 17.15 | 19.00              |
|                        |         | HIGH      | Q16        | 17.15 | 17.08 | 17.35 | 19.00              |
|                        | 50      | LOW       | Q16        | 17.51 | 17.31 | 17.23 | 19.00              |
| 10                     | 1       | LOW       | 64QAM      | 17.54 | 17.60 | 17.50 | 19.00              |
|                        |         | MID       | 64QAM      | 17.77 | 17.55 | 17.52 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.55 | 17.31 | 17.83 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 17.42 | 17.52 | 17.36 | 18.00              |
|                        |         | MID       | 64QAM      | 17.85 | 17.33 | 17.50 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.02 | 17.20 | 17.49 | 18.00              |
|                        | 50      | LOW       | 64QAM      | 17.72 | 17.51 | 17.37 | 18.00              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 18.55      | 18.37 | 18.51 | 19.00              |                    |
|                 |                 | MID       | QPSK       | 18.45      | 18.32 | 18.46 | 19.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.28      | 18.29 | 18.34 | 19.00              |                    |
|                 | 36              | LOW       | QPSK       | 18.51      | 18.46 | 18.36 | 19.00              |                    |
|                 |                 | MID       | QPSK       | 18.57      | 18.40 | 18.18 | 19.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.50      | 18.10 | 18.29 | 19.00              |                    |
|                 | 75              | LOW       | QPSK       | 18.44      | 18.21 | 18.28 | 19.00              |                    |
|                 | 15              | 1         | LOW        | Q16        | 18.31 | 18.38 | 18.26              | 19.00              |
|                 |                 |           | MID        | Q16        | 18.39 | 18.45 | 17.87              | 19.00              |
| HIGH            |                 |           | Q16        | 18.10      | 17.87 | 18.03 | 19.00              |                    |
| 36              |                 | LOW       | Q16        | 17.47      | 17.36 | 17.10 | 19.00              |                    |
|                 |                 | MID       | Q16        | 17.44      | 17.09 | 17.20 | 19.00              |                    |
|                 |                 | HIGH      | Q16        | 17.31      | 17.08 | 17.35 | 19.00              |                    |
| 75              | LOW             | Q16       | 17.28      | 17.33      | 17.11 | 19.00 |                    |                    |
| 15              | 1               | LOW       | 64QAM      | 17.75      | 17.58 | 17.49 | 19.00              |                    |
|                 |                 | MID       | 64QAM      | 17.71      | 17.50 | 17.47 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.66      | 17.31 | 17.56 | 19.00              |                    |
|                 | 36              | LOW       | 64QAM      | 17.32      | 17.50 | 17.20 | 18.00              |                    |
|                 |                 | MID       | 64QAM      | 17.76      | 17.32 | 17.62 | 18.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.16      | 17.23 | 17.60 | 18.00              |                    |
|                 | 75              | LOW       | 64QAM      | 17.93      | 17.37 | 17.39 | 18.00              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
| 20              | 1               | LOW       | QPSK       | 18.64      | 18.48 | 18.62 | 19.00              |                    |
|                 |                 | MID       | QPSK       | 18.49      | 18.39 | 18.57 | 19.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.43      | 18.36 | 18.43 | 19.00              |                    |
|                 | 50              | LOW       | QPSK       | 18.53      | 18.37 | 18.42 | 19.00              |                    |
|                 |                 | MID       | QPSK       | 18.50      | 18.31 | 18.36 | 19.00              |                    |
|                 |                 | HIGH      | QPSK       | 18.44      | 18.10 | 18.25 | 19.00              |                    |
| 20              | 100             | LOW       | QPSK       | 18.38      | 18.14 | 18.34 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 18.26      | 18.38 | 18.21 | 19.00              |                    |
|                 |                 | MID       | Q16        | 18.39      | 18.38 | 18.03 | 19.00              |                    |
|                 | 50              | LOW       | Q16        | 18.26      | 18.07 | 18.12 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 17.61      | 17.43 | 17.22 | 19.00              |                    |
|                 |                 | MID       | Q16        | 17.39      | 17.12 | 17.13 | 19.00              |                    |
| 20              | 1               | HIGH      | Q16        | 17.29      | 17.03 | 17.30 | 19.00              |                    |
|                 |                 | LOW       | Q16        | 17.42      | 17.36 | 17.25 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 17.68      | 17.60 | 17.61 | 19.00              |                    |
|                 | 50              | MID       | 64QAM      | 17.82      | 17.55 | 17.47 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.62      | 17.33 | 17.76 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 17.49      | 17.64 | 17.29 | 18.00              |                    |
|                 | 100             | MID       | 64QAM      | 17.76      | 17.49 | 17.64 | 18.00              |                    |
|                 |                 | HIGH      | 64QAM      | 17.09      | 17.37 | 17.56 | 18.00              |                    |
| 100             | LOW             | 64QAM     | 17.88      | 17.44      | 17.55 | 18.00 |                    |                    |

| LTE B38-State 6 -Ant.4 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 18.43 | 18.46 | 18.69 | 19.00              |
|                        |         | MID       | QPSK       | 18.56 | 18.48 | 18.59 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.37 | 18.30 | 18.52 | 19.00              |
|                        | 12      | LOW       | QPSK       | 18.51 | 18.24 | 18.27 | 19.00              |
|                        |         | MID       | QPSK       | 18.54 | 18.16 | 18.30 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.50 | 18.14 | 18.12 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.31 | 17.98 | 18.41 | 19.00              |
| 5                      | 1       | LOW       | Q16        | 18.21 | 18.25 | 18.05 | 19.00              |
|                        |         | MID       | Q16        | 18.39 | 18.36 | 17.83 | 19.00              |
|                        |         | HIGH      | Q16        | 18.08 | 18.05 | 17.96 | 19.00              |
|                        | 12      | LOW       | Q16        | 17.49 | 17.38 | 17.19 | 19.00              |
|                        |         | MID       | Q16        | 17.42 | 17.07 | 17.08 | 19.00              |
|                        |         | HIGH      | Q16        | 17.20 | 17.03 | 17.20 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.39 | 17.33 | 17.27 | 19.00              |
| 5                      | 1       | LOW       | 64QAM      | 17.61 | 17.67 | 17.45 | 19.00              |
|                        |         | MID       | 64QAM      | 17.64 | 17.50 | 17.42 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.66 | 17.33 | 17.58 | 19.00              |
|                        | 12      | LOW       | 64QAM      | 17.52 | 17.50 | 17.32 | 18.00              |
|                        |         | MID       | 64QAM      | 17.80 | 17.56 | 17.52 | 18.00              |
|                        |         | HIGH      | 64QAM      | 16.92 | 17.25 | 17.60 | 18.00              |
|                        | 25      | LOW       | 64QAM      | 17.72 | 17.34 | 17.57 | 18.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 37800 | 38000 | 38200 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 18.70 | 18.42 | 18.55 | 19.00              |
|                        |         | MID       | QPSK       | 18.43 | 18.24 | 18.57 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.26 | 18.25 | 18.30 | 19.00              |
|                        | 25      | LOW       | QPSK       | 18.44 | 18.39 | 18.40 | 19.00              |
|                        |         | MID       | QPSK       | 18.57 | 18.35 | 18.38 | 19.00              |
|                        |         | HIGH      | QPSK       | 18.24 | 17.96 | 18.18 | 19.00              |
| 10                     | 50      | LOW       | QPSK       | 18.18 | 18.07 | 18.23 | 19.00              |
|                        | 1       | LOW       | Q16        | 18.33 | 18.27 | 18.10 | 19.00              |
|                        |         | MID       | Q16        | 18.48 | 18.42 | 18.10 | 19.00              |
|                        |         | HIGH      | Q16        | 18.24 | 18.16 | 18.10 | 19.00              |
|                        | 25      | LOW       | Q16        | 17.70 | 17.48 | 17.03 | 19.00              |
|                        |         | MID       | Q16        | 17.27 | 17.15 | 17.15 | 19.00              |
|                        |         | HIGH      | Q16        | 17.15 | 17.08 | 17.35 | 19.00              |
|                        | 50      | LOW       | Q16        | 17.51 | 17.31 | 17.23 | 19.00              |
| 10                     | 1       | LOW       | 64QAM      | 17.54 | 17.60 | 17.50 | 19.00              |
|                        |         | MID       | 64QAM      | 17.77 | 17.55 | 17.52 | 19.00              |
|                        |         | HIGH      | 64QAM      | 17.55 | 17.31 | 17.83 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 17.42 | 17.52 | 17.36 | 18.00              |
|                        |         | MID       | 64QAM      | 17.85 | 17.33 | 17.50 | 18.00              |
|                        |         | HIGH      | 64QAM      | 17.02 | 17.20 | 17.49 | 18.00              |
|                        | 50      | LOW       | 64QAM      | 17.72 | 17.51 | 17.37 | 18.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 18.55 | 18.37 | 18.51 | 19.00              |
|                 |         | MID       | QPSK       | 18.45 | 18.32 | 18.46 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.28 | 18.29 | 18.34 | 19.00              |
|                 | 36      | LOW       | QPSK       | 18.51 | 18.46 | 18.36 | 19.00              |
|                 |         | MID       | QPSK       | 18.57 | 18.40 | 18.18 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.50 | 18.10 | 18.29 | 19.00              |
|                 | 75      | LOW       | QPSK       | 18.44 | 18.21 | 18.28 | 19.00              |
| 15              | 1       | LOW       | Q16        | 18.31 | 18.38 | 18.26 | 19.00              |
|                 |         | MID       | Q16        | 18.39 | 18.45 | 17.87 | 19.00              |
|                 |         | HIGH      | Q16        | 18.10 | 17.87 | 18.03 | 19.00              |
|                 | 36      | LOW       | Q16        | 17.47 | 17.36 | 17.10 | 19.00              |
|                 |         | MID       | Q16        | 17.44 | 17.09 | 17.20 | 19.00              |
|                 |         | HIGH      | Q16        | 17.31 | 17.08 | 17.35 | 19.00              |
|                 | 75      | LOW       | Q16        | 17.28 | 17.33 | 17.11 | 19.00              |
| 15              | 1       | LOW       | 64QAM      | 17.75 | 17.58 | 17.49 | 19.00              |
|                 |         | MID       | 64QAM      | 17.71 | 17.50 | 17.47 | 19.00              |
|                 |         | HIGH      | 64QAM      | 17.66 | 17.31 | 17.56 | 19.00              |
|                 | 36      | LOW       | 64QAM      | 17.32 | 17.50 | 17.20 | 18.00              |
|                 |         | MID       | 64QAM      | 17.76 | 17.32 | 17.62 | 18.00              |
|                 |         | HIGH      | 64QAM      | 17.16 | 17.23 | 17.60 | 18.00              |
|                 | 75      | LOW       | 64QAM      | 17.93 | 17.37 | 17.39 | 18.00              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 18.64 | 18.48 | 18.62 | 19.00              |
|                 |         | MID       | QPSK       | 18.49 | 18.39 | 18.57 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.43 | 18.36 | 18.43 | 19.00              |
|                 | 50      | LOW       | QPSK       | 18.53 | 18.37 | 18.42 | 19.00              |
|                 |         | MID       | QPSK       | 18.50 | 18.31 | 18.36 | 19.00              |
|                 |         | HIGH      | QPSK       | 18.44 | 18.10 | 18.25 | 19.00              |
| 20              | 100     | LOW       | QPSK       | 18.38 | 18.14 | 18.34 | 19.00              |
|                 |         | LOW       | Q16        | 18.26 | 18.38 | 18.21 | 19.00              |
|                 |         | MID       | Q16        | 18.39 | 18.38 | 18.03 | 19.00              |
|                 | 1       | HIGH      | Q16        | 18.26 | 18.07 | 18.12 | 19.00              |
|                 |         | LOW       | Q16        | 17.61 | 17.43 | 17.22 | 19.00              |
|                 |         | MID       | Q16        | 17.39 | 17.12 | 17.13 | 19.00              |
|                 | 50      | HIGH      | Q16        | 17.29 | 17.03 | 17.30 | 19.00              |
|                 |         | LOW       | Q16        | 17.42 | 17.36 | 17.25 | 19.00              |
| 20              |         | 1         | LOW        | 64QAM | 17.68 | 17.60 | 17.61              |
|                 | MID     |           | 64QAM      | 17.82 | 17.55 | 17.47 | 19.00              |
|                 | HIGH    |           | 64QAM      | 17.62 | 17.33 | 17.76 | 19.00              |
|                 | 50      | LOW       | 64QAM      | 17.49 | 17.64 | 17.29 | 18.00              |
|                 |         | MID       | 64QAM      | 17.76 | 17.49 | 17.64 | 18.00              |
| 100             | HIGH    | 64QAM     | 17.09      | 17.37 | 17.56 | 18.00 |                    |
| 100             | LOW     | 64QAM     | 17.88      | 17.44 | 17.55 | 18.00 |                    |

### 8.3.10 LTE Band41 Output Power

BL-SZ2220432-701

| LTE B41-State 1 -Ant.1 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 20.27 | 20.17 | 20.04 | 20.13 | 20.09 | 20.30              |
|                        |         | MID       | QPSK       | 20.11 | 19.99 | 20.21 | 20.09 | 20.14 | 20.30              |
|                        |         | HIGH      | QPSK       | 20.00 | 20.05 | 20.13 | 20.18 | 19.93 | 20.30              |
|                        | 12      | LOW       | QPSK       | 20.12 | 20.16 | 20.25 | 20.10 | 20.03 | 20.30              |
|                        |         | MID       | QPSK       | 19.93 | 19.98 | 20.03 | 20.18 | 20.06 | 20.30              |
|                        |         | HIGH      | QPSK       | 20.14 | 20.10 | 20.20 | 19.98 | 20.23 | 20.30              |
|                        | 25      | LOW       | QPSK       | 20.14 | 19.98 | 19.88 | 20.08 | 19.99 | 20.30              |
|                        | 5       | LOW       | Q16        | 19.97 | 19.99 | 20.13 | 19.67 | 19.86 | 20.30              |
|                        |         | MID       | Q16        | 20.07 | 20.01 | 19.82 | 20.23 | 20.21 | 20.30              |
|                        |         | HIGH      | Q16        | 19.99 | 20.07 | 20.00 | 20.03 | 19.95 | 20.30              |
|                        |         | LOW       | Q16        | 19.97 | 19.91 | 20.04 | 19.89 | 19.89 | 20.30              |
|                        |         | MID       | Q16        | 20.04 | 20.08 | 20.20 | 20.18 | 20.30 | 20.30              |
|                        |         | HIGH      | Q16        | 20.14 | 20.18 | 20.28 | 20.00 | 19.84 | 20.30              |
| 5                      | 1       | LOW       | 64QAM      | 20.20 | 20.06 | 19.87 | 20.06 | 20.02 | 20.30              |
|                        |         | MID       | 64QAM      | 19.98 | 19.66 | 20.02 | 19.74 | 20.11 | 20.30              |
|                        |         | HIGH      | 64QAM      | 19.61 | 19.77 | 20.12 | 19.45 | 19.97 | 20.30              |
|                        | 12      | LOW       | 64QAM      | 20.16 | 20.06 | 19.96 | 19.88 | 19.85 | 20.30              |
|                        |         | MID       | 64QAM      | 19.99 | 19.97 | 19.81 | 20.21 | 20.20 | 20.30              |
|                        |         | HIGH      | 64QAM      | 20.01 | 20.03 | 19.91 | 20.11 | 19.74 | 20.30              |
|                        | 25      | LOW       | 64QAM      | 19.73 | 19.55 | 20.17 | 19.77 | 19.96 | 20.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 20.17 | 19.91 | 20.24 | 20.23 | 20.15 | 20.30              |
|                        |         | MID       | QPSK       | 20.23 | 19.85 | 20.03 | 19.89 | 20.16 | 20.30              |
|                        |         | HIGH      | QPSK       | 20.18 | 20.09 | 20.05 | 19.96 | 19.83 | 20.30              |
|                        | 25      | LOW       | QPSK       | 20.26 | 19.86 | 20.17 | 20.00 | 20.01 | 20.30              |
|                        |         | MID       | QPSK       | 20.01 | 19.84 | 20.19 | 20.06 | 19.86 | 20.30              |
|                        |         | HIGH      | QPSK       | 20.00 | 19.92 | 20.08 | 20.06 | 20.15 | 20.30              |
| 10                     | 50      | LOW       | QPSK       | 20.16 | 20.14 | 20.12 | 20.16 | 19.97 | 20.30              |
|                        | 1       | LOW       | Q16        | 20.01 | 19.75 | 20.11 | 19.85 | 19.82 | 20.30              |
|                        |         | MID       | Q16        | 20.03 | 20.17 | 19.76 | 20.19 | 20.27 | 20.30              |
|                        |         | HIGH      | Q16        | 20.05 | 19.91 | 20.00 | 20.01 | 20.05 | 20.30              |
|                        | 25      | LOW       | Q16        | 20.17 | 19.73 | 19.82 | 19.89 | 19.95 | 20.30              |
|                        |         | MID       | Q16        | 20.28 | 19.94 | 20.14 | 20.18 | 20.18 | 20.30              |
|                        |         | HIGH      | Q16        | 20.24 | 20.20 | 20.20 | 20.30 | 19.86 | 20.30              |
|                        | 50      | LOW       | Q16        | 20.07 | 20.03 | 20.10 | 20.25 | 19.84 | 20.30              |
| 10                     | 1       | LOW       | 64QAM      | 20.14 | 19.96 | 19.71 | 19.92 | 19.90 | 20.30              |
|                        |         | MID       | 64QAM      | 20.00 | 19.78 | 20.00 | 19.86 | 20.15 | 20.30              |
|                        |         | HIGH      | 64QAM      | 19.67 | 19.73 | 20.18 | 19.57 | 20.09 | 20.30              |
|                        | 25      | LOW       | 64QAM      | 19.90 | 20.06 | 19.80 | 20.04 | 19.75 | 20.30              |
|                        |         | MID       | 64QAM      | 19.97 | 20.01 | 19.79 | 20.25 | 20.06 | 20.30              |
|                        |         | HIGH      | 64QAM      | 20.11 | 20.23 | 19.99 | 19.99 | 19.88 | 20.30              |
|                        | 50      | LOW       | 64QAM      | 19.73 | 19.67 | 20.23 | 19.65 | 20.20 | 20.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 20.23 | 20.03 | 20.14 | 20.25 | 20.27 | 20.30              |
|                 |         | MID       | QPSK       | 20.23 | 19.91 | 20.11 | 20.15 | 20.14 | 20.30              |
|                 |         | HIGH      | QPSK       | 20.08 | 19.85 | 19.97 | 19.98 | 20.01 | 20.30              |
|                 | 36      | LOW       | QPSK       | 20.10 | 20.00 | 20.03 | 20.10 | 20.03 | 20.30              |
|                 |         | MID       | QPSK       | 20.05 | 19.98 | 19.93 | 19.92 | 20.04 | 20.30              |
|                 |         | HIGH      | QPSK       | 20.00 | 19.96 | 20.04 | 20.00 | 19.95 | 20.30              |
|                 | 75      | LOW       | QPSK       | 20.12 | 19.92 | 20.06 | 20.06 | 20.07 | 20.30              |
|                 |         | LOW       | Q16        | 20.01 | 19.89 | 20.23 | 19.79 | 20.14 | 20.30              |
|                 |         | MID       | Q16        | 20.01 | 20.15 | 20.06 | 20.11 | 20.15 | 20.30              |
| 15              | 1       | HIGH      | Q16        | 20.03 | 19.95 | 20.26 | 19.93 | 20.07 | 20.30              |
|                 |         | LOW       | Q16        | 19.99 | 19.83 | 19.82 | 19.97 | 19.93 | 20.30              |
|                 |         | MID       | Q16        | 20.28 | 20.02 | 20.18 | 20.14 | 20.26 | 20.30              |
|                 | 36      | HIGH      | Q16        | 20.16 | 20.22 | 20.26 | 20.10 | 19.94 | 20.30              |
|                 |         | LOW       | Q16        | 20.09 | 20.21 | 20.16 | 20.15 | 19.96 | 20.30              |
|                 |         | LOW       | 64QAM      | 20.10 | 20.00 | 19.79 | 20.12 | 19.78 | 20.30              |
|                 | 75      | MID       | 64QAM      | 20.00 | 19.84 | 19.84 | 19.86 | 20.11 | 20.30              |
|                 |         | HIGH      | 64QAM      | 19.75 | 19.67 | 20.08 | 19.61 | 19.95 | 20.30              |
|                 |         | LOW       | 64QAM      | 19.96 | 20.04 | 19.80 | 20.02 | 19.93 | 20.30              |
| 15              | 1       | MID       | 64QAM      | 20.07 | 19.99 | 19.87 | 20.17 | 20.12 | 20.30              |
|                 |         | HIGH      | 64QAM      | 20.07 | 20.03 | 19.99 | 19.99 | 19.86 | 20.30              |
|                 |         | LOW       | 64QAM      | 19.73 | 19.61 | 20.15 | 19.83 | 20.22 | 20.30              |
|                 | 36      | LOW       | 64QAM      | 19.96 | 20.04 | 19.80 | 20.02 | 19.93 | 20.30              |
|                 |         | MID       | 64QAM      | 20.07 | 19.99 | 19.87 | 20.17 | 20.12 | 20.30              |
|                 |         | HIGH      | 64QAM      | 20.07 | 20.03 | 19.99 | 19.99 | 19.86 | 20.30              |
|                 | 75      | LOW       | 64QAM      | 19.73 | 19.61 | 20.15 | 19.83 | 20.22 | 20.30              |
|                 |         | LOW       | 64QAM      | 19.73 | 19.61 | 20.15 | 19.83 | 20.22 | 20.30              |
|                 |         | LOW       | 64QAM      | 19.73 | 19.61 | 20.15 | 19.83 | 20.22 | 20.30              |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 20.23 | 20.09 | 20.16 | 20.17 | 20.19 | 20.30              |
|                 |         | MID       | QPSK       | 20.19 | 20.01 | 20.15 | 20.09 | 20.16 | 20.30              |
|                 |         | HIGH      | QPSK       | 20.16 | 20.07 | 20.03 | 20.12 | 20.01 | 20.30              |
|                 | 50      | LOW       | QPSK       | 20.24 | 20.08 | 20.15 | 20.22 | 20.21 | 20.30              |
|                 |         | MID       | QPSK       | 20.11 | 19.94 | 20.09 | 20.10 | 20.08 | 20.30              |
|                 |         | HIGH      | QPSK       | 20.22 | 20.00 | 20.10 | 20.06 | 20.15 | 20.30              |
|                 | 100     | LOW       | QPSK       | 20.22 | 20.14 | 20.10 | 20.20 | 20.17 | 20.30              |
|                 |         | LOW       | Q16        | 20.11 | 19.97 | 20.23 | 19.89 | 20.04 | 20.30              |
|                 |         | MID       | Q16        | 20.15 | 20.15 | 19.96 | 20.25 | 20.19 | 20.30              |
| 20              | 1       | HIGH      | Q16        | 20.21 | 20.13 | 20.18 | 20.11 | 20.17 | 20.30              |
|                 |         | LOW       | Q16        | 20.07 | 19.87 | 19.98 | 19.97 | 19.93 | 20.30              |
|                 | 50      | MID       | Q16        | 20.24 | 20.16 | 20.28 | 20.32 | 20.26 | 20.30              |
|                 |         | HIGH      | Q16        | 20.26 | 20.28 | 20.20 | 20.22 | 20.04 | 20.30              |
|                 | 100     | LOW       | Q16        | 20.21 | 20.21 | 20.24 | 20.21 | 20.00 | 20.30              |
|                 |         | LOW       | 64QAM      | 20.10 | 20.10 | 19.87 | 20.08 | 19.92 | 20.30              |
|                 |         | MID       | 64QAM      | 19.92 | 19.86 | 20.02 | 19.88 | 20.21 | 20.30              |
|                 | 1       | HIGH      | 64QAM      | 19.81 | 19.79 | 20.20 | 19.67 | 20.09 | 20.30              |
|                 |         | LOW       | 64QAM      | 20.12 | 20.02 | 19.90 | 19.96 | 19.87 | 20.30              |
| 20              | 50      | MID       | 64QAM      | 20.11 | 19.97 | 19.93 | 20.15 | 20.28 | 20.30              |
|                 |         | HIGH      | 64QAM      | 20.23 | 20.23 | 20.01 | 20.13 | 19.96 | 20.30              |
|                 | 100     | LOW       | 64QAM      | 19.71 | 19.57 | 20.15 | 19.81 | 20.12 | 20.30              |

| LTE B41-State 2 -Ant.1 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 19.23 | 19.25 | 19.05 | 19.11 | 18.99 | 19.30              |
|                        |         | MID       | QPSK       | 19.08 | 18.97 | 18.83 | 18.85 | 19.09 | 19.30              |
|                        |         | HIGH      | QPSK       | 18.86 | 18.88 | 18.99 | 19.20 | 18.97 | 19.30              |
|                        | 12      | LOW       | QPSK       | 19.25 | 18.97 | 18.97 | 19.03 | 18.95 | 19.30              |
|                        |         | MID       | QPSK       | 18.91 | 18.93 | 19.06 | 18.81 | 19.04 | 19.30              |
|                        |         | HIGH      | QPSK       | 18.99 | 19.00 | 19.12 | 18.82 | 18.90 | 19.30              |
|                        | 25      | LOW       | QPSK       | 19.24 | 18.96 | 19.14 | 18.99 | 18.99 | 19.30              |
|                        | 5       | LOW       | Q16        | 19.17 | 19.13 | 19.17 | 18.79 | 19.08 | 19.30              |
|                        |         | MID       | Q16        | 18.87 | 19.12 | 18.81 | 19.27 | 19.13 | 19.30              |
|                        |         | HIGH      | Q16        | 19.08 | 18.98 | 19.14 | 19.11 | 18.94 | 19.30              |
|                        |         | LOW       | Q16        | 19.00 | 18.96 | 18.86 | 19.13 | 18.91 | 19.30              |
|                        |         | MID       | Q16        | 18.92 | 19.30 | 18.96 | 19.24 | 19.01 | 19.30              |
|                        |         | HIGH      | Q16        | 18.88 | 19.17 | 19.22 | 18.95 | 19.20 | 19.30              |
| 5                      | 1       | LOW       | 64QAM      | 19.26 | 18.95 | 18.70 | 19.03 | 18.58 | 19.30              |
|                        |         | MID       | 64QAM      | 18.56 | 18.80 | 18.91 | 18.79 | 19.07 | 19.30              |
|                        |         | HIGH      | 64QAM      | 18.71 | 18.62 | 18.91 | 18.92 | 19.08 | 19.30              |
|                        | 12      | LOW       | 64QAM      | 19.14 | 18.99 | 18.81 | 19.24 | 18.70 | 19.30              |
|                        |         | MID       | 64QAM      | 18.92 | 19.13 | 18.78 | 18.85 | 18.99 | 19.30              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.05 | 18.92 | 19.17 | 18.68 | 19.30              |
|                        | 25      | LOW       | 64QAM      | 18.41 | 18.59 | 18.79 | 18.34 | 18.95 | 19.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 19.11 | 19.19 | 19.05 | 19.11 | 18.98 | 19.30              |
|                        |         | MID       | QPSK       | 19.25 | 19.17 | 18.85 | 19.04 | 18.93 | 19.30              |
|                        |         | HIGH      | QPSK       | 19.09 | 18.88 | 18.80 | 19.10 | 18.88 | 19.30              |
|                        | 25      | LOW       | QPSK       | 19.05 | 18.80 | 18.91 | 19.06 | 19.14 | 19.30              |
|                        |         | MID       | QPSK       | 18.81 | 18.97 | 19.04 | 18.85 | 19.02 | 19.30              |
|                        |         | HIGH      | QPSK       | 18.86 | 18.98 | 19.06 | 18.99 | 19.13 | 19.30              |
| 10                     | 50      | LOW       | QPSK       | 19.20 | 19.13 | 18.85 | 19.18 | 18.98 | 19.30              |
|                        | 1       | LOW       | Q16        | 19.06 | 18.96 | 19.04 | 18.92 | 19.12 | 19.30              |
|                        |         | MID       | Q16        | 19.14 | 18.98 | 18.73 | 19.15 | 19.19 | 19.30              |
|                        |         | HIGH      | Q16        | 19.17 | 18.92 | 19.01 | 19.23 | 19.15 | 19.30              |
|                        | 25      | LOW       | Q16        | 18.94 | 19.02 | 19.03 | 18.84 | 19.05 | 19.30              |
|                        |         | MID       | Q16        | 18.86 | 19.12 | 19.17 | 19.06 | 18.92 | 19.30              |
|                        |         | HIGH      | Q16        | 18.98 | 18.99 | 19.08 | 18.99 | 18.95 | 19.30              |
|                        | 50      | LOW       | Q16        | 19.11 | 19.15 | 19.06 | 19.11 | 18.79 | 19.30              |
| 10                     | 1       | LOW       | 64QAM      | 19.01 | 19.05 | 18.76 | 18.97 | 18.67 | 19.30              |
|                        |         | MID       | 64QAM      | 18.69 | 18.93 | 19.02 | 18.97 | 18.96 | 19.30              |
|                        |         | HIGH      | 64QAM      | 18.55 | 18.45 | 19.09 | 18.79 | 18.86 | 19.30              |
|                        | 25      | LOW       | 64QAM      | 19.02 | 18.93 | 18.60 | 19.18 | 18.90 | 19.30              |
|                        |         | MID       | 64QAM      | 18.97 | 19.05 | 18.88 | 18.81 | 19.20 | 19.30              |
|                        |         | HIGH      | 64QAM      | 18.93 | 19.09 | 19.05 | 19.27 | 18.75 | 19.30              |
|                        | 50      | LOW       | 64QAM      | 18.43 | 18.71 | 18.89 | 18.37 | 19.03 | 19.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 39725      | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.15      | 19.29 | 19.02 | 19.27 | 18.98 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 19.08      | 18.88 | 18.93 | 19.00 | 18.86 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.90      | 18.86 | 19.07 | 19.18 | 18.92 | 19.30              |                    |
|                 | 36              | LOW       | QPSK       | 19.15      | 18.84 | 19.22 | 18.97 | 18.95 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 18.85      | 19.12 | 19.02 | 18.85 | 19.12 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.94      | 19.14 | 19.14 | 18.99 | 19.11 | 19.30              |                    |
|                 | 75              | LOW       | QPSK       | 19.10      | 19.13 | 19.12 | 19.18 | 18.94 | 19.30              |                    |
|                 | 15              | 1         | LOW        | Q16        | 19.21 | 18.96 | 19.21 | 18.86 | 19.02              | 19.30              |
|                 |                 |           | MID        | Q16        | 19.10 | 19.04 | 18.77 | 19.13 | 19.23              | 19.30              |
| HIGH            |                 |           | Q16        | 19.23      | 18.94 | 19.06 | 19.15 | 19.01 | 19.30              |                    |
| 36              |                 | LOW       | Q16        | 18.88      | 19.02 | 18.81 | 18.93 | 18.80 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.09      | 19.13 | 19.09 | 19.05 | 18.92 | 19.30              |                    |
|                 |                 | HIGH      | Q16        | 18.88      | 19.01 | 19.16 | 18.97 | 18.97 | 19.30              |                    |
| 75              |                 | LOW       | Q16        | 19.02      | 19.17 | 19.22 | 19.17 | 18.94 | 19.30              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 19.05 | 19.06 | 18.68 | 19.20 | 18.66              | 19.30              |
|                 |                 |           | MID        | 64QAM      | 18.73 | 19.01 | 18.89 | 18.92 | 19.05              | 19.30              |
|                 | HIGH            |           | 64QAM      | 18.68      | 18.45 | 18.93 | 18.92 | 19.03 | 19.30              |                    |
|                 | 36              | LOW       | 64QAM      | 19.08      | 18.85 | 18.68 | 19.16 | 18.85 | 19.30              |                    |
|                 |                 | MID       | 64QAM      | 18.82      | 19.21 | 18.63 | 18.98 | 19.20 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.89      | 19.03 | 19.13 | 19.19 | 18.71 | 19.30              |                    |
|                 | 75              | LOW       | 64QAM      | 18.67      | 18.67 | 18.96 | 18.45 | 18.99 | 19.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 39750 | 40185 | 40620 | 41055 | 41490              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 19.25 | 19.21 | 19.13 | 19.21 | 19.09              | 19.30              |
| MID             |                 |           | QPSK       | 19.23      | 19.07 | 19.04 | 19.04 | 19.01 | 19.30              |                    |
| HIGH            |                 |           | QPSK       | 19.05      | 18.97 | 18.99 | 19.20 | 19.03 | 19.30              |                    |
| 50              |                 | LOW       | QPSK       | 19.17      | 18.99 | 19.12 | 18.97 | 19.16 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 19.02      | 19.10 | 18.98 | 19.00 | 19.10 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.05      | 19.08 | 19.06 | 19.03 | 19.05 | 19.30              |                    |
| 20              | 1               | LOW       | QPSK       | 19.18      | 19.09 | 19.04 | 19.12 | 19.09 | 19.30              |                    |
|                 |                 | LOW       | Q16        | 19.21      | 19.07 | 19.19 | 18.90 | 19.04 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.04      | 19.02 | 18.94 | 19.25 | 19.13 | 19.30              |                    |
|                 | 50              | HIGH      | Q16        | 19.21      | 19.11 | 19.12 | 19.27 | 19.05 | 19.30              |                    |
|                 |                 | LOW       | Q16        | 18.94      | 18.96 | 18.94 | 19.03 | 18.97 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.05      | 19.30 | 19.13 | 19.18 | 19.07 | 19.30              |                    |
|                 | 100             | HIGH      | Q16        | 19.09      | 19.09 | 19.12 | 19.14 | 19.12 | 19.30              |                    |
|                 |                 | LOW       | Q16        | 19.17      | 19.27 | 19.12 | 19.27 | 18.98 | 19.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.20      | 19.16 | 18.72 | 19.18 | 18.73 | 19.30              |                    |
| 20              | 1               | MID       | 64QAM      | 18.75      | 19.01 | 19.06 | 18.88 | 19.17 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.64      | 18.66 | 19.01 | 18.90 | 18.99 | 19.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.04      | 18.93 | 18.75 | 19.16 | 18.81 | 19.30              |                    |
|                 | 50              | MID       | 64QAM      | 19.03      | 19.17 | 18.80 | 18.96 | 19.18 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.06      | 19.13 | 19.05 | 19.29 | 18.79 | 19.30              |                    |
|                 |                 | LOW       | 64QAM      | 18.58      | 18.80 | 18.98 | 18.54 | 19.14 | 19.30              |                    |

| LTE B41-State 3 -Ant.1 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 19.23 | 19.25 | 19.05 | 19.11 | 18.99 | 19.30              |
|                        |         | MID       | QPSK       | 19.08 | 18.97 | 18.83 | 18.85 | 19.09 | 19.30              |
|                        |         | HIGH      | QPSK       | 18.86 | 18.88 | 18.99 | 19.20 | 18.97 | 19.30              |
|                        | 12      | LOW       | QPSK       | 19.25 | 18.97 | 18.97 | 19.03 | 18.95 | 19.30              |
|                        |         | MID       | QPSK       | 18.91 | 18.93 | 19.06 | 18.81 | 19.04 | 19.30              |
|                        |         | HIGH      | QPSK       | 18.99 | 19.00 | 19.12 | 18.82 | 18.90 | 19.30              |
|                        | 25      | LOW       | QPSK       | 19.24 | 18.96 | 19.14 | 18.99 | 18.99 | 19.30              |
|                        | 5       | LOW       | Q16        | 19.17 | 19.13 | 19.17 | 18.79 | 19.08 | 19.30              |
|                        |         | MID       | Q16        | 18.87 | 19.12 | 18.81 | 19.27 | 19.13 | 19.30              |
|                        |         | HIGH      | Q16        | 19.08 | 18.98 | 19.14 | 19.11 | 18.94 | 19.30              |
|                        |         | LOW       | Q16        | 19.00 | 18.96 | 18.86 | 19.13 | 18.91 | 19.30              |
|                        |         | MID       | Q16        | 18.92 | 19.30 | 18.96 | 19.24 | 19.01 | 19.30              |
|                        |         | HIGH      | Q16        | 18.88 | 19.17 | 19.22 | 18.95 | 19.20 | 19.30              |
|                        | 25      | LOW       | Q16        | 19.21 | 19.15 | 19.10 | 19.17 | 18.79 | 19.30              |
| 5                      | 1       | LOW       | 64QAM      | 19.26 | 18.95 | 18.70 | 19.03 | 18.58 | 19.30              |
|                        |         | MID       | 64QAM      | 18.56 | 18.80 | 18.91 | 18.79 | 19.07 | 19.30              |
|                        |         | HIGH      | 64QAM      | 18.71 | 18.62 | 18.91 | 18.92 | 19.08 | 19.30              |
|                        | 12      | LOW       | 64QAM      | 19.14 | 18.99 | 18.81 | 19.24 | 18.70 | 19.30              |
|                        |         | MID       | 64QAM      | 18.92 | 19.13 | 18.78 | 18.85 | 18.99 | 19.30              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.05 | 18.92 | 19.17 | 18.68 | 19.30              |
|                        | 25      | LOW       | 64QAM      | 18.41 | 18.59 | 18.79 | 18.34 | 18.95 | 19.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 19.11 | 19.19 | 19.05 | 19.11 | 18.98 | 19.30              |
|                        |         | MID       | QPSK       | 19.25 | 19.17 | 18.85 | 19.04 | 18.93 | 19.30              |
|                        |         | HIGH      | QPSK       | 19.09 | 18.88 | 18.80 | 19.10 | 18.88 | 19.30              |
|                        | 25      | LOW       | QPSK       | 19.05 | 18.80 | 18.91 | 19.06 | 19.14 | 19.30              |
|                        |         | MID       | QPSK       | 18.81 | 18.97 | 19.04 | 18.85 | 19.02 | 19.30              |
|                        |         | HIGH      | QPSK       | 18.86 | 18.98 | 19.06 | 18.99 | 19.13 | 19.30              |
| 10                     | 50      | LOW       | QPSK       | 19.20 | 19.13 | 18.85 | 19.18 | 18.98 | 19.30              |
|                        | 1       | LOW       | Q16        | 19.06 | 18.96 | 19.04 | 18.92 | 19.12 | 19.30              |
|                        |         | MID       | Q16        | 19.14 | 18.98 | 18.73 | 19.15 | 19.19 | 19.30              |
|                        |         | HIGH      | Q16        | 19.17 | 18.92 | 19.01 | 19.23 | 19.15 | 19.30              |
|                        | 25      | LOW       | Q16        | 18.94 | 19.02 | 19.03 | 18.84 | 19.05 | 19.30              |
|                        |         | MID       | Q16        | 18.86 | 19.12 | 19.17 | 19.06 | 18.92 | 19.30              |
|                        |         | HIGH      | Q16        | 18.98 | 18.99 | 19.08 | 18.99 | 18.95 | 19.30              |
|                        | 50      | LOW       | Q16        | 19.11 | 19.15 | 19.06 | 19.11 | 18.79 | 19.30              |
|                        | 10      | LOW       | 64QAM      | 19.01 | 19.05 | 18.76 | 18.97 | 18.67 | 19.30              |
|                        |         | MID       | 64QAM      | 18.69 | 18.93 | 19.02 | 18.97 | 18.96 | 19.30              |
|                        |         | HIGH      | 64QAM      | 18.55 | 18.45 | 19.09 | 18.79 | 18.86 | 19.30              |
|                        |         | LOW       | 64QAM      | 19.02 | 18.93 | 18.60 | 19.18 | 18.90 | 19.30              |
|                        |         | MID       | 64QAM      | 18.97 | 19.05 | 18.88 | 18.81 | 19.20 | 19.30              |
|                        |         | HIGH      | 64QAM      | 18.93 | 19.09 | 19.05 | 19.27 | 18.75 | 19.30              |
|                        | 50      | LOW       | 64QAM      | 18.43 | 18.71 | 18.89 | 18.37 | 19.03 | 19.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 39725      | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 19.15      | 19.29 | 19.02 | 19.27 | 18.98 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 19.08      | 18.88 | 18.93 | 19.00 | 18.86 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.90      | 18.86 | 19.07 | 19.18 | 18.92 | 19.30              |                    |
|                 | 36              | LOW       | QPSK       | 19.15      | 18.84 | 19.22 | 18.97 | 18.95 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 18.85      | 19.12 | 19.02 | 18.85 | 19.12 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 18.94      | 19.14 | 19.14 | 18.99 | 19.11 | 19.30              |                    |
|                 | 75              | LOW       | QPSK       | 19.10      | 19.13 | 19.12 | 19.18 | 18.94 | 19.30              |                    |
|                 | 15              | 1         | LOW        | Q16        | 19.21 | 18.96 | 19.21 | 18.86 | 19.02              | 19.30              |
|                 |                 |           | MID        | Q16        | 19.10 | 19.04 | 18.77 | 19.13 | 19.23              | 19.30              |
| HIGH            |                 |           | Q16        | 19.23      | 18.94 | 19.06 | 19.15 | 19.01 | 19.30              |                    |
| 36              |                 | LOW       | Q16        | 18.88      | 19.02 | 18.81 | 18.93 | 18.80 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.09      | 19.13 | 19.09 | 19.05 | 18.92 | 19.30              |                    |
|                 |                 | HIGH      | Q16        | 18.88      | 19.01 | 19.16 | 18.97 | 18.97 | 19.30              |                    |
| 75              |                 | LOW       | Q16        | 19.02      | 19.17 | 19.22 | 19.17 | 18.94 | 19.30              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 19.05 | 19.06 | 18.68 | 19.20 | 18.66              | 19.30              |
|                 |                 |           | MID        | 64QAM      | 18.73 | 19.01 | 18.89 | 18.92 | 19.05              | 19.30              |
|                 | HIGH            |           | 64QAM      | 18.68      | 18.45 | 18.93 | 18.92 | 19.03 | 19.30              |                    |
|                 | 36              | LOW       | 64QAM      | 19.08      | 18.85 | 18.68 | 19.16 | 18.85 | 19.30              |                    |
|                 |                 | MID       | 64QAM      | 18.82      | 19.21 | 18.63 | 18.98 | 19.20 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.89      | 19.03 | 19.13 | 19.19 | 18.71 | 19.30              |                    |
|                 | 75              | LOW       | 64QAM      | 18.67      | 18.67 | 18.96 | 18.45 | 18.99 | 19.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 39750 | 40185 | 40620 | 41055 | 41490              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 19.25 | 19.21 | 19.13 | 19.21 | 19.09              | 19.30              |
| MID             |                 |           | QPSK       | 19.23      | 19.07 | 19.04 | 19.04 | 19.01 | 19.30              |                    |
| HIGH            |                 |           | QPSK       | 19.05      | 18.97 | 18.99 | 19.20 | 19.03 | 19.30              |                    |
| 50              |                 | LOW       | QPSK       | 19.17      | 18.99 | 19.12 | 18.97 | 19.16 | 19.30              |                    |
|                 |                 | MID       | QPSK       | 19.02      | 19.10 | 18.98 | 19.00 | 19.10 | 19.30              |                    |
|                 |                 | HIGH      | QPSK       | 19.05      | 19.08 | 19.06 | 19.03 | 19.05 | 19.30              |                    |
| 20              | 1               | LOW       | QPSK       | 19.18      | 19.09 | 19.04 | 19.12 | 19.09 | 19.30              |                    |
|                 |                 | LOW       | Q16        | 19.21      | 19.07 | 19.19 | 18.90 | 19.04 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.04      | 19.02 | 18.94 | 19.25 | 19.13 | 19.30              |                    |
|                 | 50              | HIGH      | Q16        | 19.21      | 19.11 | 19.12 | 19.27 | 19.05 | 19.30              |                    |
|                 |                 | LOW       | Q16        | 18.94      | 18.96 | 18.94 | 19.03 | 18.97 | 19.30              |                    |
|                 |                 | MID       | Q16        | 19.05      | 19.30 | 19.13 | 19.18 | 19.07 | 19.30              |                    |
|                 | 100             | HIGH      | Q16        | 19.09      | 19.09 | 19.12 | 19.14 | 19.12 | 19.30              |                    |
|                 |                 | LOW       | Q16        | 19.17      | 19.27 | 19.12 | 19.27 | 18.98 | 19.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.20      | 19.16 | 18.72 | 19.18 | 18.73 | 19.30              |                    |
| 20              | 1               | MID       | 64QAM      | 18.75      | 19.01 | 19.06 | 18.88 | 19.17 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 18.64      | 18.66 | 19.01 | 18.90 | 18.99 | 19.30              |                    |
|                 |                 | LOW       | 64QAM      | 19.04      | 18.93 | 18.75 | 19.16 | 18.81 | 19.30              |                    |
|                 | 50              | MID       | 64QAM      | 19.03      | 19.17 | 18.80 | 18.96 | 19.18 | 19.30              |                    |
|                 |                 | HIGH      | 64QAM      | 19.06      | 19.13 | 19.05 | 19.29 | 18.79 | 19.30              |                    |
|                 |                 | LOW       | 64QAM      | 18.58      | 18.80 | 18.98 | 18.54 | 19.14 | 19.30              |                    |

| LTE B41-State 4 -Ant.1 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 23.00 | 23.10 | 22.73 | 22.86 | 22.82 | 23.30              |
|                        |         | MID       | QPSK       | 23.23 | 23.01 | 23.12 | 23.13 | 23.01 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.01 | 22.95 | 22.74 | 22.97 | 22.81 | 23.30              |
|                        | 12      | LOW       | QPSK       | 22.84 | 22.77 | 22.92 | 22.80 | 23.09 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 22.91 | 23.01 | 22.96 | 22.83 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.09 | 22.77 | 23.02 | 23.02 | 22.85 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.92 | 22.92 | 23.00 | 22.67 | 22.96 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.16 | 22.93 | 23.14 | 22.91 | 23.21 | 23.30              |
|                        |         | MID       | Q16        | 23.01 | 23.06 | 22.98 | 23.23 | 23.17 | 23.30              |
|                        |         | HIGH      | Q16        | 23.26 | 23.07 | 23.19 | 23.25 | 23.14 | 23.30              |
|                        |         | LOW       | Q16        | 21.91 | 21.67 | 22.05 | 21.98 | 21.98 | 22.30              |
|                        |         | MID       | Q16        | 22.00 | 22.04 | 22.04 | 22.10 | 22.22 | 22.30              |
|                        |         | HIGH      | Q16        | 22.00 | 21.90 | 22.16 | 22.13 | 22.20 | 22.30              |
|                        | 25      | LOW       | Q16        | 21.95 | 21.81 | 21.97 | 21.93 | 21.83 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.11 | 21.97 | 21.81 | 22.03 | 21.97 | 22.30              |
|                        |         | MID       | 64QAM      | 21.80 | 22.25 | 21.92 | 22.14 | 22.18 | 22.30              |
|                        |         | HIGH      | 64QAM      | 21.82 | 22.28 | 22.17 | 22.10 | 22.17 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 20.91 | 20.80 | 20.90 | 21.00 | 20.97 | 21.30              |
|                        |         | MID       | 64QAM      | 21.02 | 20.90 | 21.03 | 21.24 | 21.03 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.52 | 21.06 | 21.21 | 21.16 | 21.10 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 20.82 | 20.88 | 21.11 | 20.71 | 20.86 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 22.84 | 22.98 | 22.71 | 23.04 | 23.00 | 23.30              |
|                        |         | MID       | QPSK       | 22.91 | 23.04 | 23.12 | 23.13 | 23.11 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.15 | 22.68 | 23.08 | 22.92 | 22.77 | 23.30              |
|                        | 25      | LOW       | QPSK       | 22.86 | 22.86 | 23.04 | 22.76 | 23.07 | 23.30              |
|                        |         | MID       | QPSK       | 22.87 | 22.97 | 22.85 | 23.01 | 22.87 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.12 | 23.00 | 23.02 | 22.82 | 23.11 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 23.18 | 23.08 | 22.89 | 22.81 | 22.99 | 23.30              |
|                        | 1       | LOW       | Q16        | 23.09 | 22.89 | 22.86 | 23.28 | 22.97 | 23.30              |
|                        |         | MID       | Q16        | 23.27 | 23.16 | 22.93 | 23.18 | 23.08 | 23.30              |
|                        |         | HIGH      | Q16        | 23.07 | 23.23 | 22.96 | 23.14 | 23.12 | 23.30              |
|                        | 25      | LOW       | Q16        | 21.89 | 21.98 | 22.07 | 21.91 | 21.87 | 22.30              |
|                        |         | MID       | Q16        | 22.13 | 22.26 | 21.84 | 22.10 | 21.89 | 22.30              |
|                        |         | HIGH      | Q16        | 22.11 | 21.77 | 21.91 | 21.98 | 22.05 | 22.30              |
|                        | 50      | LOW       | Q16        | 21.93 | 21.79 | 21.93 | 22.12 | 21.87 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 22.11 | 22.19 | 22.07 | 22.03 | 22.12 | 22.30              |
|                        |         | MID       | 64QAM      | 21.94 | 22.23 | 22.21 | 22.11 | 22.13 | 22.30              |
|                        |         | HIGH      | 64QAM      | 21.86 | 22.10 | 22.09 | 22.14 | 22.23 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 20.85 | 20.95 | 20.79 | 21.17 | 21.14 | 21.30              |
|                        |         | MID       | 64QAM      | 20.93 | 20.86 | 20.99 | 20.99 | 20.95 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.83 | 20.99 | 21.02 | 20.95 | 21.02 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 21.05 | 20.59 | 21.16 | 20.84 | 21.00 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 22.84 | 23.22 | 22.80 | 22.68 | 23.05 | 23.30              |
|                 |         | MID       | QPSK       | 22.97 | 22.97 | 22.84 | 22.97 | 22.99 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.01 | 22.79 | 23.02 | 22.81 | 22.90 | 23.30              |
|                 | 36      | LOW       | QPSK       | 23.09 | 22.70 | 23.13 | 22.96 | 22.97 | 23.30              |
|                 |         | MID       | QPSK       | 23.14 | 22.97 | 22.96 | 23.15 | 23.10 | 23.30              |
|                 |         | HIGH      | QPSK       | 22.95 | 22.86 | 22.92 | 22.75 | 22.88 | 23.30              |
|                 | 75      | LOW       | QPSK       | 22.92 | 22.81 | 22.89 | 22.99 | 23.10 | 23.30              |
|                 |         | LOW       | Q16        | 23.02 | 22.95 | 22.91 | 23.18 | 23.18 | 23.30              |
|                 |         | MID       | Q16        | 23.01 | 23.16 | 23.19 | 23.13 | 23.21 | 23.30              |
| 15              | 1       | HIGH      | Q16        | 23.02 | 23.18 | 23.17 | 23.01 | 23.12 | 23.30              |
|                 |         | LOW       | Q16        | 22.00 | 21.85 | 22.18 | 21.91 | 21.89 | 22.30              |
|                 |         | MID       | Q16        | 22.00 | 22.09 | 22.19 | 21.97 | 21.91 | 22.30              |
|                 | 36      | HIGH      | Q16        | 22.11 | 21.92 | 21.91 | 22.22 | 22.02 | 22.30              |
|                 |         | LOW       | Q16        | 21.91 | 21.79 | 21.88 | 21.86 | 21.89 | 22.30              |
|                 |         | LOW       | 64QAM      | 21.78 | 22.08 | 22.16 | 22.01 | 22.12 | 22.30              |
|                 | 1       | MID       | 64QAM      | 21.78 | 22.16 | 22.10 | 22.05 | 22.13 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.77 | 22.21 | 22.09 | 22.19 | 22.03 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.12 | 20.80 | 20.90 | 20.88 | 20.88 | 21.30              |
| MID             |         | 64QAM     | 20.93      | 20.94 | 20.86 | 21.12 | 21.25 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.54      | 21.01 | 21.15 | 21.14 | 21.15 | 21.30 |                    |
| 75              | LOW     | 64QAM     | 20.76      | 20.72 | 21.11 | 20.78 | 21.04 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 23.02 | 23.10 | 22.96 | 22.93 | 23.05 | 23.30              |
|                 |         | MID       | QPSK       | 23.16 | 23.13 | 23.07 | 23.04 | 23.13 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.06 | 22.86 | 22.97 | 23.04 | 23.02 | 23.30              |
|                 | 50      | LOW       | QPSK       | 23.07 | 22.84 | 23.06 | 22.87 | 23.02 | 23.30              |
|                 |         | MID       | QPSK       | 23.12 | 23.09 | 23.08 | 23.10 | 23.08 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.07 | 22.93 | 23.04 | 22.91 | 23.06 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.06 | 22.97 | 23.05 | 22.92 | 23.01 | 23.30              |
|                 |         | LOW       | Q16        | 23.11 | 23.14 | 23.07 | 23.16 | 23.16 | 23.30              |
|                 |         | MID       | Q16        | 23.27 | 23.18 | 23.19 | 23.11 | 23.29 | 23.30              |
| 20              | 1       | HIGH      | Q16        | 23.21 | 23.23 | 23.10 | 23.27 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.04 | 21.87 | 22.09 | 21.91 | 22.02 | 22.30              |
|                 | 50      | MID       | Q16        | 22.09 | 22.22 | 22.08 | 22.17 | 22.11 | 22.30              |
|                 |         | HIGH      | Q16        | 22.04 | 21.90 | 22.09 | 22.13 | 22.09 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.06 | 21.83 | 22.06 | 22.08 | 21.98 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.00 | 22.15 | 22.05 | 22.12 | 22.21 | 22.30              |
|                 | 1       | MID       | 64QAM      | 21.98 | 22.25 | 22.14 | 22.27 | 22.29 | 22.30              |
|                 |         | HIGH      | 64QAM      | 21.84 | 22.19 | 22.13 | 22.23 | 22.21 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.06 | 20.93 | 21.00 | 21.11 | 21.03 | 21.30              |
| MID             |         | 64QAM     | 21.06      | 20.96 | 21.01 | 21.18 | 21.14 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.75      | 21.12 | 21.15 | 21.08 | 21.04 | 21.30 |                    |
| 100             | LOW     | 64QAM     | 20.99      | 20.80 | 21.20 | 20.88 | 20.96 | 21.30 |                    |

| LTE B41-State 5 -Ant.1 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 20.85 | 20.90 | 20.85 | 21.00 | 20.80 | 21.30              |
|                        |         | MID       | QPSK       | 20.99 | 20.78 | 20.84 | 20.91 | 21.03 | 21.30              |
|                        |         | HIGH      | QPSK       | 20.95 | 20.59 | 20.83 | 20.94 | 20.69 | 21.30              |
|                        | 12      | LOW       | QPSK       | 21.04 | 20.81 | 20.95 | 20.85 | 21.00 | 21.30              |
|                        |         | MID       | QPSK       | 20.92 | 20.88 | 21.04 | 21.04 | 20.97 | 21.30              |
|                        |         | HIGH      | QPSK       | 21.09 | 21.09 | 21.14 | 20.80 | 20.95 | 21.30              |
|                        | 25      | LOW       | QPSK       | 20.87 | 20.92 | 20.96 | 20.69 | 21.06 | 21.30              |
|                        | 5       | LOW       | Q16        | 21.16 | 20.84 | 20.99 | 20.60 | 20.72 | 21.30              |
|                        |         | MID       | Q16        | 21.11 | 20.81 | 21.18 | 20.98 | 21.08 | 21.30              |
|                        |         | HIGH      | Q16        | 21.13 | 20.66 | 21.17 | 20.79 | 20.90 | 21.30              |
|                        |         | LOW       | Q16        | 20.89 | 20.69 | 20.83 | 20.90 | 20.92 | 21.30              |
|                        |         | MID       | Q16        | 21.07 | 21.13 | 20.98 | 20.99 | 20.99 | 21.30              |
|                        |         | HIGH      | Q16        | 20.90 | 21.09 | 21.05 | 20.85 | 20.84 | 21.30              |
|                        | 25      | LOW       | Q16        | 20.93 | 20.86 | 20.93 | 21.01 | 21.05 | 21.30              |
| 5                      | 1       | LOW       | 64QAM      | 20.82 | 21.15 | 20.89 | 21.09 | 21.13 | 21.30              |
|                        |         | MID       | 64QAM      | 21.16 | 20.93 | 21.09 | 20.79 | 20.66 | 21.30              |
|                        |         | HIGH      | 64QAM      | 21.19 | 21.15 | 21.03 | 20.96 | 20.98 | 21.30              |
|                        | 12      | LOW       | 64QAM      | 20.81 | 20.88 | 20.97 | 20.88 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 21.12 | 21.02 | 20.96 | 21.23 | 21.15 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.85 | 21.16 | 20.67 | 21.01 | 20.93 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 20.81 | 20.77 | 21.17 | 20.85 | 21.00 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 20.87 | 20.88 | 20.93 | 20.79 | 20.80 | 21.30              |
|                        |         | MID       | QPSK       | 21.16 | 21.09 | 20.80 | 20.99 | 20.89 | 21.30              |
|                        |         | HIGH      | QPSK       | 21.01 | 20.68 | 20.93 | 20.79 | 20.67 | 21.30              |
|                        | 25      | LOW       | QPSK       | 20.83 | 20.97 | 20.95 | 20.66 | 20.90 | 21.30              |
|                        |         | MID       | QPSK       | 20.88 | 20.92 | 20.96 | 20.93 | 20.97 | 21.30              |
|                        |         | HIGH      | QPSK       | 20.99 | 21.05 | 21.04 | 20.91 | 21.05 | 21.30              |
| 10                     | 50      | LOW       | QPSK       | 20.89 | 20.79 | 20.92 | 20.88 | 20.81 | 21.30              |
|                        | 1       | LOW       | Q16        | 21.12 | 20.88 | 21.24 | 20.57 | 20.97 | 21.30              |
|                        |         | MID       | Q16        | 21.01 | 20.87 | 21.18 | 20.81 | 20.87 | 21.30              |
|                        |         | HIGH      | Q16        | 20.92 | 20.91 | 21.02 | 20.64 | 20.96 | 21.30              |
|                        | 25      | LOW       | Q16        | 20.93 | 21.00 | 20.79 | 20.69 | 20.98 | 21.30              |
|                        |         | MID       | Q16        | 20.96 | 21.05 | 20.77 | 21.03 | 20.86 | 21.30              |
|                        |         | HIGH      | Q16        | 21.09 | 20.95 | 21.16 | 20.83 | 21.03 | 21.30              |
|                        | 50      | LOW       | Q16        | 21.08 | 21.09 | 20.93 | 20.84 | 21.03 | 21.30              |
| 10                     | 1       | LOW       | 64QAM      | 20.99 | 21.17 | 21.08 | 21.20 | 21.02 | 21.30              |
|                        |         | MID       | 64QAM      | 21.12 | 20.70 | 21.03 | 20.60 | 20.83 | 21.30              |
|                        |         | HIGH      | 64QAM      | 21.09 | 21.23 | 20.95 | 21.25 | 21.00 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 20.62 | 20.78 | 20.97 | 20.90 | 21.07 | 21.30              |
|                        |         | MID       | 64QAM      | 21.28 | 20.94 | 20.76 | 21.09 | 21.17 | 21.30              |
|                        |         | HIGH      | 64QAM      | 21.11 | 20.95 | 20.71 | 21.10 | 21.14 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.72 | 21.08 | 21.30 | 20.83 | 21.08 | 21.30              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 39725      | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 21.04      | 20.75 | 21.01 | 21.06 | 20.94 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 21.08      | 21.07 | 20.97 | 20.74 | 21.01 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 21.23      | 20.64 | 20.99 | 20.86 | 20.76 | 21.30              |                    |
|                 | 36              | LOW       | QPSK       | 20.91      | 20.79 | 20.97 | 20.89 | 21.06 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 21.13      | 20.78 | 21.11 | 20.81 | 21.07 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 20.90      | 20.80 | 20.98 | 21.09 | 20.99 | 21.30              |                    |
|                 | 75              | LOW       | QPSK       | 21.02      | 20.92 | 20.92 | 20.90 | 21.00 | 21.30              |                    |
|                 | 15              | 1         | LOW        | Q16        | 21.12 | 20.59 | 21.14 | 20.55 | 20.87              | 21.30              |
|                 |                 |           | MID        | Q16        | 21.18 | 21.08 | 21.08 | 21.04 | 21.08              | 21.30              |
| HIGH            |                 |           | Q16        | 21.23      | 20.75 | 21.25 | 20.85 | 20.88 | 21.30              |                    |
| 36              |                 | LOW       | Q16        | 21.08      | 20.92 | 21.08 | 20.96 | 20.92 | 21.30              |                    |
|                 |                 | MID       | Q16        | 21.13      | 21.11 | 20.88 | 20.84 | 20.86 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 20.96      | 20.93 | 21.09 | 20.78 | 21.03 | 21.30              |                    |
| 75              |                 | LOW       | Q16        | 20.83      | 20.86 | 20.97 | 21.11 | 20.80 | 21.30              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 20.90 | 20.90 | 20.97 | 21.13 | 20.92              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 21.14 | 20.89 | 21.15 | 20.65 | 20.81              | 21.30              |
|                 | HIGH            |           | 64QAM      | 21.21      | 21.00 | 21.08 | 21.11 | 21.21 | 21.30              |                    |
|                 | 36              | LOW       | 64QAM      | 20.64      | 20.99 | 21.04 | 20.78 | 20.95 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.20      | 20.96 | 20.90 | 21.11 | 21.12 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 20.81      | 20.95 | 20.96 | 21.14 | 20.99 | 21.30              |                    |
|                 | 75              | LOW       | 64QAM      | 20.72      | 21.06 | 21.11 | 20.81 | 20.81 | 21.30              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 39750 | 40185 | 40620 | 41055 | 41490              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 21.06 | 20.98 | 20.93 | 21.00 | 20.90              | 21.30              |
| MID             |                 |           | QPSK       | 21.16      | 21.01 | 21.01 | 20.91 | 20.99 | 21.30              |                    |
| HIGH            |                 |           | QPSK       | 21.12      | 20.76 | 20.93 | 20.92 | 20.84 | 21.30              |                    |
| 50              |                 | LOW       | QPSK       | 21.04      | 20.87 | 21.03 | 20.81 | 21.00 | 21.30              |                    |
|                 |                 | MID       | QPSK       | 21.07      | 20.82 | 21.00 | 21.04 | 21.05 | 21.30              |                    |
|                 |                 | HIGH      | QPSK       | 21.05      | 21.03 | 21.06 | 20.99 | 21.01 | 21.30              |                    |
| 20              | 1               | LOW       | Q16        | 21.14      | 20.80 | 21.18 | 20.72 | 20.95 | 21.30              |                    |
|                 |                 | MID       | Q16        | 21.24      | 21.02 | 21.29 | 21.04 | 21.04 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 21.15      | 20.81 | 21.21 | 20.79 | 20.96 | 21.30              |                    |
|                 | 50              | LOW       | Q16        | 21.10      | 20.92 | 21.00 | 20.92 | 21.00 | 21.30              |                    |
|                 |                 | MID       | Q16        | 21.09      | 21.13 | 20.98 | 21.07 | 21.07 | 21.30              |                    |
|                 |                 | HIGH      | Q16        | 21.09      | 21.01 | 21.05 | 20.93 | 21.01 | 21.30              |                    |
|                 | 100             | LOW       | Q16        | 21.04      | 21.05 | 21.01 | 21.07 | 20.99 | 21.30              |                    |
|                 | 20              | 1         | LOW        | 64QAM      | 21.01 | 21.09 | 21.08 | 21.24 | 21.13              | 21.30              |
|                 |                 |           | MID        | 64QAM      | 21.16 | 20.89 | 21.26 | 20.75 | 20.85              | 21.30              |
| HIGH            |                 |           | 64QAM      | 21.17      | 21.15 | 21.16 | 21.19 | 21.15 | 21.30              |                    |
| 50              |                 | LOW       | 64QAM      | 20.83      | 21.01 | 21.10 | 20.82 | 21.03 | 21.30              |                    |
|                 |                 | MID       | 64QAM      | 21.24      | 21.17 | 20.86 | 21.15 | 21.26 | 21.30              |                    |
|                 |                 | HIGH      | 64QAM      | 21.00      | 21.10 | 20.86 | 21.18 | 21.14 | 21.30              |                    |
| 100             |                 | LOW       | 64QAM      | 20.85      | 21.00 | 21.28 | 20.85 | 21.04 | 21.30              |                    |

| LTE B41-State 6 -Ant.1 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 20.85 | 20.90 | 20.85 | 21.00 | 20.80 | 21.30              |
|                        |         | MID       | QPSK       | 20.99 | 20.78 | 20.84 | 20.91 | 21.03 | 21.30              |
|                        |         | HIGH      | QPSK       | 20.95 | 20.59 | 20.83 | 20.94 | 20.69 | 21.30              |
|                        | 12      | LOW       | QPSK       | 21.04 | 20.81 | 20.95 | 20.85 | 21.00 | 21.30              |
|                        |         | MID       | QPSK       | 20.92 | 20.88 | 21.04 | 21.04 | 20.97 | 21.30              |
|                        |         | HIGH      | QPSK       | 21.09 | 21.09 | 21.14 | 20.80 | 20.95 | 21.30              |
|                        | 25      | LOW       | QPSK       | 20.87 | 20.92 | 20.96 | 20.69 | 21.06 | 21.30              |
|                        | 5       | LOW       | Q16        | 21.16 | 20.84 | 20.99 | 20.60 | 20.72 | 21.30              |
|                        |         | MID       | Q16        | 21.11 | 20.81 | 21.18 | 20.98 | 21.08 | 21.30              |
|                        |         | HIGH      | Q16        | 21.13 | 20.66 | 21.17 | 20.79 | 20.90 | 21.30              |
|                        |         | LOW       | Q16        | 20.89 | 20.69 | 20.83 | 20.90 | 20.92 | 21.30              |
|                        |         | MID       | Q16        | 21.07 | 21.13 | 20.98 | 20.99 | 20.99 | 21.30              |
|                        |         | HIGH      | Q16        | 20.90 | 21.09 | 21.05 | 20.85 | 20.84 | 21.30              |
| 5                      | 1       | LOW       | 64QAM      | 20.82 | 21.15 | 20.89 | 21.09 | 21.13 | 21.30              |
|                        |         | MID       | 64QAM      | 21.16 | 20.93 | 21.09 | 20.79 | 20.66 | 21.30              |
|                        |         | HIGH      | 64QAM      | 21.19 | 21.15 | 21.03 | 20.96 | 20.98 | 21.30              |
|                        | 12      | LOW       | 64QAM      | 20.81 | 20.88 | 20.97 | 20.88 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 21.12 | 21.02 | 20.96 | 21.23 | 21.15 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.85 | 21.16 | 20.67 | 21.01 | 20.93 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 20.81 | 20.77 | 21.17 | 20.85 | 21.00 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 20.87 | 20.88 | 20.93 | 20.79 | 20.80 | 21.30              |
|                        |         | MID       | QPSK       | 21.16 | 21.09 | 20.80 | 20.99 | 20.89 | 21.30              |
|                        |         | HIGH      | QPSK       | 21.01 | 20.68 | 20.93 | 20.79 | 20.67 | 21.30              |
|                        | 25      | LOW       | QPSK       | 20.83 | 20.97 | 20.95 | 20.66 | 20.90 | 21.30              |
|                        |         | MID       | QPSK       | 20.88 | 20.92 | 20.96 | 20.93 | 20.97 | 21.30              |
|                        |         | HIGH      | QPSK       | 20.99 | 21.05 | 21.04 | 20.91 | 21.05 | 21.30              |
| 10                     | 50      | LOW       | QPSK       | 20.89 | 20.79 | 20.92 | 20.88 | 20.81 | 21.30              |
|                        | 1       | LOW       | Q16        | 21.12 | 20.88 | 21.24 | 20.57 | 20.97 | 21.30              |
|                        |         | MID       | Q16        | 21.01 | 20.87 | 21.18 | 20.81 | 20.87 | 21.30              |
|                        |         | HIGH      | Q16        | 20.92 | 20.91 | 21.02 | 20.64 | 20.96 | 21.30              |
|                        | 25      | LOW       | Q16        | 20.93 | 21.00 | 20.79 | 20.69 | 20.98 | 21.30              |
|                        |         | MID       | Q16        | 20.96 | 21.05 | 20.77 | 21.03 | 20.86 | 21.30              |
|                        |         | HIGH      | Q16        | 21.09 | 20.95 | 21.16 | 20.83 | 21.03 | 21.30              |
|                        | 50      | LOW       | Q16        | 21.08 | 21.09 | 20.93 | 20.84 | 21.03 | 21.30              |
| 10                     | 1       | LOW       | 64QAM      | 20.99 | 21.17 | 21.08 | 21.20 | 21.02 | 21.30              |
|                        |         | MID       | 64QAM      | 21.12 | 20.70 | 21.03 | 20.60 | 20.83 | 21.30              |
|                        |         | HIGH      | 64QAM      | 21.09 | 21.23 | 20.95 | 21.25 | 21.00 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 20.62 | 20.78 | 20.97 | 20.90 | 21.07 | 21.30              |
|                        |         | MID       | 64QAM      | 21.28 | 20.94 | 20.76 | 21.09 | 21.17 | 21.30              |
|                        |         | HIGH      | 64QAM      | 21.11 | 20.95 | 20.71 | 21.10 | 21.14 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.72 | 21.08 | 21.30 | 20.83 | 21.08 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset       | Modulation | 39725     | 40160      | 40620 | 41080 | 41515 | Tune-up power(dBm) |       |                    |
|-----------------|---------|-----------------|------------|-----------|------------|-------|-------|-------|--------------------|-------|--------------------|
| 15              | 1       | LOW             | QPSK       | 21.04     | 20.75      | 21.01 | 21.06 | 20.94 | 21.30              |       |                    |
|                 |         | MID             | QPSK       | 21.08     | 21.07      | 20.97 | 20.74 | 21.01 | 21.30              |       |                    |
|                 |         | HIGH            | QPSK       | 21.23     | 20.64      | 20.99 | 20.86 | 20.76 | 21.30              |       |                    |
|                 | 36      | LOW             | QPSK       | 20.91     | 20.79      | 20.97 | 20.89 | 21.06 | 21.30              |       |                    |
|                 |         | MID             | QPSK       | 21.13     | 20.78      | 21.11 | 20.81 | 21.07 | 21.30              |       |                    |
|                 |         | HIGH            | QPSK       | 20.90     | 20.80      | 20.98 | 21.09 | 20.99 | 21.30              |       |                    |
|                 | 75      | LOW             | QPSK       | 21.02     | 20.92      | 20.92 | 20.90 | 21.00 | 21.30              |       |                    |
|                 |         | LOW             | Q16        | 21.12     | 20.59      | 21.14 | 20.55 | 20.87 | 21.30              |       |                    |
|                 |         | MID             | Q16        | 21.18     | 21.08      | 21.08 | 21.04 | 21.08 | 21.30              |       |                    |
| 15              | 1       | HIGH            | Q16        | 21.23     | 20.75      | 21.25 | 20.85 | 20.88 | 21.30              |       |                    |
|                 |         | LOW             | Q16        | 21.08     | 20.92      | 21.08 | 20.96 | 20.92 | 21.30              |       |                    |
|                 |         | MID             | Q16        | 21.13     | 21.11      | 20.88 | 20.84 | 20.86 | 21.30              |       |                    |
|                 | 36      | HIGH            | Q16        | 20.96     | 20.93      | 21.09 | 20.78 | 21.03 | 21.30              |       |                    |
|                 |         | LOW             | Q16        | 20.83     | 20.86      | 20.97 | 21.11 | 20.80 | 21.30              |       |                    |
|                 |         | LOW             | Q16        | 20.83     | 20.86      | 20.97 | 21.11 | 20.80 | 21.30              |       |                    |
|                 | 15      | 1               | LOW        | 64QAM     | 20.90      | 20.90 | 20.97 | 21.13 | 20.92              | 21.30 |                    |
|                 |         |                 | MID        | 64QAM     | 21.14      | 20.89 | 21.15 | 20.65 | 20.81              | 21.30 |                    |
|                 |         |                 | HIGH       | 64QAM     | 21.21      | 21.00 | 21.08 | 21.11 | 21.21              | 21.30 |                    |
| 36              |         | LOW             | 64QAM      | 20.64     | 20.99      | 21.04 | 20.78 | 20.95 | 21.30              |       |                    |
|                 |         | MID             | 64QAM      | 21.20     | 20.96      | 20.90 | 21.11 | 21.12 | 21.30              |       |                    |
|                 |         | HIGH            | 64QAM      | 20.81     | 20.95      | 20.96 | 21.14 | 20.99 | 21.30              |       |                    |
| 75              |         | LOW             | 64QAM      | 20.72     | 21.06      | 21.11 | 20.81 | 20.81 | 21.30              |       |                    |
|                 |         | Bandwidth (MHz) | RB Size    | RB offset | Modulation | 39750 | 40185 | 40620 | 41055              | 41490 | Tune-up power(dBm) |
|                 |         | 20              | 1          | LOW       | QPSK       | 21.06 | 20.98 | 20.93 | 21.00              | 20.90 | 21.30              |
| MID             | QPSK    |                 |            | 21.16     | 21.01      | 21.01 | 20.91 | 20.99 | 21.30              |       |                    |
| HIGH            | QPSK    |                 |            | 21.12     | 20.76      | 20.93 | 20.92 | 20.84 | 21.30              |       |                    |
| 50              | LOW     |                 | QPSK       | 21.04     | 20.87      | 21.03 | 20.81 | 21.00 | 21.30              |       |                    |
|                 | MID     |                 | QPSK       | 21.07     | 20.82      | 21.00 | 21.04 | 21.05 | 21.30              |       |                    |
|                 | HIGH    |                 | QPSK       | 21.05     | 21.03      | 21.06 | 20.99 | 21.01 | 21.30              |       |                    |
| 100             | LOW     |                 | QPSK       | 21.02     | 20.96      | 21.00 | 20.92 | 20.98 | 21.30              |       |                    |
|                 | LOW     |                 | Q16        | 21.14     | 20.80      | 21.18 | 20.72 | 20.95 | 21.30              |       |                    |
|                 | MID     |                 | Q16        | 21.24     | 21.02      | 21.29 | 21.04 | 21.04 | 21.30              |       |                    |
| 20              | 1       | HIGH            | Q16        | 21.15     | 20.81      | 21.21 | 20.79 | 20.96 | 21.30              |       |                    |
|                 |         | LOW             | Q16        | 21.10     | 20.92      | 21.00 | 20.92 | 21.00 | 21.30              |       |                    |
|                 |         | MID             | Q16        | 21.09     | 21.13      | 20.98 | 21.07 | 21.07 | 21.30              |       |                    |
|                 | 50      | HIGH            | Q16        | 21.09     | 21.01      | 21.05 | 20.93 | 21.01 | 21.30              |       |                    |
|                 |         | LOW             | Q16        | 21.04     | 21.05      | 21.01 | 21.07 | 20.99 | 21.30              |       |                    |
|                 |         | LOW             | 64QAM      | 21.01     | 21.09      | 21.08 | 21.24 | 21.13 | 21.30              |       |                    |
|                 | 1       | MID             | 64QAM      | 21.16     | 20.89      | 21.26 | 20.75 | 20.85 | 21.30              |       |                    |
|                 |         | HIGH            | 64QAM      | 21.17     | 21.15      | 21.16 | 21.19 | 21.15 | 21.30              |       |                    |
|                 |         | LOW             | 64QAM      | 20.83     | 21.01      | 21.10 | 20.82 | 21.03 | 21.30              |       |                    |
| 50              | MID     | 64QAM           | 21.24      | 21.17     | 20.86      | 21.15 | 21.26 | 21.30 |                    |       |                    |
|                 | HIGH    | 64QAM           | 21.00      | 21.10     | 20.86      | 21.18 | 21.14 | 21.30 |                    |       |                    |
|                 | 100     | LOW             | 64QAM      | 20.85     | 21.00      | 21.28 | 20.85 | 21.04 | 21.30              |       |                    |

### 8.3.5 LTE Band41 Output Power

BL-SZ2220432-701

| LTE B41-State 1 -Ant.0 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.05 | 23.97 | 23.85 | 23.99 | 24.23 | 24.30              |
|                        |         | MID       | QPSK       | 24.30 | 24.18 | 24.10 | 24.09 | 24.06 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.99 | 24.00 | 24.18 | 24.13 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.16 | 23.04 | 23.05 | 23.22 | 23.24 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 22.70 | 23.15 | 23.00 | 22.97 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.25 | 22.96 | 23.07 | 22.80 | 22.98 | 23.30              |
|                        | 25      | LOW       | QPSK       | 23.01 | 23.07 | 23.02 | 23.12 | 23.13 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.26 | 23.03 | 22.92 | 22.93 | 23.21 | 23.30              |
|                        |         | MID       | Q16        | 23.11 | 22.95 | 23.12 | 22.92 | 23.11 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.14 | 22.93 | 23.01 | 23.16 | 23.30              |
|                        |         | LOW       | Q16        | 22.15 | 22.22 | 22.14 | 22.19 | 22.24 | 22.30              |
|                        |         | MID       | Q16        | 22.08 | 22.16 | 21.92 | 21.76 | 22.02 | 22.30              |
|                        |         | HIGH      | Q16        | 22.01 | 21.74 | 22.22 | 21.93 | 21.93 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.16 | 22.07 | 21.81 | 21.98 | 22.20 | 22.30              |
|                        |         | MID       | 64QAM      | 21.99 | 21.99 | 21.94 | 22.00 | 22.26 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.24 | 22.03 | 21.90 | 22.07 | 22.03 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.12 | 20.97 | 20.70 | 20.72 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 20.70 | 21.01 | 21.27 | 20.92 | 21.11 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.91 | 21.17 | 21.10 | 20.95 | 21.01 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.03 | 20.86 | 21.16 | 20.80 | 21.15 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 24.22 | 24.04 | 24.02 | 24.11 | 23.97 | 24.30              |
|                        |         | MID       | QPSK       | 24.20 | 23.97 | 24.15 | 24.01 | 24.21 | 24.30              |
|                        |         | HIGH      | QPSK       | 23.97 | 23.92 | 23.95 | 24.06 | 24.20 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.13 | 22.88 | 23.11 | 23.19 | 22.92 | 23.30              |
|                        |         | MID       | QPSK       | 23.18 | 22.93 | 22.96 | 23.02 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 22.97 | 22.83 | 23.16 | 23.07 | 23.17 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 22.94 | 23.21 | 23.11 | 23.23 | 23.13 | 23.30              |
|                        | 1       | LOW       | Q16        | 23.26 | 23.11 | 22.96 | 23.05 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 22.97 | 23.23 | 23.08 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.00 | 23.19 | 23.23 | 23.06 | 23.20 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.22 | 22.06 | 22.14 | 21.86 | 22.26 | 22.30              |
|                        |         | MID       | Q16        | 22.00 | 21.98 | 22.25 | 21.76 | 22.25 | 22.30              |
|                        |         | HIGH      | Q16        | 21.99 | 21.94 | 22.15 | 21.95 | 22.11 | 22.30              |
|                        | 50      | LOW       | Q16        | 22.08 | 21.94 | 22.13 | 22.00 | 22.04 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 21.92 | 22.29 | 21.61 | 22.09 | 22.29 | 22.30              |
|                        |         | MID       | 64QAM      | 21.94 | 22.02 | 22.18 | 22.13 | 22.20 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.01 | 22.16 | 21.95 | 21.87 | 21.92 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.23 | 20.91 | 20.81 | 21.01 | 20.84 | 21.30              |
|                        |         | MID       | 64QAM      | 20.76 | 21.11 | 21.10 | 20.92 | 21.20 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.97 | 21.13 | 20.93 | 21.06 | 21.09 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.92 | 20.90 | 20.93 | 21.05 | 20.96 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.22 | 23.83 | 24.07 | 24.02 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.13 | 24.04 | 23.98 | 24.23 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.29 | 24.11 | 24.14 | 24.18 | 23.91 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.12 | 23.04 | 23.11 | 23.24 | 23.08 | 23.30              |
|                 |         | MID       | QPSK       | 23.11 | 22.93 | 23.05 | 22.95 | 22.97 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 22.99 | 23.28 | 22.91 | 23.14 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 22.86 | 23.27 | 22.95 | 23.02 | 23.30              |
|                 |         | LOW       | Q16        | 22.98 | 23.18 | 23.15 | 22.89 | 23.23 | 23.30              |
|                 |         | MID       | Q16        | 23.04 | 23.02 | 23.30 | 22.85 | 23.29 | 23.30              |
| 15              | 1       | HIGH      | Q16        | 23.07 | 23.25 | 23.28 | 22.94 | 23.13 | 23.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.00 | 22.22 | 22.08 | 22.06 | 22.30              |
|                 |         | MID       | Q16        | 22.11 | 22.18 | 22.09 | 21.83 | 21.94 | 22.30              |
|                 | 36      | HIGH      | Q16        | 22.19 | 21.80 | 21.91 | 21.82 | 21.91 | 22.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.18 | 22.06 | 22.26 | 22.02 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.00 | 22.20 | 21.81 | 22.18 | 22.15 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.07 | 21.93 | 22.16 | 22.07 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.08 | 21.90 | 21.97 | 21.98 | 22.05 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.21 | 20.72 | 20.76 | 20.78 | 21.07 | 21.30              |
| MID             |         | 64QAM     | 20.89      | 20.86 | 21.27 | 20.80 | 21.30 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.97      | 21.13 | 21.22 | 21.25 | 20.88 | 21.30 |                    |
| 75              | LOW     | 64QAM     | 21.01      | 20.92 | 20.93 | 21.01 | 21.13 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.22 | 24.09 | 24.07 | 24.04 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.11 | 24.22 | 24.28 | 24.23 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.24 | 24.06 | 24.12 | 24.11 | 24.18 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.21 | 23.13 | 23.19 | 23.17 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.29 | 22.95 | 23.17 | 22.93 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.20 | 22.94 | 23.23 | 23.05 | 23.12 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.20 | 23.09 | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 23.17 | 23.26 | 23.15 | 23.05 | 23.21 | 23.30              |
|                 |         | MID       | Q16        | 23.27 | 23.04 | 23.23 | 23.01 | 23.27 | 23.30              |
| 20              | 1       | HIGH      | Q16        | 23.19 | 23.27 | 23.16 | 23.13 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.24 | 22.13 | 22.18 | 22.10 | 22.17 | 22.30              |
|                 | 50      | MID       | Q16        | 22.24 | 22.18 | 22.16 | 21.96 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.21 | 21.98 | 22.15 | 21.95 | 22.13 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.15 | 22.18 | 22.15 | 22.22 | 22.11 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.16 | 22.18 | 21.85 | 22.20 | 22.22 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.14 | 22.15 | 22.14 | 22.11 | 22.24 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.17 | 22.05 | 22.08 | 22.07 | 22.03 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.23 | 20.95 | 20.91 | 20.95 | 21.03 | 21.30              |
| MID             |         | 64QAM     | 20.91      | 21.03 | 21.23 | 21.03 | 21.22 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.99      | 21.09 | 21.16 | 21.14 | 21.03 | 21.30 |                    |
| 100             | LOW     | 64QAM     | 21.03      | 21.05 | 21.16 | 20.99 | 21.07 | 21.30 |                    |

| LTE B41-State 2 -Ant.0 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.05 | 23.97 | 23.85 | 23.99 | 24.23 | 24.30              |
|                        |         | MID       | QPSK       | 24.30 | 24.18 | 24.10 | 24.09 | 24.06 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.99 | 24.00 | 24.18 | 24.13 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.16 | 23.04 | 23.05 | 23.22 | 23.24 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 22.70 | 23.15 | 23.00 | 22.97 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.25 | 22.96 | 23.07 | 22.80 | 22.98 | 23.30              |
|                        | 25      | LOW       | QPSK       | 23.01 | 23.07 | 23.02 | 23.12 | 23.13 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.26 | 23.03 | 22.92 | 22.93 | 23.21 | 23.30              |
|                        |         | MID       | Q16        | 23.11 | 22.95 | 23.12 | 22.92 | 23.11 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.14 | 22.93 | 23.01 | 23.16 | 23.30              |
|                        |         | LOW       | Q16        | 22.15 | 22.22 | 22.14 | 22.19 | 22.24 | 22.30              |
|                        |         | MID       | Q16        | 22.08 | 22.16 | 21.92 | 21.76 | 22.02 | 22.30              |
|                        |         | HIGH      | Q16        | 22.01 | 21.74 | 22.22 | 21.93 | 21.93 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.16 | 22.07 | 21.81 | 21.98 | 22.20 | 22.30              |
|                        |         | MID       | 64QAM      | 21.99 | 21.99 | 21.94 | 22.00 | 22.26 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.24 | 22.03 | 21.90 | 22.07 | 22.03 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.12 | 20.97 | 20.70 | 20.72 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 20.70 | 21.01 | 21.27 | 20.92 | 21.11 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.91 | 21.17 | 21.10 | 20.95 | 21.01 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.03 | 20.86 | 21.16 | 20.80 | 21.15 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 24.22 | 24.04 | 24.02 | 24.11 | 23.97 | 24.30              |
|                        |         | MID       | QPSK       | 24.20 | 23.97 | 24.15 | 24.01 | 24.21 | 24.30              |
|                        |         | HIGH      | QPSK       | 23.97 | 23.92 | 23.95 | 24.06 | 24.20 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.13 | 22.88 | 23.11 | 23.19 | 22.92 | 23.30              |
|                        |         | MID       | QPSK       | 23.18 | 22.93 | 22.96 | 23.02 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 22.97 | 22.83 | 23.16 | 23.07 | 23.17 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 22.94 | 23.21 | 23.11 | 23.23 | 23.13 | 23.30              |
|                        | 1       | LOW       | Q16        | 23.26 | 23.11 | 22.96 | 23.05 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 22.97 | 23.23 | 23.08 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.00 | 23.19 | 23.23 | 23.06 | 23.20 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.22 | 22.06 | 22.14 | 21.86 | 22.26 | 22.30              |
|                        |         | MID       | Q16        | 22.00 | 21.98 | 22.25 | 21.76 | 22.25 | 22.30              |
|                        |         | HIGH      | Q16        | 21.99 | 21.94 | 22.15 | 21.95 | 22.11 | 22.30              |
|                        | 50      | LOW       | Q16        | 22.08 | 21.94 | 22.13 | 22.00 | 22.04 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 21.92 | 22.29 | 21.61 | 22.09 | 22.29 | 22.30              |
|                        |         | MID       | 64QAM      | 21.94 | 22.02 | 22.18 | 22.13 | 22.20 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.01 | 22.16 | 21.95 | 21.87 | 21.92 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.23 | 20.91 | 20.81 | 21.01 | 20.84 | 21.30              |
|                        |         | MID       | 64QAM      | 20.76 | 21.11 | 21.10 | 20.92 | 21.20 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.97 | 21.13 | 20.93 | 21.06 | 21.09 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.92 | 20.90 | 20.93 | 21.05 | 20.96 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.22 | 23.83 | 24.07 | 24.02 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.13 | 24.04 | 23.98 | 24.23 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.29 | 24.11 | 24.14 | 24.18 | 23.91 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.12 | 23.04 | 23.11 | 23.24 | 23.08 | 23.30              |
|                 |         | MID       | QPSK       | 23.11 | 22.93 | 23.05 | 22.95 | 22.97 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 22.99 | 23.28 | 22.91 | 23.14 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 22.86 | 23.27 | 22.95 | 23.02 | 23.30              |
|                 |         | LOW       | Q16        | 22.98 | 23.18 | 23.15 | 22.89 | 23.23 | 23.30              |
|                 |         | MID       | Q16        | 23.04 | 23.02 | 23.30 | 22.85 | 23.29 | 23.30              |
| 15              | 1       | HIGH      | Q16        | 23.07 | 23.25 | 23.28 | 22.94 | 23.13 | 23.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.00 | 22.22 | 22.08 | 22.06 | 22.30              |
|                 |         | MID       | Q16        | 22.11 | 22.18 | 22.09 | 21.83 | 21.94 | 22.30              |
|                 | 36      | HIGH      | Q16        | 22.19 | 21.80 | 21.91 | 21.82 | 21.91 | 22.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.18 | 22.06 | 22.26 | 22.02 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.00 | 22.20 | 21.81 | 22.18 | 22.15 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.07 | 21.93 | 22.16 | 22.07 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.08 | 21.90 | 21.97 | 21.98 | 22.05 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.21 | 20.72 | 20.76 | 20.78 | 21.07 | 21.30              |
| MID             |         | 64QAM     | 20.89      | 20.86 | 21.27 | 20.80 | 21.30 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.97      | 21.13 | 21.22 | 21.25 | 20.88 | 21.30 |                    |
| 75              | LOW     | 64QAM     | 21.01      | 20.92 | 20.93 | 21.01 | 21.13 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.22 | 24.09 | 24.07 | 24.04 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.11 | 24.22 | 24.28 | 24.23 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.24 | 24.06 | 24.12 | 24.11 | 24.18 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.21 | 23.13 | 23.19 | 23.17 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.29 | 22.95 | 23.17 | 22.93 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.20 | 22.94 | 23.23 | 23.05 | 23.12 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.20 | 23.09 | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 23.17 | 23.26 | 23.15 | 23.05 | 23.21 | 23.30              |
|                 |         | MID       | Q16        | 23.27 | 23.04 | 23.23 | 23.01 | 23.27 | 23.30              |
| 20              | 1       | HIGH      | Q16        | 23.19 | 23.27 | 23.16 | 23.13 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.24 | 22.13 | 22.18 | 22.10 | 22.17 | 22.30              |
|                 | 50      | MID       | Q16        | 22.24 | 22.18 | 22.16 | 21.96 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.21 | 21.98 | 22.15 | 21.95 | 22.13 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.15 | 22.18 | 22.15 | 22.22 | 22.11 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.16 | 22.18 | 21.85 | 22.20 | 22.22 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.14 | 22.15 | 22.14 | 22.11 | 22.24 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.17 | 22.05 | 22.08 | 22.07 | 22.03 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.23 | 20.95 | 20.91 | 20.95 | 21.03 | 21.30              |
| MID             |         | 64QAM     | 20.91      | 21.03 | 21.23 | 21.03 | 21.22 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.99      | 21.09 | 21.16 | 21.14 | 21.03 | 21.30 |                    |
| 100             | LOW     | 64QAM     | 21.03      | 21.05 | 21.16 | 20.99 | 21.07 | 21.30 |                    |

| LTE B41-State 3 -Ant.0 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.05 | 23.97 | 23.85 | 23.99 | 24.23 | 24.30              |
|                        |         | MID       | QPSK       | 24.30 | 24.18 | 24.10 | 24.09 | 24.06 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.99 | 24.00 | 24.18 | 24.13 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.16 | 23.04 | 23.05 | 23.22 | 23.24 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 22.70 | 23.15 | 23.00 | 22.97 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.25 | 22.96 | 23.07 | 22.80 | 22.98 | 23.30              |
|                        | 25      | LOW       | QPSK       | 23.01 | 23.07 | 23.02 | 23.12 | 23.13 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.26 | 23.03 | 22.92 | 22.93 | 23.21 | 23.30              |
|                        |         | MID       | Q16        | 23.11 | 22.95 | 23.12 | 22.92 | 23.11 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.14 | 22.93 | 23.01 | 23.16 | 23.30              |
|                        |         | LOW       | Q16        | 22.15 | 22.22 | 22.14 | 22.19 | 22.24 | 22.30              |
|                        |         | MID       | Q16        | 22.08 | 22.16 | 21.92 | 21.76 | 22.02 | 22.30              |
|                        |         | HIGH      | Q16        | 22.01 | 21.74 | 22.22 | 21.93 | 21.93 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.16 | 22.07 | 21.81 | 21.98 | 22.20 | 22.30              |
|                        |         | MID       | 64QAM      | 21.99 | 21.99 | 21.94 | 22.00 | 22.26 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.24 | 22.03 | 21.90 | 22.07 | 22.03 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.12 | 20.97 | 20.70 | 20.72 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 20.70 | 21.01 | 21.27 | 20.92 | 21.11 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.91 | 21.17 | 21.10 | 20.95 | 21.01 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.03 | 20.86 | 21.16 | 20.80 | 21.15 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 24.22 | 24.04 | 24.02 | 24.11 | 23.97 | 24.30              |
|                        |         | MID       | QPSK       | 24.20 | 23.97 | 24.15 | 24.01 | 24.21 | 24.30              |
|                        |         | HIGH      | QPSK       | 23.97 | 23.92 | 23.95 | 24.06 | 24.20 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.13 | 22.88 | 23.11 | 23.19 | 22.92 | 23.30              |
|                        |         | MID       | QPSK       | 23.18 | 22.93 | 22.96 | 23.02 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 22.97 | 22.83 | 23.16 | 23.07 | 23.17 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 22.94 | 23.21 | 23.11 | 23.23 | 23.13 | 23.30              |
|                        | 1       | LOW       | Q16        | 23.26 | 23.11 | 22.96 | 23.05 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 22.97 | 23.23 | 23.08 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.00 | 23.19 | 23.23 | 23.06 | 23.20 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.22 | 22.06 | 22.14 | 21.86 | 22.26 | 22.30              |
|                        |         | MID       | Q16        | 22.00 | 21.98 | 22.25 | 21.76 | 22.25 | 22.30              |
|                        |         | HIGH      | Q16        | 21.99 | 21.94 | 22.15 | 21.95 | 22.11 | 22.30              |
|                        | 50      | LOW       | Q16        | 22.08 | 21.94 | 22.13 | 22.00 | 22.04 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 21.92 | 22.29 | 21.61 | 22.09 | 22.29 | 22.30              |
|                        |         | MID       | 64QAM      | 21.94 | 22.02 | 22.18 | 22.13 | 22.20 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.01 | 22.16 | 21.95 | 21.87 | 21.92 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.23 | 20.91 | 20.81 | 21.01 | 20.84 | 21.30              |
|                        |         | MID       | 64QAM      | 20.76 | 21.11 | 21.10 | 20.92 | 21.20 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.97 | 21.13 | 20.93 | 21.06 | 21.09 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.92 | 20.90 | 20.93 | 21.05 | 20.96 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.22 | 23.83 | 24.07 | 24.02 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.13 | 24.04 | 23.98 | 24.23 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.29 | 24.11 | 24.14 | 24.18 | 23.91 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.12 | 23.04 | 23.11 | 23.24 | 23.08 | 23.30              |
|                 |         | MID       | QPSK       | 23.11 | 22.93 | 23.05 | 22.95 | 22.97 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 22.99 | 23.28 | 22.91 | 23.14 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 22.86 | 23.27 | 22.95 | 23.02 | 23.30              |
|                 |         | LOW       | Q16        | 22.98 | 23.18 | 23.15 | 22.89 | 23.23 | 23.30              |
|                 |         | MID       | Q16        | 23.04 | 23.02 | 23.30 | 22.85 | 23.29 | 23.30              |
| 15              | 1       | HIGH      | Q16        | 23.07 | 23.25 | 23.28 | 22.94 | 23.13 | 23.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.00 | 22.22 | 22.08 | 22.06 | 22.30              |
|                 |         | MID       | Q16        | 22.11 | 22.18 | 22.09 | 21.83 | 21.94 | 22.30              |
|                 | 36      | HIGH      | Q16        | 22.19 | 21.80 | 21.91 | 21.82 | 21.91 | 22.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.18 | 22.06 | 22.26 | 22.02 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.00 | 22.20 | 21.81 | 22.18 | 22.15 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.07 | 21.93 | 22.16 | 22.07 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.08 | 21.90 | 21.97 | 21.98 | 22.05 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.21 | 20.72 | 20.76 | 20.78 | 21.07 | 21.30              |
| MID             |         | 64QAM     | 20.89      | 20.86 | 21.27 | 20.80 | 21.30 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.97      | 21.13 | 21.22 | 21.25 | 20.88 | 21.30 |                    |
| 75              | LOW     | 64QAM     | 21.01      | 20.92 | 20.93 | 21.01 | 21.13 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.22 | 24.09 | 24.07 | 24.04 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.11 | 24.22 | 24.28 | 24.23 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.24 | 24.06 | 24.12 | 24.11 | 24.18 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.21 | 23.13 | 23.19 | 23.17 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.29 | 22.95 | 23.17 | 22.93 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.20 | 22.94 | 23.23 | 23.05 | 23.12 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.20 | 23.09 | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 23.17 | 23.26 | 23.15 | 23.05 | 23.21 | 23.30              |
|                 |         | MID       | Q16        | 23.27 | 23.04 | 23.23 | 23.01 | 23.27 | 23.30              |
| 20              | 1       | HIGH      | Q16        | 23.19 | 23.27 | 23.16 | 23.13 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.24 | 22.13 | 22.18 | 22.10 | 22.17 | 22.30              |
|                 | 50      | MID       | Q16        | 22.24 | 22.18 | 22.16 | 21.96 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.21 | 21.98 | 22.15 | 21.95 | 22.13 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.15 | 22.18 | 22.15 | 22.22 | 22.11 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.16 | 22.18 | 21.85 | 22.20 | 22.22 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.14 | 22.15 | 22.14 | 22.11 | 22.24 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.17 | 22.05 | 22.08 | 22.07 | 22.03 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.23 | 20.95 | 20.91 | 20.95 | 21.03 | 21.30              |
| MID             |         | 64QAM     | 20.91      | 21.03 | 21.23 | 21.03 | 21.22 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.99      | 21.09 | 21.16 | 21.14 | 21.03 | 21.30 |                    |
| 100             | LOW     | 64QAM     | 21.03      | 21.05 | 21.16 | 20.99 | 21.07 | 21.30 |                    |

| LTE B41-State 4 -Ant.0 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.05 | 23.97 | 23.85 | 23.99 | 24.23 | 24.30              |
|                        |         | MID       | QPSK       | 24.30 | 24.18 | 24.10 | 24.09 | 24.06 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.99 | 24.00 | 24.18 | 24.13 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.16 | 23.04 | 23.05 | 23.22 | 23.24 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 22.70 | 23.15 | 23.00 | 22.97 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.25 | 22.96 | 23.07 | 22.80 | 22.98 | 23.30              |
|                        | 25      | LOW       | QPSK       | 23.01 | 23.07 | 23.02 | 23.12 | 23.13 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.26 | 23.03 | 22.92 | 22.93 | 23.21 | 23.30              |
|                        |         | MID       | Q16        | 23.11 | 22.95 | 23.12 | 22.92 | 23.11 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.14 | 22.93 | 23.01 | 23.16 | 23.30              |
|                        |         | LOW       | Q16        | 22.15 | 22.22 | 22.14 | 22.19 | 22.24 | 22.30              |
|                        |         | MID       | Q16        | 22.08 | 22.16 | 21.92 | 21.76 | 22.02 | 22.30              |
|                        |         | HIGH      | Q16        | 22.01 | 21.74 | 22.22 | 21.93 | 21.93 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.16 | 22.07 | 21.81 | 21.98 | 22.20 | 22.30              |
|                        |         | MID       | 64QAM      | 21.99 | 21.99 | 21.94 | 22.00 | 22.26 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.24 | 22.03 | 21.90 | 22.07 | 22.03 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.12 | 20.97 | 20.70 | 20.72 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 20.70 | 21.01 | 21.27 | 20.92 | 21.11 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.91 | 21.17 | 21.10 | 20.95 | 21.01 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.03 | 20.86 | 21.16 | 20.80 | 21.15 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 24.22 | 24.04 | 24.02 | 24.11 | 23.97 | 24.30              |
|                        |         | MID       | QPSK       | 24.20 | 23.97 | 24.15 | 24.01 | 24.21 | 24.30              |
|                        |         | HIGH      | QPSK       | 23.97 | 23.92 | 23.95 | 24.06 | 24.20 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.13 | 22.88 | 23.11 | 23.19 | 22.92 | 23.30              |
|                        |         | MID       | QPSK       | 23.18 | 22.93 | 22.96 | 23.02 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 22.97 | 22.83 | 23.16 | 23.07 | 23.17 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 22.94 | 23.21 | 23.11 | 23.23 | 23.13 | 23.30              |
|                        | 1       | LOW       | Q16        | 23.26 | 23.11 | 22.96 | 23.05 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 22.97 | 23.23 | 23.08 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.00 | 23.19 | 23.23 | 23.06 | 23.20 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.22 | 22.06 | 22.14 | 21.86 | 22.26 | 22.30              |
|                        |         | MID       | Q16        | 22.00 | 21.98 | 22.25 | 21.76 | 22.25 | 22.30              |
|                        |         | HIGH      | Q16        | 21.99 | 21.94 | 22.15 | 21.95 | 22.11 | 22.30              |
|                        | 50      | LOW       | Q16        | 22.08 | 21.94 | 22.13 | 22.00 | 22.04 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 21.92 | 22.29 | 21.61 | 22.09 | 22.29 | 22.30              |
|                        |         | MID       | 64QAM      | 21.94 | 22.02 | 22.18 | 22.13 | 22.20 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.01 | 22.16 | 21.95 | 21.87 | 21.92 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.23 | 20.91 | 20.81 | 21.01 | 20.84 | 21.30              |
|                        |         | MID       | 64QAM      | 20.76 | 21.11 | 21.10 | 20.92 | 21.20 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.97 | 21.13 | 20.93 | 21.06 | 21.09 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.92 | 20.90 | 20.93 | 21.05 | 20.96 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.22 | 23.83 | 24.07 | 24.02 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.13 | 24.04 | 23.98 | 24.23 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.29 | 24.11 | 24.14 | 24.18 | 23.91 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.12 | 23.04 | 23.11 | 23.24 | 23.08 | 23.30              |
|                 |         | MID       | QPSK       | 23.11 | 22.93 | 23.05 | 22.95 | 22.97 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 22.99 | 23.28 | 22.91 | 23.14 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 22.86 | 23.27 | 22.95 | 23.02 | 23.30              |
|                 |         | LOW       | Q16        | 22.98 | 23.18 | 23.15 | 22.89 | 23.23 | 23.30              |
|                 |         | MID       | Q16        | 23.04 | 23.02 | 23.30 | 22.85 | 23.29 | 23.30              |
| 15              | 1       | HIGH      | Q16        | 23.07 | 23.25 | 23.28 | 22.94 | 23.13 | 23.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.00 | 22.22 | 22.08 | 22.06 | 22.30              |
|                 |         | MID       | Q16        | 22.11 | 22.18 | 22.09 | 21.83 | 21.94 | 22.30              |
|                 | 36      | HIGH      | Q16        | 22.19 | 21.80 | 21.91 | 21.82 | 21.91 | 22.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.18 | 22.06 | 22.26 | 22.02 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.00 | 22.20 | 21.81 | 22.18 | 22.15 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.07 | 21.93 | 22.16 | 22.07 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.08 | 21.90 | 21.97 | 21.98 | 22.05 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.21 | 20.72 | 20.76 | 20.78 | 21.07 | 21.30              |
| MID             |         | 64QAM     | 20.89      | 20.86 | 21.27 | 20.80 | 21.30 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.97      | 21.13 | 21.22 | 21.25 | 20.88 | 21.30 |                    |
| 75              | LOW     | 64QAM     | 21.01      | 20.92 | 20.93 | 21.01 | 21.13 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.22 | 24.09 | 24.07 | 24.04 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.11 | 24.22 | 24.28 | 24.23 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.24 | 24.06 | 24.12 | 24.11 | 24.18 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.21 | 23.13 | 23.19 | 23.17 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.29 | 22.95 | 23.17 | 22.93 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.20 | 22.94 | 23.23 | 23.05 | 23.12 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.20 | 23.09 | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 23.17 | 23.26 | 23.15 | 23.05 | 23.21 | 23.30              |
|                 |         | MID       | Q16        | 23.27 | 23.04 | 23.23 | 23.01 | 23.27 | 23.30              |
| 20              | 1       | HIGH      | Q16        | 23.19 | 23.27 | 23.16 | 23.13 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.24 | 22.13 | 22.18 | 22.10 | 22.17 | 22.30              |
|                 | 50      | MID       | Q16        | 22.24 | 22.18 | 22.16 | 21.96 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.21 | 21.98 | 22.15 | 21.95 | 22.13 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.15 | 22.18 | 22.15 | 22.22 | 22.11 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.16 | 22.18 | 21.85 | 22.20 | 22.22 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.14 | 22.15 | 22.14 | 22.11 | 22.24 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.17 | 22.05 | 22.08 | 22.07 | 22.03 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.23 | 20.95 | 20.91 | 20.95 | 21.03 | 21.30              |
| MID             |         | 64QAM     | 20.91      | 21.03 | 21.23 | 21.03 | 21.22 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.99      | 21.09 | 21.16 | 21.14 | 21.03 | 21.30 |                    |
| 100             | LOW     | 64QAM     | 21.03      | 21.05 | 21.16 | 20.99 | 21.07 | 21.30 |                    |

| LTE B41-State 5 -Ant.0 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.05 | 23.97 | 23.85 | 23.99 | 24.23 | 24.30              |
|                        |         | MID       | QPSK       | 24.30 | 24.18 | 24.10 | 24.09 | 24.06 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.99 | 24.00 | 24.18 | 24.13 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.16 | 23.04 | 23.05 | 23.22 | 23.24 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 22.70 | 23.15 | 23.00 | 22.97 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.25 | 22.96 | 23.07 | 22.80 | 22.98 | 23.30              |
|                        | 25      | LOW       | QPSK       | 23.01 | 23.07 | 23.02 | 23.12 | 23.13 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.26 | 23.03 | 22.92 | 22.93 | 23.21 | 23.30              |
|                        |         | MID       | Q16        | 23.11 | 22.95 | 23.12 | 22.92 | 23.11 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.14 | 22.93 | 23.01 | 23.16 | 23.30              |
|                        |         | LOW       | Q16        | 22.15 | 22.22 | 22.14 | 22.19 | 22.24 | 22.30              |
|                        |         | MID       | Q16        | 22.08 | 22.16 | 21.92 | 21.76 | 22.02 | 22.30              |
|                        |         | HIGH      | Q16        | 22.01 | 21.74 | 22.22 | 21.93 | 21.93 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.16 | 22.07 | 21.81 | 21.98 | 22.20 | 22.30              |
|                        |         | MID       | 64QAM      | 21.99 | 21.99 | 21.94 | 22.00 | 22.26 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.24 | 22.03 | 21.90 | 22.07 | 22.03 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.12 | 20.97 | 20.70 | 20.72 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 20.70 | 21.01 | 21.27 | 20.92 | 21.11 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.91 | 21.17 | 21.10 | 20.95 | 21.01 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.03 | 20.86 | 21.16 | 20.80 | 21.15 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 24.22 | 24.04 | 24.02 | 24.11 | 23.97 | 24.30              |
|                        |         | MID       | QPSK       | 24.20 | 23.97 | 24.15 | 24.01 | 24.21 | 24.30              |
|                        |         | HIGH      | QPSK       | 23.97 | 23.92 | 23.95 | 24.06 | 24.20 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.13 | 22.88 | 23.11 | 23.19 | 22.92 | 23.30              |
|                        |         | MID       | QPSK       | 23.18 | 22.93 | 22.96 | 23.02 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 22.97 | 22.83 | 23.16 | 23.07 | 23.17 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 22.94 | 23.21 | 23.11 | 23.23 | 23.13 | 23.30              |
|                        | 1       | LOW       | Q16        | 23.26 | 23.11 | 22.96 | 23.05 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 22.97 | 23.23 | 23.08 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.00 | 23.19 | 23.23 | 23.06 | 23.20 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.22 | 22.06 | 22.14 | 21.86 | 22.26 | 22.30              |
|                        |         | MID       | Q16        | 22.00 | 21.98 | 22.25 | 21.76 | 22.25 | 22.30              |
|                        |         | HIGH      | Q16        | 21.99 | 21.94 | 22.15 | 21.95 | 22.11 | 22.30              |
|                        | 50      | LOW       | Q16        | 22.08 | 21.94 | 22.13 | 22.00 | 22.04 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 21.92 | 22.29 | 21.61 | 22.09 | 22.29 | 22.30              |
|                        |         | MID       | 64QAM      | 21.94 | 22.02 | 22.18 | 22.13 | 22.20 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.01 | 22.16 | 21.95 | 21.87 | 21.92 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.23 | 20.91 | 20.81 | 21.01 | 20.84 | 21.30              |
|                        |         | MID       | 64QAM      | 20.76 | 21.11 | 21.10 | 20.92 | 21.20 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.97 | 21.13 | 20.93 | 21.06 | 21.09 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.92 | 20.90 | 20.93 | 21.05 | 20.96 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.22 | 23.83 | 24.07 | 24.02 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.13 | 24.04 | 23.98 | 24.23 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.29 | 24.11 | 24.14 | 24.18 | 23.91 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.12 | 23.04 | 23.11 | 23.24 | 23.08 | 23.30              |
|                 |         | MID       | QPSK       | 23.11 | 22.93 | 23.05 | 22.95 | 22.97 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 22.99 | 23.28 | 22.91 | 23.14 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 22.86 | 23.27 | 22.95 | 23.02 | 23.30              |
|                 |         | LOW       | Q16        | 22.98 | 23.18 | 23.15 | 22.89 | 23.23 | 23.30              |
|                 |         | MID       | Q16        | 23.04 | 23.02 | 23.30 | 22.85 | 23.29 | 23.30              |
| 15              | 1       | HIGH      | Q16        | 23.07 | 23.25 | 23.28 | 22.94 | 23.13 | 23.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.00 | 22.22 | 22.08 | 22.06 | 22.30              |
|                 |         | MID       | Q16        | 22.11 | 22.18 | 22.09 | 21.83 | 21.94 | 22.30              |
|                 | 36      | HIGH      | Q16        | 22.19 | 21.80 | 21.91 | 21.82 | 21.91 | 22.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.18 | 22.06 | 22.26 | 22.02 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.00 | 22.20 | 21.81 | 22.18 | 22.15 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.07 | 21.93 | 22.16 | 22.07 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.08 | 21.90 | 21.97 | 21.98 | 22.05 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.21 | 20.72 | 20.76 | 20.78 | 21.07 | 21.30              |
| MID             |         | 64QAM     | 20.89      | 20.86 | 21.27 | 20.80 | 21.30 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.97      | 21.13 | 21.22 | 21.25 | 20.88 | 21.30 |                    |
| 75              | LOW     | 64QAM     | 21.01      | 20.92 | 20.93 | 21.01 | 21.13 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.22 | 24.09 | 24.07 | 24.04 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.11 | 24.22 | 24.28 | 24.23 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.24 | 24.06 | 24.12 | 24.11 | 24.18 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.21 | 23.13 | 23.19 | 23.17 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.29 | 22.95 | 23.17 | 22.93 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.20 | 22.94 | 23.23 | 23.05 | 23.12 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.20 | 23.09 | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 23.17 | 23.26 | 23.15 | 23.05 | 23.21 | 23.30              |
|                 |         | MID       | Q16        | 23.27 | 23.04 | 23.23 | 23.01 | 23.27 | 23.30              |
| 20              | 1       | HIGH      | Q16        | 23.19 | 23.27 | 23.16 | 23.13 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.24 | 22.13 | 22.18 | 22.10 | 22.17 | 22.30              |
|                 | 50      | MID       | Q16        | 22.24 | 22.18 | 22.16 | 21.96 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.21 | 21.98 | 22.15 | 21.95 | 22.13 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.15 | 22.18 | 22.15 | 22.22 | 22.11 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.16 | 22.18 | 21.85 | 22.20 | 22.22 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.14 | 22.15 | 22.14 | 22.11 | 22.24 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.17 | 22.05 | 22.08 | 22.07 | 22.03 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.23 | 20.95 | 20.91 | 20.95 | 21.03 | 21.30              |
| MID             |         | 64QAM     | 20.91      | 21.03 | 21.23 | 21.03 | 21.22 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.99      | 21.09 | 21.16 | 21.14 | 21.03 | 21.30 |                    |
| 100             | LOW     | 64QAM     | 21.03      | 21.05 | 21.16 | 20.99 | 21.07 | 21.30 |                    |

| LTE B41-State 6 -Ant.0 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 24.05 | 23.97 | 23.85 | 23.99 | 24.23 | 24.30              |
|                        |         | MID       | QPSK       | 24.30 | 24.18 | 24.10 | 24.09 | 24.06 | 24.30              |
|                        |         | HIGH      | QPSK       | 24.16 | 23.99 | 24.00 | 24.18 | 24.13 | 24.30              |
|                        | 12      | LOW       | QPSK       | 23.16 | 23.04 | 23.05 | 23.22 | 23.24 | 23.30              |
|                        |         | MID       | QPSK       | 23.24 | 22.70 | 23.15 | 23.00 | 22.97 | 23.30              |
|                        |         | HIGH      | QPSK       | 23.25 | 22.96 | 23.07 | 22.80 | 22.98 | 23.30              |
|                        | 25      | LOW       | QPSK       | 23.01 | 23.07 | 23.02 | 23.12 | 23.13 | 23.30              |
|                        | 5       | LOW       | Q16        | 23.26 | 23.03 | 22.92 | 22.93 | 23.21 | 23.30              |
|                        |         | MID       | Q16        | 23.11 | 22.95 | 23.12 | 22.92 | 23.11 | 23.30              |
|                        |         | HIGH      | Q16        | 23.19 | 23.14 | 22.93 | 23.01 | 23.16 | 23.30              |
|                        |         | LOW       | Q16        | 22.15 | 22.22 | 22.14 | 22.19 | 22.24 | 22.30              |
|                        |         | MID       | Q16        | 22.08 | 22.16 | 21.92 | 21.76 | 22.02 | 22.30              |
|                        |         | HIGH      | Q16        | 22.01 | 21.74 | 22.22 | 21.93 | 21.93 | 22.30              |
| 5                      | 1       | LOW       | 64QAM      | 22.16 | 22.07 | 21.81 | 21.98 | 22.20 | 22.30              |
|                        |         | MID       | 64QAM      | 21.99 | 21.99 | 21.94 | 22.00 | 22.26 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.24 | 22.03 | 21.90 | 22.07 | 22.03 | 22.30              |
|                        | 12      | LOW       | 64QAM      | 21.12 | 20.97 | 20.70 | 20.72 | 20.88 | 21.30              |
|                        |         | MID       | 64QAM      | 20.70 | 21.01 | 21.27 | 20.92 | 21.11 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.91 | 21.17 | 21.10 | 20.95 | 21.01 | 21.30              |
|                        | 25      | LOW       | 64QAM      | 21.03 | 20.86 | 21.16 | 20.80 | 21.15 | 21.30              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 24.22 | 24.04 | 24.02 | 24.11 | 23.97 | 24.30              |
|                        |         | MID       | QPSK       | 24.20 | 23.97 | 24.15 | 24.01 | 24.21 | 24.30              |
|                        |         | HIGH      | QPSK       | 23.97 | 23.92 | 23.95 | 24.06 | 24.20 | 24.30              |
|                        | 25      | LOW       | QPSK       | 23.13 | 22.88 | 23.11 | 23.19 | 22.92 | 23.30              |
|                        |         | MID       | QPSK       | 23.18 | 22.93 | 22.96 | 23.02 | 23.30 | 23.30              |
|                        |         | HIGH      | QPSK       | 22.97 | 22.83 | 23.16 | 23.07 | 23.17 | 23.30              |
| 10                     | 50      | LOW       | QPSK       | 22.94 | 23.21 | 23.11 | 23.23 | 23.13 | 23.30              |
|                        | 1       | LOW       | Q16        | 23.26 | 23.11 | 22.96 | 23.05 | 23.26 | 23.30              |
|                        |         | MID       | Q16        | 23.25 | 22.97 | 23.23 | 23.08 | 23.22 | 23.30              |
|                        |         | HIGH      | Q16        | 23.00 | 23.19 | 23.23 | 23.06 | 23.20 | 23.30              |
|                        | 25      | LOW       | Q16        | 22.22 | 22.06 | 22.14 | 21.86 | 22.26 | 22.30              |
|                        |         | MID       | Q16        | 22.00 | 21.98 | 22.25 | 21.76 | 22.25 | 22.30              |
|                        |         | HIGH      | Q16        | 21.99 | 21.94 | 22.15 | 21.95 | 22.11 | 22.30              |
|                        | 50      | LOW       | Q16        | 22.08 | 21.94 | 22.13 | 22.00 | 22.04 | 22.30              |
| 10                     | 1       | LOW       | 64QAM      | 21.92 | 22.29 | 21.61 | 22.09 | 22.29 | 22.30              |
|                        |         | MID       | 64QAM      | 21.94 | 22.02 | 22.18 | 22.13 | 22.20 | 22.30              |
|                        |         | HIGH      | 64QAM      | 22.01 | 22.16 | 21.95 | 21.87 | 21.92 | 22.30              |
|                        | 25      | LOW       | 64QAM      | 21.23 | 20.91 | 20.81 | 21.01 | 20.84 | 21.30              |
|                        |         | MID       | 64QAM      | 20.76 | 21.11 | 21.10 | 20.92 | 21.20 | 21.30              |
|                        |         | HIGH      | 64QAM      | 20.97 | 21.13 | 20.93 | 21.06 | 21.09 | 21.30              |
|                        | 50      | LOW       | 64QAM      | 20.92 | 20.90 | 20.93 | 21.05 | 20.96 | 21.30              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 24.22 | 23.83 | 24.07 | 24.02 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.13 | 24.04 | 23.98 | 24.23 | 24.13 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.29 | 24.11 | 24.14 | 24.18 | 23.91 | 24.30              |
|                 | 36      | LOW       | QPSK       | 23.12 | 23.04 | 23.11 | 23.24 | 23.08 | 23.30              |
|                 |         | MID       | QPSK       | 23.11 | 22.93 | 23.05 | 22.95 | 22.97 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.15 | 22.99 | 23.28 | 22.91 | 23.14 | 23.30              |
|                 | 75      | LOW       | QPSK       | 23.01 | 22.86 | 23.27 | 22.95 | 23.02 | 23.30              |
|                 |         | LOW       | Q16        | 22.98 | 23.18 | 23.15 | 22.89 | 23.23 | 23.30              |
|                 |         | MID       | Q16        | 23.04 | 23.02 | 23.30 | 22.85 | 23.29 | 23.30              |
| 15              | 1       | HIGH      | Q16        | 23.07 | 23.25 | 23.28 | 22.94 | 23.13 | 23.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.00 | 22.22 | 22.08 | 22.06 | 22.30              |
|                 |         | MID       | Q16        | 22.11 | 22.18 | 22.09 | 21.83 | 21.94 | 22.30              |
|                 | 36      | HIGH      | Q16        | 22.19 | 21.80 | 21.91 | 21.82 | 21.91 | 22.30              |
|                 |         | LOW       | Q16        | 22.15 | 22.18 | 22.06 | 22.26 | 22.02 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.00 | 22.20 | 21.81 | 22.18 | 22.15 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.07 | 21.93 | 22.16 | 22.07 | 22.26 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.08 | 21.90 | 21.97 | 21.98 | 22.05 | 22.30              |
|                 | 36      | LOW       | 64QAM      | 21.21 | 20.72 | 20.76 | 20.78 | 21.07 | 21.30              |
| MID             |         | 64QAM     | 20.89      | 20.86 | 21.27 | 20.80 | 21.30 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.97      | 21.13 | 21.22 | 21.25 | 20.88 | 21.30 |                    |
| 75              | LOW     | 64QAM     | 21.01      | 20.92 | 20.93 | 21.01 | 21.13 | 21.30 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 24.22 | 24.09 | 24.07 | 24.04 | 24.16 | 24.30              |
|                 |         | MID       | QPSK       | 24.30 | 24.11 | 24.22 | 24.28 | 24.23 | 24.30              |
|                 |         | HIGH      | QPSK       | 24.24 | 24.06 | 24.12 | 24.11 | 24.18 | 24.30              |
|                 | 50      | LOW       | QPSK       | 23.21 | 23.13 | 23.19 | 23.17 | 23.15 | 23.30              |
|                 |         | MID       | QPSK       | 23.29 | 22.95 | 23.17 | 22.93 | 23.18 | 23.30              |
|                 |         | HIGH      | QPSK       | 23.20 | 22.94 | 23.23 | 23.05 | 23.12 | 23.30              |
|                 | 100     | LOW       | QPSK       | 23.20 | 23.09 | 23.18 | 23.14 | 23.11 | 23.30              |
|                 |         | LOW       | Q16        | 23.17 | 23.26 | 23.15 | 23.05 | 23.21 | 23.30              |
|                 |         | MID       | Q16        | 23.27 | 23.04 | 23.23 | 23.01 | 23.27 | 23.30              |
| 20              | 1       | HIGH      | Q16        | 23.19 | 23.27 | 23.16 | 23.13 | 23.25 | 23.30              |
|                 |         | LOW       | Q16        | 22.24 | 22.13 | 22.18 | 22.10 | 22.17 | 22.30              |
|                 | 50      | MID       | Q16        | 22.24 | 22.18 | 22.16 | 21.96 | 22.18 | 22.30              |
|                 |         | HIGH      | Q16        | 22.21 | 21.98 | 22.15 | 21.95 | 22.13 | 22.30              |
|                 | 100     | LOW       | Q16        | 22.15 | 22.18 | 22.15 | 22.22 | 22.11 | 22.30              |
|                 |         | LOW       | 64QAM      | 22.16 | 22.18 | 21.85 | 22.20 | 22.22 | 22.30              |
|                 | 1       | MID       | 64QAM      | 22.14 | 22.15 | 22.14 | 22.11 | 22.24 | 22.30              |
|                 |         | HIGH      | 64QAM      | 22.17 | 22.05 | 22.08 | 22.07 | 22.03 | 22.30              |
|                 | 50      | LOW       | 64QAM      | 21.23 | 20.95 | 20.91 | 20.95 | 21.03 | 21.30              |
| MID             |         | 64QAM     | 20.91      | 21.03 | 21.23 | 21.03 | 21.22 | 21.30 |                    |
| HIGH            |         | 64QAM     | 20.99      | 21.09 | 21.16 | 21.14 | 21.03 | 21.30 |                    |
| 100             | LOW     | 64QAM     | 21.03      | 21.05 | 21.16 | 20.99 | 21.07 | 21.30 |                    |

### 8.3.5 LTE Band41 Output Power

BL-SZ2220432-701

| LTE B41-State 1 -Ant.4 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.29 | 21.16 | 21.36 | 21.23 | 21.16 | 22.00              |
|                        |         | MID       | QPSK       | 21.60 | 21.36 | 21.28 | 21.21 | 21.40 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.53 | 21.28 | 21.36 | 21.11 | 21.49 | 22.00              |
|                        | 12      | LOW       | QPSK       | 20.34 | 20.17 | 20.34 | 20.39 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 19.97 | 20.05 | 20.27 | 20.05 | 20.31 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.35 | 20.29 | 20.27 | 20.21 | 21.00              |
|                        | 25      | LOW       | QPSK       | 20.16 | 19.95 | 20.38 | 20.19 | 20.15 | 21.00              |
|                        | 5       | LOW       | Q16        | 20.44 | 20.04 | 20.54 | 20.12 | 20.18 | 21.00              |
|                        |         | MID       | Q16        | 19.93 | 20.35 | 20.29 | 20.15 | 20.11 | 21.00              |
|                        |         | HIGH      | Q16        | 20.41 | 20.15 | 20.21 | 20.21 | 20.37 | 21.00              |
|                        |         | LOW       | Q16        | 19.39 | 19.37 | 19.63 | 19.43 | 19.59 | 20.00              |
|                        |         | MID       | Q16        | 19.10 | 18.97 | 19.47 | 19.24 | 19.45 | 20.00              |
|                        |         | HIGH      | Q16        | 19.29 | 19.24 | 19.35 | 19.24 | 19.41 | 20.00              |
| 5                      | 1       | LOW       | 64QAM      | 19.56 | 19.11 | 19.50 | 19.30 | 19.36 | 20.00              |
|                        |         | MID       | 64QAM      | 19.23 | 19.17 | 19.27 | 19.10 | 19.29 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.19 | 19.23 | 19.23 | 19.36 | 20.00              |
|                        | 12      | LOW       | 64QAM      | 18.43 | 18.56 | 18.75 | 18.44 | 18.67 | 19.00              |
|                        |         | MID       | 64QAM      | 18.48 | 18.00 | 18.39 | 18.30 | 18.24 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.23 | 18.23 | 18.36 | 18.45 | 18.47 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 18.53 | 18.48 | 18.61 | 18.32 | 18.63 | 19.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 21.44 | 21.16 | 21.49 | 21.23 | 21.33 | 22.00              |
|                        |         | MID       | QPSK       | 21.65 | 21.23 | 21.37 | 21.36 | 21.38 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.23 | 21.32 | 21.29 | 21.28 | 21.36 | 22.00              |
|                        | 25      | LOW       | QPSK       | 20.26 | 20.01 | 20.44 | 20.37 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 20.03 | 20.07 | 20.35 | 20.15 | 20.47 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.29 | 20.29 | 20.21 | 20.21 | 21.00              |
| 10                     | 50      | LOW       | QPSK       | 20.34 | 19.93 | 20.34 | 20.23 | 20.05 | 21.00              |
|                        | 1       | LOW       | Q16        | 20.46 | 20.12 | 20.44 | 19.92 | 20.08 | 21.00              |
|                        |         | MID       | Q16        | 19.85 | 20.13 | 20.19 | 20.11 | 20.35 | 21.00              |
|                        |         | HIGH      | Q16        | 20.27 | 20.19 | 20.31 | 20.47 | 20.19 | 21.00              |
|                        | 25      | LOW       | Q16        | 19.49 | 19.53 | 19.51 | 19.61 | 19.67 | 20.00              |
|                        |         | MID       | Q16        | 19.25 | 19.26 | 19.29 | 19.12 | 19.16 | 20.00              |
|                        |         | HIGH      | Q16        | 19.12 | 19.12 | 19.28 | 19.27 | 19.41 | 20.00              |
|                        | 50      | LOW       | Q16        | 19.71 | 19.27 | 19.65 | 19.31 | 19.39 | 20.00              |
| 10                     | 1       | LOW       | 64QAM      | 19.34 | 19.22 | 19.46 | 19.32 | 19.48 | 20.00              |
|                        |         | MID       | 64QAM      | 19.27 | 19.31 | 19.21 | 18.99 | 19.14 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.23 | 19.21 | 19.46 | 19.04 | 19.44 | 20.00              |
|                        | 25      | LOW       | 64QAM      | 18.58 | 18.48 | 18.58 | 18.48 | 18.63 | 19.00              |
|                        |         | MID       | 64QAM      | 18.44 | 18.20 | 18.46 | 18.28 | 18.18 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.47 | 18.25 | 18.43 | 18.39 | 18.58 | 19.00              |
|                        | 50      | LOW       | 64QAM      | 18.55 | 18.58 | 18.50 | 18.54 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620        | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|--------------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 21.38 | 21.01 | 21.53        | 21.18 | 21.24 | 22.00              |
|                 |         | MID       | QPSK       | 21.32 | 21.38 | 21.24        | 21.38 | 21.25 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.48 | 21.17 | 21.44        | 21.35 | 21.34 | 22.00              |
|                 | 36      | LOW       | QPSK       | 20.46 | 20.29 | 20.40        | 20.17 | 20.25 | 21.00              |
|                 |         | MID       | QPSK       | 20.03 | 20.05 | 20.37        | 20.31 | 20.27 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.33 | 20.37        | 20.31 | 20.33 | 21.00              |
|                 | 75      | LOW       | QPSK       | 20.22 | 20.11 | 20.28        | 20.33 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 20.52 | 19.90 | 20.48        | 20.10 | 20.20 | 21.00              |
|                 |         | MID       | Q16        | 20.13 | 20.43 | 20.03        | 20.03 | 20.27 | 21.00              |
| 15              | 1       | HIGH      | Q16        | 20.31 | 20.17 | 20.23        | 20.41 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 19.33 | 19.55 | 19.47        | 19.47 | 19.69 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.08 | 19.29        | 19.12 | 19.45 | 20.00              |
|                 | 36      | HIGH      | Q16        | 19.39 | 19.03 | 19.28        | 19.35 | 19.37 | 20.00              |
|                 |         | LOW       | Q16        | 19.67 | 19.24 | 19.49        | 19.25 | 19.51 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.40 | 19.32 | 19.25        | 19.16 | 19.30 | 20.00              |
|                 | 1       | MID       | 64QAM      | 19.02 | 19.10 | 19.17        | 19.20 | 19.21 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.21 | 19.29 | 19.25        | 19.02 | 19.30 | 20.00              |
|                 | 36      | LOW       | 64QAM      | 18.43 | 18.61 | 18.69        | 18.37 | 18.60 | 19.00              |
| MID             |         | 64QAM     | 18.40      | 18.17 | 18.46 | 18.26        | 18.33 | 19.00 |                    |
| HIGH            |         | 64QAM     | 18.50      | 18.25 | 18.53 | 18.30        | 18.63 | 19.00 |                    |
| 75              | LOW     | 64QAM     | 18.65      | 18.56 | 18.72 | 18.25        | 18.61 | 19.00 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620        | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 21.42 | 21.20 | <b>21.55</b> | 21.27 | 21.33 | 22.00              |
|                 |         | MID       | QPSK       | 21.54 | 21.36 | 21.39        | 21.38 | 21.36 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.42 | 21.28 | 21.42        | 21.26 | 21.45 | 22.00              |
|                 | 50      | LOW       | QPSK       | 20.40 | 20.19 | <b>20.52</b> | 20.29 | 20.29 | 21.00              |
|                 |         | MID       | QPSK       | 20.19 | 20.27 | 20.39        | 20.23 | 20.39 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.31 | 20.43        | 20.27 | 20.41 | 21.00              |
|                 | 100     | LOW       | QPSK       | 20.34 | 20.13 | <b>20.48</b> | 20.33 | 20.25 | 21.00              |
| 20              | 1       | LOW       | Q16        | 20.46 | 20.08 | 20.44        | 20.08 | 20.26 | 21.00              |
|                 |         | MID       | Q16        | 20.07 | 20.35 | 20.21        | 20.09 | 20.29 | 21.00              |
|                 |         | HIGH      | Q16        | 20.35 | 20.33 | 20.35        | 20.37 | 20.39 | 21.00              |
|                 | 50      | LOW       | Q16        | 19.39 | 19.53 | 19.59        | 19.59 | 19.59 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.18 | 19.37        | 19.22 | 19.37 | 20.00              |
|                 |         | HIGH      | Q16        | 19.29 | 19.20 | 19.47        | 19.43 | 19.41 | 20.00              |
|                 | 100     | LOW       | Q16        | 19.63 | 19.43 | 19.57        | 19.41 | 19.53 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.54 | 19.24 | 19.44        | 19.28 | 19.38 | 20.00              |
|                 |         | MID       | 64QAM      | 19.17 | 19.29 | 19.23        | 19.16 | 19.31 | 20.00              |
| 20              | 1       | HIGH      | 64QAM      | 19.21 | 19.21 | 19.42        | 19.21 | 19.38 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.54 | 18.52 | 18.75        | 18.48 | 18.69 | 19.00              |
|                 |         | MID       | 64QAM      | 18.44 | 18.13 | 18.37        | 18.26 | 18.31 | 19.00              |
|                 | 50      | HIGH      | 64QAM      | 18.43 | 18.43 | 18.47        | 18.43 | 18.54 | 19.00              |
|                 |         | LOW       | 64QAM      | 18.72 | 18.52 | 18.65        | 18.45 | 18.54 | 19.00              |

| LTE B41-State 2 -Ant.4 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.29 | 21.16 | 21.36 | 21.23 | 21.16 | 22.00              |
|                        |         | MID       | QPSK       | 21.60 | 21.36 | 21.28 | 21.21 | 21.40 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.53 | 21.28 | 21.36 | 21.11 | 21.49 | 22.00              |
|                        | 12      | LOW       | QPSK       | 20.34 | 20.17 | 20.34 | 20.39 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 19.97 | 20.05 | 20.27 | 20.05 | 20.31 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.35 | 20.29 | 20.27 | 20.21 | 21.00              |
|                        | 25      | LOW       | QPSK       | 20.16 | 19.95 | 20.38 | 20.19 | 20.15 | 21.00              |
|                        | 5       | LOW       | Q16        | 20.44 | 20.04 | 20.54 | 20.12 | 20.18 | 21.00              |
|                        |         | MID       | Q16        | 19.93 | 20.35 | 20.29 | 20.15 | 20.11 | 21.00              |
|                        |         | HIGH      | Q16        | 20.41 | 20.15 | 20.21 | 20.21 | 20.37 | 21.00              |
|                        |         | LOW       | Q16        | 19.39 | 19.37 | 19.63 | 19.43 | 19.59 | 20.00              |
|                        |         | MID       | Q16        | 19.10 | 18.97 | 19.47 | 19.24 | 19.45 | 20.00              |
|                        |         | HIGH      | Q16        | 19.29 | 19.24 | 19.35 | 19.24 | 19.41 | 20.00              |
|                        | 25      | LOW       | Q16        | 19.47 | 19.31 | 19.63 | 19.20 | 19.32 | 20.00              |
| 5                      | 1       | LOW       | 64QAM      | 19.56 | 19.11 | 19.50 | 19.30 | 19.36 | 20.00              |
|                        |         | MID       | 64QAM      | 19.23 | 19.17 | 19.27 | 19.10 | 19.29 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.19 | 19.23 | 19.23 | 19.36 | 20.00              |
|                        | 12      | LOW       | 64QAM      | 18.43 | 18.56 | 18.75 | 18.44 | 18.67 | 19.00              |
|                        |         | MID       | 64QAM      | 18.48 | 18.00 | 18.39 | 18.30 | 18.24 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.23 | 18.23 | 18.36 | 18.45 | 18.47 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 18.53 | 18.48 | 18.61 | 18.32 | 18.63 | 19.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 21.44 | 21.16 | 21.49 | 21.23 | 21.33 | 22.00              |
|                        |         | MID       | QPSK       | 21.65 | 21.23 | 21.37 | 21.36 | 21.38 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.23 | 21.32 | 21.29 | 21.28 | 21.36 | 22.00              |
|                        | 25      | LOW       | QPSK       | 20.26 | 20.01 | 20.44 | 20.37 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 20.03 | 20.07 | 20.35 | 20.15 | 20.47 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.29 | 20.29 | 20.21 | 20.21 | 21.00              |
| 10                     | 50      | LOW       | QPSK       | 20.34 | 19.93 | 20.34 | 20.23 | 20.05 | 21.00              |
|                        | 1       | LOW       | Q16        | 20.46 | 20.12 | 20.44 | 19.92 | 20.08 | 21.00              |
|                        |         | MID       | Q16        | 19.85 | 20.13 | 20.19 | 20.11 | 20.35 | 21.00              |
|                        |         | HIGH      | Q16        | 20.27 | 20.19 | 20.31 | 20.47 | 20.19 | 21.00              |
|                        | 25      | LOW       | Q16        | 19.49 | 19.53 | 19.51 | 19.61 | 19.67 | 20.00              |
|                        |         | MID       | Q16        | 19.25 | 19.26 | 19.29 | 19.12 | 19.16 | 20.00              |
|                        |         | HIGH      | Q16        | 19.12 | 19.12 | 19.28 | 19.27 | 19.41 | 20.00              |
|                        | 50      | LOW       | Q16        | 19.71 | 19.27 | 19.65 | 19.31 | 19.39 | 20.00              |
|                        | 10      | LOW       | 64QAM      | 19.34 | 19.22 | 19.46 | 19.32 | 19.48 | 20.00              |
|                        |         | MID       | 64QAM      | 19.27 | 19.31 | 19.21 | 18.99 | 19.14 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.23 | 19.21 | 19.46 | 19.04 | 19.44 | 20.00              |
|                        |         | LOW       | 64QAM      | 18.58 | 18.48 | 18.58 | 18.48 | 18.63 | 19.00              |
|                        |         | MID       | 64QAM      | 18.44 | 18.20 | 18.46 | 18.28 | 18.18 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.47 | 18.25 | 18.43 | 18.39 | 18.58 | 19.00              |
|                        | 50      | LOW       | 64QAM      | 18.55 | 18.58 | 18.50 | 18.54 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 21.38 | 21.01 | 21.53 | 21.18 | 21.24 | 22.00              |
|                 |         | MID       | QPSK       | 21.32 | 21.38 | 21.24 | 21.38 | 21.25 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.48 | 21.17 | 21.44 | 21.35 | 21.34 | 22.00              |
|                 | 36      | LOW       | QPSK       | 20.46 | 20.29 | 20.40 | 20.17 | 20.25 | 21.00              |
|                 |         | MID       | QPSK       | 20.03 | 20.05 | 20.37 | 20.31 | 20.27 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.33 | 20.37 | 20.31 | 20.33 | 21.00              |
|                 | 75      | LOW       | QPSK       | 20.22 | 20.11 | 20.28 | 20.33 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 20.52 | 19.90 | 20.48 | 20.10 | 20.20 | 21.00              |
|                 |         | MID       | Q16        | 20.13 | 20.43 | 20.03 | 20.03 | 20.27 | 21.00              |
| 15              | 1       | HIGH      | Q16        | 20.31 | 20.17 | 20.23 | 20.41 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 19.33 | 19.55 | 19.47 | 19.47 | 19.69 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.08 | 19.29 | 19.12 | 19.45 | 20.00              |
|                 | 36      | HIGH      | Q16        | 19.39 | 19.03 | 19.28 | 19.35 | 19.37 | 20.00              |
|                 |         | LOW       | Q16        | 19.67 | 19.24 | 19.49 | 19.25 | 19.51 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.40 | 19.32 | 19.25 | 19.16 | 19.30 | 20.00              |
|                 | 1       | MID       | 64QAM      | 19.02 | 19.10 | 19.17 | 19.20 | 19.21 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.21 | 19.29 | 19.25 | 19.02 | 19.30 | 20.00              |
|                 | 36      | LOW       | 64QAM      | 18.43 | 18.61 | 18.69 | 18.37 | 18.60 | 19.00              |
| MID             |         | 64QAM     | 18.40      | 18.17 | 18.46 | 18.26 | 18.33 | 19.00 |                    |
| HIGH            |         | 64QAM     | 18.50      | 18.25 | 18.53 | 18.30 | 18.63 | 19.00 |                    |
| 75              | LOW     | 64QAM     | 18.65      | 18.56 | 18.72 | 18.25 | 18.61 | 19.00 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 21.42 | 21.20 | 21.55 | 21.27 | 21.33 | 22.00              |
|                 |         | MID       | QPSK       | 21.54 | 21.36 | 21.39 | 21.38 | 21.36 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.42 | 21.28 | 21.42 | 21.26 | 21.45 | 22.00              |
|                 | 50      | LOW       | QPSK       | 20.40 | 20.19 | 20.52 | 20.29 | 20.29 | 21.00              |
|                 |         | MID       | QPSK       | 20.19 | 20.27 | 20.39 | 20.23 | 20.39 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.31 | 20.43 | 20.27 | 20.41 | 21.00              |
|                 | 100     | LOW       | QPSK       | 20.34 | 20.13 | 20.48 | 20.33 | 20.25 | 21.00              |
| 20              | 1       | LOW       | Q16        | 20.46 | 20.08 | 20.44 | 20.08 | 20.26 | 21.00              |
|                 |         | MID       | Q16        | 20.07 | 20.35 | 20.21 | 20.09 | 20.29 | 21.00              |
|                 |         | HIGH      | Q16        | 20.35 | 20.33 | 20.35 | 20.37 | 20.39 | 21.00              |
|                 | 50      | LOW       | Q16        | 19.39 | 19.53 | 19.59 | 19.59 | 19.59 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.18 | 19.37 | 19.22 | 19.37 | 20.00              |
|                 |         | HIGH      | Q16        | 19.29 | 19.20 | 19.47 | 19.43 | 19.41 | 20.00              |
|                 | 100     | LOW       | Q16        | 19.63 | 19.43 | 19.57 | 19.41 | 19.53 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.54 | 19.24 | 19.44 | 19.28 | 19.38 | 20.00              |
|                 |         | MID       | 64QAM      | 19.17 | 19.29 | 19.23 | 19.16 | 19.31 | 20.00              |
| 20              | 1       | HIGH      | 64QAM      | 19.21 | 19.21 | 19.42 | 19.21 | 19.38 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.54 | 18.52 | 18.75 | 18.48 | 18.69 | 19.00              |
|                 |         | MID       | 64QAM      | 18.44 | 18.13 | 18.37 | 18.26 | 18.31 | 19.00              |
|                 | 50      | HIGH      | 64QAM      | 18.43 | 18.43 | 18.47 | 18.43 | 18.54 | 19.00              |
|                 |         | LOW       | 64QAM      | 18.72 | 18.52 | 18.65 | 18.45 | 18.54 | 19.00              |

| LTE B41-State 3 -Ant.4 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.29 | 21.16 | 21.36 | 21.23 | 21.16 | 22.00              |
|                        |         | MID       | QPSK       | 21.60 | 21.36 | 21.28 | 21.21 | 21.40 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.53 | 21.28 | 21.36 | 21.11 | 21.49 | 22.00              |
|                        | 12      | LOW       | QPSK       | 20.34 | 20.17 | 20.34 | 20.39 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 19.97 | 20.05 | 20.27 | 20.05 | 20.31 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.35 | 20.29 | 20.27 | 20.21 | 21.00              |
|                        | 25      | LOW       | QPSK       | 20.16 | 19.95 | 20.38 | 20.19 | 20.15 | 21.00              |
|                        | 5       | LOW       | Q16        | 20.44 | 20.04 | 20.54 | 20.12 | 20.18 | 21.00              |
|                        |         | MID       | Q16        | 19.93 | 20.35 | 20.29 | 20.15 | 20.11 | 21.00              |
|                        |         | HIGH      | Q16        | 20.41 | 20.15 | 20.21 | 20.21 | 20.37 | 21.00              |
|                        |         | LOW       | Q16        | 19.39 | 19.37 | 19.63 | 19.43 | 19.59 | 20.00              |
|                        |         | MID       | Q16        | 19.10 | 18.97 | 19.47 | 19.24 | 19.45 | 20.00              |
|                        |         | HIGH      | Q16        | 19.29 | 19.24 | 19.35 | 19.24 | 19.41 | 20.00              |
|                        | 25      | LOW       | Q16        | 19.47 | 19.31 | 19.63 | 19.20 | 19.32 | 20.00              |
| 5                      | 1       | LOW       | 64QAM      | 19.56 | 19.11 | 19.50 | 19.30 | 19.36 | 20.00              |
|                        |         | MID       | 64QAM      | 19.23 | 19.17 | 19.27 | 19.10 | 19.29 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.19 | 19.23 | 19.23 | 19.36 | 20.00              |
|                        | 12      | LOW       | 64QAM      | 18.43 | 18.56 | 18.75 | 18.44 | 18.67 | 19.00              |
|                        |         | MID       | 64QAM      | 18.48 | 18.00 | 18.39 | 18.30 | 18.24 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.23 | 18.23 | 18.36 | 18.45 | 18.47 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 18.53 | 18.48 | 18.61 | 18.32 | 18.63 | 19.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 21.44 | 21.16 | 21.49 | 21.23 | 21.33 | 22.00              |
|                        |         | MID       | QPSK       | 21.65 | 21.23 | 21.37 | 21.36 | 21.38 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.23 | 21.32 | 21.29 | 21.28 | 21.36 | 22.00              |
|                        | 25      | LOW       | QPSK       | 20.26 | 20.01 | 20.44 | 20.37 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 20.03 | 20.07 | 20.35 | 20.15 | 20.47 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.29 | 20.29 | 20.21 | 20.21 | 21.00              |
| 10                     | 50      | LOW       | QPSK       | 20.34 | 19.93 | 20.34 | 20.23 | 20.05 | 21.00              |
|                        | 1       | LOW       | Q16        | 20.46 | 20.12 | 20.44 | 19.92 | 20.08 | 21.00              |
|                        |         | MID       | Q16        | 19.85 | 20.13 | 20.19 | 20.11 | 20.35 | 21.00              |
|                        |         | HIGH      | Q16        | 20.27 | 20.19 | 20.31 | 20.47 | 20.19 | 21.00              |
|                        | 25      | LOW       | Q16        | 19.49 | 19.53 | 19.51 | 19.61 | 19.67 | 20.00              |
|                        |         | MID       | Q16        | 19.25 | 19.26 | 19.29 | 19.12 | 19.16 | 20.00              |
|                        |         | HIGH      | Q16        | 19.12 | 19.12 | 19.28 | 19.27 | 19.41 | 20.00              |
|                        | 50      | LOW       | Q16        | 19.71 | 19.27 | 19.65 | 19.31 | 19.39 | 20.00              |
|                        | 10      | LOW       | 64QAM      | 19.34 | 19.22 | 19.46 | 19.32 | 19.48 | 20.00              |
|                        |         | MID       | 64QAM      | 19.27 | 19.31 | 19.21 | 18.99 | 19.14 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.23 | 19.21 | 19.46 | 19.04 | 19.44 | 20.00              |
|                        |         | LOW       | 64QAM      | 18.58 | 18.48 | 18.58 | 18.48 | 18.63 | 19.00              |
|                        |         | MID       | 64QAM      | 18.44 | 18.20 | 18.46 | 18.28 | 18.18 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.47 | 18.25 | 18.43 | 18.39 | 18.58 | 19.00              |
|                        | 50      | LOW       | 64QAM      | 18.55 | 18.58 | 18.50 | 18.54 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620        | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|--------------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 21.38 | 21.01 | 21.53        | 21.18 | 21.24 | 22.00              |
|                 |         | MID       | QPSK       | 21.32 | 21.38 | 21.24        | 21.38 | 21.25 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.48 | 21.17 | 21.44        | 21.35 | 21.34 | 22.00              |
|                 | 36      | LOW       | QPSK       | 20.46 | 20.29 | 20.40        | 20.17 | 20.25 | 21.00              |
|                 |         | MID       | QPSK       | 20.03 | 20.05 | 20.37        | 20.31 | 20.27 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.33 | 20.37        | 20.31 | 20.33 | 21.00              |
|                 | 75      | LOW       | QPSK       | 20.22 | 20.11 | 20.28        | 20.33 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 20.52 | 19.90 | 20.48        | 20.10 | 20.20 | 21.00              |
|                 |         | MID       | Q16        | 20.13 | 20.43 | 20.03        | 20.03 | 20.27 | 21.00              |
| 15              | 1       | HIGH      | Q16        | 20.31 | 20.17 | 20.23        | 20.41 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 19.33 | 19.55 | 19.47        | 19.47 | 19.69 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.08 | 19.29        | 19.12 | 19.45 | 20.00              |
|                 | 36      | HIGH      | Q16        | 19.39 | 19.03 | 19.28        | 19.35 | 19.37 | 20.00              |
|                 |         | LOW       | Q16        | 19.67 | 19.24 | 19.49        | 19.25 | 19.51 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.40 | 19.32 | 19.25        | 19.16 | 19.30 | 20.00              |
|                 | 1       | MID       | 64QAM      | 19.02 | 19.10 | 19.17        | 19.20 | 19.21 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.21 | 19.29 | 19.25        | 19.02 | 19.30 | 20.00              |
|                 | 36      | LOW       | 64QAM      | 18.43 | 18.61 | 18.69        | 18.37 | 18.60 | 19.00              |
| MID             |         | 64QAM     | 18.40      | 18.17 | 18.46 | 18.26        | 18.33 | 19.00 |                    |
| HIGH            |         | 64QAM     | 18.50      | 18.25 | 18.53 | 18.30        | 18.63 | 19.00 |                    |
| 75              | LOW     | 64QAM     | 18.65      | 18.56 | 18.72 | 18.25        | 18.61 | 19.00 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620        | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 21.42 | 21.20 | <b>21.55</b> | 21.27 | 21.33 | 22.00              |
|                 |         | MID       | QPSK       | 21.54 | 21.36 | 21.39        | 21.38 | 21.36 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.42 | 21.28 | 21.42        | 21.26 | 21.45 | 22.00              |
|                 | 50      | LOW       | QPSK       | 20.40 | 20.19 | <b>20.52</b> | 20.29 | 20.29 | 21.00              |
|                 |         | MID       | QPSK       | 20.19 | 20.27 | 20.39        | 20.23 | 20.39 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.31 | 20.43        | 20.27 | 20.41 | 21.00              |
|                 | 100     | LOW       | QPSK       | 20.34 | 20.13 | <b>20.48</b> | 20.33 | 20.25 | 21.00              |
| 20              | 1       | LOW       | Q16        | 20.46 | 20.08 | 20.44        | 20.08 | 20.26 | 21.00              |
|                 |         | MID       | Q16        | 20.07 | 20.35 | 20.21        | 20.09 | 20.29 | 21.00              |
|                 |         | HIGH      | Q16        | 20.35 | 20.33 | 20.35        | 20.37 | 20.39 | 21.00              |
|                 | 50      | LOW       | Q16        | 19.39 | 19.53 | 19.59        | 19.59 | 19.59 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.18 | 19.37        | 19.22 | 19.37 | 20.00              |
|                 |         | HIGH      | Q16        | 19.29 | 19.20 | 19.47        | 19.43 | 19.41 | 20.00              |
|                 | 100     | LOW       | Q16        | 19.63 | 19.43 | 19.57        | 19.41 | 19.53 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.54 | 19.24 | 19.44        | 19.28 | 19.38 | 20.00              |
|                 |         | MID       | 64QAM      | 19.17 | 19.29 | 19.23        | 19.16 | 19.31 | 20.00              |
| 20              | 1       | HIGH      | 64QAM      | 19.21 | 19.21 | 19.42        | 19.21 | 19.38 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.54 | 18.52 | 18.75        | 18.48 | 18.69 | 19.00              |
|                 |         | MID       | 64QAM      | 18.44 | 18.13 | 18.37        | 18.26 | 18.31 | 19.00              |
|                 | 50      | HIGH      | 64QAM      | 18.43 | 18.43 | 18.47        | 18.43 | 18.54 | 19.00              |
|                 |         | LOW       | 64QAM      | 18.72 | 18.52 | 18.65        | 18.45 | 18.54 | 19.00              |

| LTE B41-State 4 -Ant.4 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.29 | 21.16 | 21.36 | 21.23 | 21.16 | 22.00              |
|                        |         | MID       | QPSK       | 21.60 | 21.36 | 21.28 | 21.21 | 21.40 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.53 | 21.28 | 21.36 | 21.11 | 21.49 | 22.00              |
|                        | 12      | LOW       | QPSK       | 20.34 | 20.17 | 20.34 | 20.39 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 19.97 | 20.05 | 20.27 | 20.05 | 20.31 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.35 | 20.29 | 20.27 | 20.21 | 21.00              |
|                        | 25      | LOW       | QPSK       | 20.16 | 19.95 | 20.38 | 20.19 | 20.15 | 21.00              |
|                        | 5       | LOW       | Q16        | 20.44 | 20.04 | 20.54 | 20.12 | 20.18 | 21.00              |
|                        |         | MID       | Q16        | 19.93 | 20.35 | 20.29 | 20.15 | 20.11 | 21.00              |
|                        |         | HIGH      | Q16        | 20.41 | 20.15 | 20.21 | 20.21 | 20.37 | 21.00              |
|                        |         | LOW       | Q16        | 19.39 | 19.37 | 19.63 | 19.43 | 19.59 | 20.00              |
|                        |         | MID       | Q16        | 19.10 | 18.97 | 19.47 | 19.24 | 19.45 | 20.00              |
|                        |         | HIGH      | Q16        | 19.29 | 19.24 | 19.35 | 19.24 | 19.41 | 20.00              |
|                        | 25      | LOW       | Q16        | 19.47 | 19.31 | 19.63 | 19.20 | 19.32 | 20.00              |
| 5                      | 1       | LOW       | 64QAM      | 19.56 | 19.11 | 19.50 | 19.30 | 19.36 | 20.00              |
|                        |         | MID       | 64QAM      | 19.23 | 19.17 | 19.27 | 19.10 | 19.29 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.19 | 19.23 | 19.23 | 19.36 | 20.00              |
|                        | 12      | LOW       | 64QAM      | 18.43 | 18.56 | 18.75 | 18.44 | 18.67 | 19.00              |
|                        |         | MID       | 64QAM      | 18.48 | 18.00 | 18.39 | 18.30 | 18.24 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.23 | 18.23 | 18.36 | 18.45 | 18.47 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 18.53 | 18.48 | 18.61 | 18.32 | 18.63 | 19.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 21.44 | 21.16 | 21.49 | 21.23 | 21.33 | 22.00              |
|                        |         | MID       | QPSK       | 21.65 | 21.23 | 21.37 | 21.36 | 21.38 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.23 | 21.32 | 21.29 | 21.28 | 21.36 | 22.00              |
|                        | 25      | LOW       | QPSK       | 20.26 | 20.01 | 20.44 | 20.37 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 20.03 | 20.07 | 20.35 | 20.15 | 20.47 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.29 | 20.29 | 20.21 | 20.21 | 21.00              |
| 10                     | 50      | LOW       | QPSK       | 20.34 | 19.93 | 20.34 | 20.23 | 20.05 | 21.00              |
|                        | 1       | LOW       | Q16        | 20.46 | 20.12 | 20.44 | 19.92 | 20.08 | 21.00              |
|                        |         | MID       | Q16        | 19.85 | 20.13 | 20.19 | 20.11 | 20.35 | 21.00              |
|                        |         | HIGH      | Q16        | 20.27 | 20.19 | 20.31 | 20.47 | 20.19 | 21.00              |
|                        | 25      | LOW       | Q16        | 19.49 | 19.53 | 19.51 | 19.61 | 19.67 | 20.00              |
|                        |         | MID       | Q16        | 19.25 | 19.26 | 19.29 | 19.12 | 19.16 | 20.00              |
|                        |         | HIGH      | Q16        | 19.12 | 19.12 | 19.28 | 19.27 | 19.41 | 20.00              |
|                        | 50      | LOW       | Q16        | 19.71 | 19.27 | 19.65 | 19.31 | 19.39 | 20.00              |
|                        | 10      | LOW       | 64QAM      | 19.34 | 19.22 | 19.46 | 19.32 | 19.48 | 20.00              |
|                        |         | MID       | 64QAM      | 19.27 | 19.31 | 19.21 | 18.99 | 19.14 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.23 | 19.21 | 19.46 | 19.04 | 19.44 | 20.00              |
|                        | 25      | LOW       | 64QAM      | 18.58 | 18.48 | 18.58 | 18.48 | 18.63 | 19.00              |
|                        |         | MID       | 64QAM      | 18.44 | 18.20 | 18.46 | 18.28 | 18.18 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.47 | 18.25 | 18.43 | 18.39 | 18.58 | 19.00              |
|                        | 50      | LOW       | 64QAM      | 18.55 | 18.58 | 18.50 | 18.54 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39725 | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |
|-----------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| 15              | 1       | LOW       | QPSK       | 21.38 | 21.01 | 21.53 | 21.18 | 21.24 | 22.00              |
|                 |         | MID       | QPSK       | 21.32 | 21.38 | 21.24 | 21.38 | 21.25 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.48 | 21.17 | 21.44 | 21.35 | 21.34 | 22.00              |
|                 | 36      | LOW       | QPSK       | 20.46 | 20.29 | 20.40 | 20.17 | 20.25 | 21.00              |
|                 |         | MID       | QPSK       | 20.03 | 20.05 | 20.37 | 20.31 | 20.27 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.33 | 20.37 | 20.31 | 20.33 | 21.00              |
|                 | 75      | LOW       | QPSK       | 20.22 | 20.11 | 20.28 | 20.33 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 20.52 | 19.90 | 20.48 | 20.10 | 20.20 | 21.00              |
|                 |         | MID       | Q16        | 20.13 | 20.43 | 20.03 | 20.03 | 20.27 | 21.00              |
| 15              | 1       | HIGH      | Q16        | 20.31 | 20.17 | 20.23 | 20.41 | 20.29 | 21.00              |
|                 |         | LOW       | Q16        | 19.33 | 19.55 | 19.47 | 19.47 | 19.69 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.08 | 19.29 | 19.12 | 19.45 | 20.00              |
|                 | 36      | HIGH      | Q16        | 19.39 | 19.03 | 19.28 | 19.35 | 19.37 | 20.00              |
|                 |         | LOW       | Q16        | 19.67 | 19.24 | 19.49 | 19.25 | 19.51 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.40 | 19.32 | 19.25 | 19.16 | 19.30 | 20.00              |
|                 | 1       | MID       | 64QAM      | 19.02 | 19.10 | 19.17 | 19.20 | 19.21 | 20.00              |
|                 |         | HIGH      | 64QAM      | 19.21 | 19.29 | 19.25 | 19.02 | 19.30 | 20.00              |
|                 | 36      | LOW       | 64QAM      | 18.43 | 18.61 | 18.69 | 18.37 | 18.60 | 19.00              |
| MID             |         | 64QAM     | 18.40      | 18.17 | 18.46 | 18.26 | 18.33 | 19.00 |                    |
| HIGH            |         | 64QAM     | 18.50      | 18.25 | 18.53 | 18.30 | 18.63 | 19.00 |                    |
| 75              | LOW     | 64QAM     | 18.65      | 18.56 | 18.72 | 18.25 | 18.61 | 19.00 |                    |
| Bandwidth (MHz) | RB Size | RB offset | Modulation | 39750 | 40185 | 40620 | 41055 | 41490 | Tune-up power(dBm) |
| 20              | 1       | LOW       | QPSK       | 21.42 | 21.20 | 21.55 | 21.27 | 21.33 | 22.00              |
|                 |         | MID       | QPSK       | 21.54 | 21.36 | 21.39 | 21.38 | 21.36 | 22.00              |
|                 |         | HIGH      | QPSK       | 21.42 | 21.28 | 21.42 | 21.26 | 21.45 | 22.00              |
|                 | 50      | LOW       | QPSK       | 20.40 | 20.19 | 20.52 | 20.29 | 20.29 | 21.00              |
|                 |         | MID       | QPSK       | 20.19 | 20.27 | 20.39 | 20.23 | 20.39 | 21.00              |
|                 |         | HIGH      | QPSK       | 20.43 | 20.31 | 20.43 | 20.27 | 20.41 | 21.00              |
|                 | 100     | LOW       | QPSK       | 20.34 | 20.13 | 20.48 | 20.33 | 20.25 | 21.00              |
| 20              | 1       | LOW       | Q16        | 20.46 | 20.08 | 20.44 | 20.08 | 20.26 | 21.00              |
|                 |         | MID       | Q16        | 20.07 | 20.35 | 20.21 | 20.09 | 20.29 | 21.00              |
|                 |         | HIGH      | Q16        | 20.35 | 20.33 | 20.35 | 20.37 | 20.39 | 21.00              |
|                 | 50      | LOW       | Q16        | 19.39 | 19.53 | 19.59 | 19.59 | 19.59 | 20.00              |
|                 |         | MID       | Q16        | 19.29 | 19.18 | 19.37 | 19.22 | 19.37 | 20.00              |
|                 |         | HIGH      | Q16        | 19.29 | 19.20 | 19.47 | 19.43 | 19.41 | 20.00              |
|                 | 100     | LOW       | Q16        | 19.63 | 19.43 | 19.57 | 19.41 | 19.53 | 20.00              |
|                 |         | LOW       | 64QAM      | 19.54 | 19.24 | 19.44 | 19.28 | 19.38 | 20.00              |
|                 |         | MID       | 64QAM      | 19.17 | 19.29 | 19.23 | 19.16 | 19.31 | 20.00              |
| 20              | 1       | HIGH      | 64QAM      | 19.21 | 19.21 | 19.42 | 19.21 | 19.38 | 20.00              |
|                 |         | LOW       | 64QAM      | 18.54 | 18.52 | 18.75 | 18.48 | 18.69 | 19.00              |
|                 |         | MID       | 64QAM      | 18.44 | 18.13 | 18.37 | 18.26 | 18.31 | 19.00              |
|                 | 50      | HIGH      | 64QAM      | 18.43 | 18.43 | 18.47 | 18.43 | 18.54 | 19.00              |
|                 |         | LOW       | 64QAM      | 18.72 | 18.52 | 18.65 | 18.45 | 18.54 | 19.00              |

| LTE B41-State 5 -Ant.4 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.29 | 21.16 | 21.36 | 21.23 | 21.16 | 22.00              |
|                        |         | MID       | QPSK       | 21.60 | 21.36 | 21.28 | 21.21 | 21.40 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.53 | 21.28 | 21.36 | 21.11 | 21.49 | 22.00              |
|                        | 12      | LOW       | QPSK       | 20.34 | 20.17 | 20.34 | 20.39 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 19.97 | 20.05 | 20.27 | 20.05 | 20.31 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.35 | 20.29 | 20.27 | 20.21 | 21.00              |
|                        | 25      | LOW       | QPSK       | 20.16 | 19.95 | 20.38 | 20.19 | 20.15 | 21.00              |
|                        | 5       | LOW       | Q16        | 20.44 | 20.04 | 20.54 | 20.12 | 20.18 | 21.00              |
|                        |         | MID       | Q16        | 19.93 | 20.35 | 20.29 | 20.15 | 20.11 | 21.00              |
|                        |         | HIGH      | Q16        | 20.41 | 20.15 | 20.21 | 20.21 | 20.37 | 21.00              |
|                        |         | LOW       | Q16        | 19.39 | 19.37 | 19.63 | 19.43 | 19.59 | 20.00              |
|                        |         | MID       | Q16        | 19.10 | 18.97 | 19.47 | 19.24 | 19.45 | 20.00              |
|                        |         | HIGH      | Q16        | 19.29 | 19.24 | 19.35 | 19.24 | 19.41 | 20.00              |
|                        | 25      | LOW       | Q16        | 19.47 | 19.31 | 19.63 | 19.20 | 19.32 | 20.00              |
| 5                      | 1       | LOW       | 64QAM      | 19.56 | 19.11 | 19.50 | 19.30 | 19.36 | 20.00              |
|                        |         | MID       | 64QAM      | 19.23 | 19.17 | 19.27 | 19.10 | 19.29 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.19 | 19.23 | 19.23 | 19.36 | 20.00              |
|                        | 12      | LOW       | 64QAM      | 18.43 | 18.56 | 18.75 | 18.44 | 18.67 | 19.00              |
|                        |         | MID       | 64QAM      | 18.48 | 18.00 | 18.39 | 18.30 | 18.24 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.23 | 18.23 | 18.36 | 18.45 | 18.47 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 18.53 | 18.48 | 18.61 | 18.32 | 18.63 | 19.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 21.44 | 21.16 | 21.49 | 21.23 | 21.33 | 22.00              |
|                        |         | MID       | QPSK       | 21.65 | 21.23 | 21.37 | 21.36 | 21.38 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.23 | 21.32 | 21.29 | 21.28 | 21.36 | 22.00              |
|                        | 25      | LOW       | QPSK       | 20.26 | 20.01 | 20.44 | 20.37 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 20.03 | 20.07 | 20.35 | 20.15 | 20.47 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.29 | 20.29 | 20.21 | 20.21 | 21.00              |
| 10                     | 50      | LOW       | QPSK       | 20.34 | 19.93 | 20.34 | 20.23 | 20.05 | 21.00              |
|                        | 1       | LOW       | Q16        | 20.46 | 20.12 | 20.44 | 19.92 | 20.08 | 21.00              |
|                        |         | MID       | Q16        | 19.85 | 20.13 | 20.19 | 20.11 | 20.35 | 21.00              |
|                        |         | HIGH      | Q16        | 20.27 | 20.19 | 20.31 | 20.47 | 20.19 | 21.00              |
|                        | 25      | LOW       | Q16        | 19.49 | 19.53 | 19.51 | 19.61 | 19.67 | 20.00              |
|                        |         | MID       | Q16        | 19.25 | 19.26 | 19.29 | 19.12 | 19.16 | 20.00              |
|                        |         | HIGH      | Q16        | 19.12 | 19.12 | 19.28 | 19.27 | 19.41 | 20.00              |
|                        | 50      | LOW       | Q16        | 19.71 | 19.27 | 19.65 | 19.31 | 19.39 | 20.00              |
|                        | 10      | LOW       | 64QAM      | 19.34 | 19.22 | 19.46 | 19.32 | 19.48 | 20.00              |
|                        |         | MID       | 64QAM      | 19.27 | 19.31 | 19.21 | 18.99 | 19.14 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.23 | 19.21 | 19.46 | 19.04 | 19.44 | 20.00              |
|                        |         | LOW       | 64QAM      | 18.58 | 18.48 | 18.58 | 18.48 | 18.63 | 19.00              |
|                        |         | MID       | 64QAM      | 18.44 | 18.20 | 18.46 | 18.28 | 18.18 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.47 | 18.25 | 18.43 | 18.39 | 18.58 | 19.00              |
|                        | 50      | LOW       | 64QAM      | 18.55 | 18.58 | 18.50 | 18.54 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 39725      | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 21.38      | 21.01 | 21.53 | 21.18 | 21.24 | 22.00              |                    |
|                 |                 | MID       | QPSK       | 21.32      | 21.38 | 21.24 | 21.38 | 21.25 | 22.00              |                    |
|                 |                 | HIGH      | QPSK       | 21.48      | 21.17 | 21.44 | 21.35 | 21.34 | 22.00              |                    |
|                 | 36              | LOW       | QPSK       | 20.46      | 20.29 | 20.40 | 20.17 | 20.25 | 21.00              |                    |
|                 |                 | MID       | QPSK       | 20.03      | 20.05 | 20.37 | 20.31 | 20.27 | 21.00              |                    |
|                 |                 | HIGH      | QPSK       | 20.43      | 20.33 | 20.37 | 20.31 | 20.33 | 21.00              |                    |
|                 | 75              | LOW       | QPSK       | 20.22      | 20.11 | 20.28 | 20.33 | 20.29 | 21.00              |                    |
|                 | 15              | 1         | LOW        | Q16        | 20.52 | 19.90 | 20.48 | 20.10 | 20.20              | 21.00              |
|                 |                 |           | MID        | Q16        | 20.13 | 20.43 | 20.03 | 20.03 | 20.27              | 21.00              |
| HIGH            |                 |           | Q16        | 20.31      | 20.17 | 20.23 | 20.41 | 20.29 | 21.00              |                    |
| 36              |                 | LOW       | Q16        | 19.33      | 19.55 | 19.47 | 19.47 | 19.69 | 20.00              |                    |
|                 |                 | MID       | Q16        | 19.29      | 19.08 | 19.29 | 19.12 | 19.45 | 20.00              |                    |
|                 |                 | HIGH      | Q16        | 19.39      | 19.03 | 19.28 | 19.35 | 19.37 | 20.00              |                    |
| 75              |                 | LOW       | Q16        | 19.67      | 19.24 | 19.49 | 19.25 | 19.51 | 20.00              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 19.40 | 19.32 | 19.25 | 19.16 | 19.30              | 20.00              |
|                 |                 |           | MID        | 64QAM      | 19.02 | 19.10 | 19.17 | 19.20 | 19.21              | 20.00              |
|                 | HIGH            |           | 64QAM      | 19.21      | 19.29 | 19.25 | 19.02 | 19.30 | 20.00              |                    |
|                 | 36              | LOW       | 64QAM      | 18.43      | 18.61 | 18.69 | 18.37 | 18.60 | 19.00              |                    |
|                 |                 | MID       | 64QAM      | 18.40      | 18.17 | 18.46 | 18.26 | 18.33 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 18.50      | 18.25 | 18.53 | 18.30 | 18.63 | 19.00              |                    |
|                 | 75              | LOW       | 64QAM      | 18.65      | 18.56 | 18.72 | 18.25 | 18.61 | 19.00              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 39750 | 40185 | 40620 | 41055 | 41490              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 21.42 | 21.20 | 21.55 | 21.27 | 21.33              | 22.00              |
| MID             |                 |           | QPSK       | 21.54      | 21.36 | 21.39 | 21.38 | 21.36 | 22.00              |                    |
| HIGH            |                 |           | QPSK       | 21.42      | 21.28 | 21.42 | 21.26 | 21.45 | 22.00              |                    |
| 50              |                 | LOW       | QPSK       | 20.40      | 20.19 | 20.52 | 20.29 | 20.29 | 21.00              |                    |
|                 |                 | MID       | QPSK       | 20.19      | 20.27 | 20.39 | 20.23 | 20.39 | 21.00              |                    |
|                 |                 | HIGH      | QPSK       | 20.43      | 20.31 | 20.43 | 20.27 | 20.41 | 21.00              |                    |
| 20              | 1               | LOW       | QPSK       | 20.34      | 20.13 | 20.48 | 20.33 | 20.25 | 21.00              |                    |
|                 |                 | LOW       | Q16        | 20.46      | 20.08 | 20.44 | 20.08 | 20.26 | 21.00              |                    |
|                 |                 | MID       | Q16        | 20.07      | 20.35 | 20.21 | 20.09 | 20.29 | 21.00              |                    |
|                 | 50              | HIGH      | Q16        | 20.35      | 20.33 | 20.35 | 20.37 | 20.39 | 21.00              |                    |
|                 |                 | LOW       | Q16        | 19.39      | 19.53 | 19.59 | 19.59 | 19.59 | 20.00              |                    |
|                 |                 | MID       | Q16        | 19.29      | 19.18 | 19.37 | 19.22 | 19.37 | 20.00              |                    |
|                 | 100             | HIGH      | Q16        | 19.29      | 19.20 | 19.47 | 19.43 | 19.41 | 20.00              |                    |
|                 |                 | LOW       | Q16        | 19.63      | 19.43 | 19.57 | 19.41 | 19.53 | 20.00              |                    |
|                 |                 | LOW       | 64QAM      | 19.54      | 19.24 | 19.44 | 19.28 | 19.38 | 20.00              |                    |
| 20              | 1               | MID       | 64QAM      | 19.17      | 19.29 | 19.23 | 19.16 | 19.31 | 20.00              |                    |
|                 |                 | HIGH      | 64QAM      | 19.21      | 19.21 | 19.42 | 19.21 | 19.38 | 20.00              |                    |
|                 |                 | LOW       | 64QAM      | 18.54      | 18.52 | 18.75 | 18.48 | 18.69 | 19.00              |                    |
|                 | 50              | MID       | 64QAM      | 18.44      | 18.13 | 18.37 | 18.26 | 18.31 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 18.43      | 18.43 | 18.47 | 18.43 | 18.54 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 18.72      | 18.52 | 18.65 | 18.45 | 18.54 | 19.00              |                    |

| LTE B41-State 6 -Ant.4 |         |           |            |       |       |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|-------|-------|--------------------|
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39675 | 40110 | 40620 | 41130 | 41565 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.29 | 21.16 | 21.36 | 21.23 | 21.16 | 22.00              |
|                        |         | MID       | QPSK       | 21.60 | 21.36 | 21.28 | 21.21 | 21.40 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.53 | 21.28 | 21.36 | 21.11 | 21.49 | 22.00              |
|                        | 12      | LOW       | QPSK       | 20.34 | 20.17 | 20.34 | 20.39 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 19.97 | 20.05 | 20.27 | 20.05 | 20.31 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.35 | 20.29 | 20.27 | 20.21 | 21.00              |
|                        | 25      | LOW       | QPSK       | 20.16 | 19.95 | 20.38 | 20.19 | 20.15 | 21.00              |
|                        | 5       | LOW       | Q16        | 20.44 | 20.04 | 20.54 | 20.12 | 20.18 | 21.00              |
|                        |         | MID       | Q16        | 19.93 | 20.35 | 20.29 | 20.15 | 20.11 | 21.00              |
|                        |         | HIGH      | Q16        | 20.41 | 20.15 | 20.21 | 20.21 | 20.37 | 21.00              |
|                        |         | LOW       | Q16        | 19.39 | 19.37 | 19.63 | 19.43 | 19.59 | 20.00              |
|                        |         | MID       | Q16        | 19.10 | 18.97 | 19.47 | 19.24 | 19.45 | 20.00              |
|                        |         | HIGH      | Q16        | 19.29 | 19.24 | 19.35 | 19.24 | 19.41 | 20.00              |
|                        | 25      | LOW       | Q16        | 19.47 | 19.31 | 19.63 | 19.20 | 19.32 | 20.00              |
| 5                      | 1       | LOW       | 64QAM      | 19.56 | 19.11 | 19.50 | 19.30 | 19.36 | 20.00              |
|                        |         | MID       | 64QAM      | 19.23 | 19.17 | 19.27 | 19.10 | 19.29 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.08 | 19.19 | 19.23 | 19.23 | 19.36 | 20.00              |
|                        | 12      | LOW       | 64QAM      | 18.43 | 18.56 | 18.75 | 18.44 | 18.67 | 19.00              |
|                        |         | MID       | 64QAM      | 18.48 | 18.00 | 18.39 | 18.30 | 18.24 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.23 | 18.23 | 18.36 | 18.45 | 18.47 | 19.00              |
|                        | 25      | LOW       | 64QAM      | 18.53 | 18.48 | 18.61 | 18.32 | 18.63 | 19.00              |
| Bandwidth (MHz)        | RB Size | RB offset | Modulation | 39700 | 40135 | 40620 | 41105 | 41540 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 21.44 | 21.16 | 21.49 | 21.23 | 21.33 | 22.00              |
|                        |         | MID       | QPSK       | 21.65 | 21.23 | 21.37 | 21.36 | 21.38 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.23 | 21.32 | 21.29 | 21.28 | 21.36 | 22.00              |
|                        | 25      | LOW       | QPSK       | 20.26 | 20.01 | 20.44 | 20.37 | 20.07 | 21.00              |
|                        |         | MID       | QPSK       | 20.03 | 20.07 | 20.35 | 20.15 | 20.47 | 21.00              |
|                        |         | HIGH      | QPSK       | 20.23 | 20.29 | 20.29 | 20.21 | 20.21 | 21.00              |
| 10                     | 50      | LOW       | QPSK       | 20.34 | 19.93 | 20.34 | 20.23 | 20.05 | 21.00              |
|                        | 1       | LOW       | Q16        | 20.46 | 20.12 | 20.44 | 19.92 | 20.08 | 21.00              |
|                        |         | MID       | Q16        | 19.85 | 20.13 | 20.19 | 20.11 | 20.35 | 21.00              |
|                        |         | HIGH      | Q16        | 20.27 | 20.19 | 20.31 | 20.47 | 20.19 | 21.00              |
|                        | 25      | LOW       | Q16        | 19.49 | 19.53 | 19.51 | 19.61 | 19.67 | 20.00              |
|                        |         | MID       | Q16        | 19.25 | 19.26 | 19.29 | 19.12 | 19.16 | 20.00              |
|                        |         | HIGH      | Q16        | 19.12 | 19.12 | 19.28 | 19.27 | 19.41 | 20.00              |
|                        | 50      | LOW       | Q16        | 19.71 | 19.27 | 19.65 | 19.31 | 19.39 | 20.00              |
|                        | 10      | LOW       | 64QAM      | 19.34 | 19.22 | 19.46 | 19.32 | 19.48 | 20.00              |
|                        |         | MID       | 64QAM      | 19.27 | 19.31 | 19.21 | 18.99 | 19.14 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.23 | 19.21 | 19.46 | 19.04 | 19.44 | 20.00              |
|                        |         | LOW       | 64QAM      | 18.58 | 18.48 | 18.58 | 18.48 | 18.63 | 19.00              |
|                        |         | MID       | 64QAM      | 18.44 | 18.20 | 18.46 | 18.28 | 18.18 | 19.00              |
|                        |         | HIGH      | 64QAM      | 18.47 | 18.25 | 18.43 | 18.39 | 18.58 | 19.00              |
|                        | 50      | LOW       | 64QAM      | 18.55 | 18.58 | 18.50 | 18.54 | 18.37 | 19.00              |

| Bandwidth (MHz) | RB Size         | RB offset | Modulation | 39725      | 40160 | 40620 | 41080 | 41515 | Tune-up power(dBm) |                    |
|-----------------|-----------------|-----------|------------|------------|-------|-------|-------|-------|--------------------|--------------------|
| 15              | 1               | LOW       | QPSK       | 21.38      | 21.01 | 21.53 | 21.18 | 21.24 | 22.00              |                    |
|                 |                 | MID       | QPSK       | 21.32      | 21.38 | 21.24 | 21.38 | 21.25 | 22.00              |                    |
|                 |                 | HIGH      | QPSK       | 21.48      | 21.17 | 21.44 | 21.35 | 21.34 | 22.00              |                    |
|                 | 36              | LOW       | QPSK       | 20.46      | 20.29 | 20.40 | 20.17 | 20.25 | 21.00              |                    |
|                 |                 | MID       | QPSK       | 20.03      | 20.05 | 20.37 | 20.31 | 20.27 | 21.00              |                    |
|                 |                 | HIGH      | QPSK       | 20.43      | 20.33 | 20.37 | 20.31 | 20.33 | 21.00              |                    |
|                 | 75              | LOW       | QPSK       | 20.22      | 20.11 | 20.28 | 20.33 | 20.29 | 21.00              |                    |
|                 | 15              | 1         | LOW        | Q16        | 20.52 | 19.90 | 20.48 | 20.10 | 20.20              | 21.00              |
|                 |                 |           | MID        | Q16        | 20.13 | 20.43 | 20.03 | 20.03 | 20.27              | 21.00              |
| HIGH            |                 |           | Q16        | 20.31      | 20.17 | 20.23 | 20.41 | 20.29 | 21.00              |                    |
| 36              |                 | LOW       | Q16        | 19.33      | 19.55 | 19.47 | 19.47 | 19.69 | 20.00              |                    |
|                 |                 | MID       | Q16        | 19.29      | 19.08 | 19.29 | 19.12 | 19.45 | 20.00              |                    |
|                 |                 | HIGH      | Q16        | 19.39      | 19.03 | 19.28 | 19.35 | 19.37 | 20.00              |                    |
| 75              |                 | LOW       | Q16        | 19.67      | 19.24 | 19.49 | 19.25 | 19.51 | 20.00              |                    |
| 15              |                 | 1         | LOW        | 64QAM      | 19.40 | 19.32 | 19.25 | 19.16 | 19.30              | 20.00              |
|                 |                 |           | MID        | 64QAM      | 19.02 | 19.10 | 19.17 | 19.20 | 19.21              | 20.00              |
|                 | HIGH            |           | 64QAM      | 19.21      | 19.29 | 19.25 | 19.02 | 19.30 | 20.00              |                    |
|                 | 36              | LOW       | 64QAM      | 18.43      | 18.61 | 18.69 | 18.37 | 18.60 | 19.00              |                    |
|                 |                 | MID       | 64QAM      | 18.40      | 18.17 | 18.46 | 18.26 | 18.33 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 18.50      | 18.25 | 18.53 | 18.30 | 18.63 | 19.00              |                    |
|                 | 75              | LOW       | 64QAM      | 18.65      | 18.56 | 18.72 | 18.25 | 18.61 | 19.00              |                    |
|                 | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 39750 | 40185 | 40620 | 41055 | 41490              | Tune-up power(dBm) |
|                 | 20              | 1         | LOW        | QPSK       | 21.42 | 21.20 | 21.55 | 21.27 | 21.33              | 22.00              |
| MID             |                 |           | QPSK       | 21.54      | 21.36 | 21.39 | 21.38 | 21.36 | 22.00              |                    |
| HIGH            |                 |           | QPSK       | 21.42      | 21.28 | 21.42 | 21.26 | 21.45 | 22.00              |                    |
| 50              |                 | LOW       | QPSK       | 20.40      | 20.19 | 20.52 | 20.29 | 20.29 | 21.00              |                    |
|                 |                 | MID       | QPSK       | 20.19      | 20.27 | 20.39 | 20.23 | 20.39 | 21.00              |                    |
|                 |                 | HIGH      | QPSK       | 20.43      | 20.31 | 20.43 | 20.27 | 20.41 | 21.00              |                    |
| 20              | 1               | LOW       | QPSK       | 20.34      | 20.13 | 20.48 | 20.33 | 20.25 | 21.00              |                    |
|                 |                 | LOW       | Q16        | 20.46      | 20.08 | 20.44 | 20.08 | 20.26 | 21.00              |                    |
|                 |                 | MID       | Q16        | 20.07      | 20.35 | 20.21 | 20.09 | 20.29 | 21.00              |                    |
|                 | 50              | HIGH      | Q16        | 20.35      | 20.33 | 20.35 | 20.37 | 20.39 | 21.00              |                    |
|                 |                 | LOW       | Q16        | 19.39      | 19.53 | 19.59 | 19.59 | 19.59 | 20.00              |                    |
|                 |                 | MID       | Q16        | 19.29      | 19.18 | 19.37 | 19.22 | 19.37 | 20.00              |                    |
|                 | 100             | HIGH      | Q16        | 19.29      | 19.20 | 19.47 | 19.43 | 19.41 | 20.00              |                    |
|                 |                 | LOW       | Q16        | 19.63      | 19.43 | 19.57 | 19.41 | 19.53 | 20.00              |                    |
|                 |                 | LOW       | 64QAM      | 19.54      | 19.24 | 19.44 | 19.28 | 19.38 | 20.00              |                    |
| 20              | 1               | MID       | 64QAM      | 19.17      | 19.29 | 19.23 | 19.16 | 19.31 | 20.00              |                    |
|                 |                 | HIGH      | 64QAM      | 19.21      | 19.21 | 19.42 | 19.21 | 19.38 | 20.00              |                    |
|                 |                 | LOW       | 64QAM      | 18.54      | 18.52 | 18.75 | 18.48 | 18.69 | 19.00              |                    |
|                 | 50              | MID       | 64QAM      | 18.44      | 18.13 | 18.37 | 18.26 | 18.31 | 19.00              |                    |
|                 |                 | HIGH      | 64QAM      | 18.43      | 18.43 | 18.47 | 18.43 | 18.54 | 19.00              |                    |
|                 |                 | LOW       | 64QAM      | 18.72      | 18.52 | 18.65 | 18.45 | 18.54 | 19.00              |                    |