



REPORT No.: SZ23080316S01

## Annex E Conducted Power

**Note:**

Conducted power unit: dBm

The target power was recorded in the manufacturer's document.

### Full Power for ANT 1 & ANT3 & ANT4 & ANT5 & ANT6 & ANT 8

| GSM850          | Burst Average Power (dBm) |       |       | Tune-up Limit (dBm) | Frame-Average Power (dBm) |       |       | Tune-up Limit (dBm) |
|-----------------|---------------------------|-------|-------|---------------------|---------------------------|-------|-------|---------------------|
| TX Channel      | 128                       | 189   | 251   |                     | 128                       | 189   | 251   |                     |
| Frequency (MHz) | 824.2                     | 836.4 | 848.8 |                     | 824.2                     | 836.4 | 848.8 |                     |
| GSM 1 Tx slot   | 31.86                     | 32.02 | 32.55 | 33.70               | 22.86                     | 23.02 | 23.55 | 24.70               |
| GPRS 1 Tx slot  | 31.95                     | 32.23 | 32.61 | 33.70               | 22.95                     | 23.23 | 23.61 | 24.70               |
| GPRS 2 Tx slots | 28.32                     | 28.59 | 28.93 | 29.50               | 22.32                     | 22.59 | 22.93 | 23.50               |
| GPRS 3 Tx slots | 26.29                     | 26.58 | 26.88 | 27.50               | 22.03                     | 22.32 | 22.62 | 23.24               |
| GPRS 4 Tx slots | 24.23                     | 24.52 | 24.85 | 25.50               | 21.23                     | 21.52 | 21.85 | 22.50               |
| EDGE 1 Tx slot  | 26.53                     | 26.65 | 26.82 | 27.50               | 17.53                     | 17.65 | 17.82 | 18.50               |
| EDGE 2 Tx slots | 24.42                     | 24.59 | 24.80 | 25.50               | 18.42                     | 18.59 | 18.80 | 19.50               |
| EDGE 3 Tx slots | 22.49                     | 22.61 | 22.87 | 23.50               | 18.23                     | 18.35 | 18.61 | 19.24               |
| EDGE 4 Tx slots | 20.71                     | 20.89 | 21.05 | 22.00               | 17.71                     | 17.89 | 18.05 | 19.00               |
| Mode            |                           | Max.  | 32.61 |                     |                           | Max.  | 23.61 |                     |
| Attenuator      | Cable Loss : 0.6          |       |       |                     |                           |       |       |                     |

| GSM1900         | Burst Average Power (dBm) |       |        | Tune-up Limit (dBm) | Frame-Average Power (dBm) |       |        | Tune-up Limit (dBm) |
|-----------------|---------------------------|-------|--------|---------------------|---------------------------|-------|--------|---------------------|
| TX Channel      | 512                       | 661   | 810    |                     | 512                       | 661   | 810    |                     |
| Frequency (MHz) | 1850.2                    | 1880  | 1909.8 |                     | 1850.2                    | 1880  | 1909.8 |                     |
| GSM 1 Tx slot   | 29.33                     | 29.60 | 29.71  | 30.50               | 20.33                     | 20.60 | 20.71  | 21.50               |
| GPRS 1 Tx slot  | 29.31                     | 29.60 | 29.70  | 30.50               | 20.31                     | 20.60 | 20.70  | 21.50               |
| GPRS 2 Tx slots | 28.47                     | 28.75 | 28.89  | 29.50               | 22.47                     | 22.75 | 22.89  | 23.50               |
| GPRS 3 Tx slots | 26.50                     | 26.69 | 26.82  | 27.50               | 22.24                     | 22.43 | 22.56  | 23.24               |
| GPRS 4 Tx slots | 25.09                     | 25.31 | 25.43  | 26.00               | 22.09                     | 22.31 | 22.43  | 23.00               |
| EDGE 1 Tx slot  | 25.97                     | 26.29 | 26.40  | 27.00               | 16.97                     | 17.29 | 17.40  | 18.00               |
| EDGE 2 Tx slots | 24.01                     | 24.25 | 24.38  | 25.00               | 18.01                     | 18.25 | 18.38  | 19.00               |
| EDGE 3 Tx slots | 22.12                     | 22.42 | 22.55  | 23.50               | 17.86                     | 18.16 | 18.29  | 19.24               |
| EDGE 4 Tx slots | 21.38                     | 21.53 | 21.69  | 22.50               | 18.38                     | 18.53 | 18.69  | 19.50               |
| Mode            |                           | Max.  | 29.71  |                     |                           | Max.  | 22.89  |                     |
| Attenuator      | Cable Loss : 0.8          |       |        |                     |                           |       |        |                     |

| Band            |                         | WCDMA Band II (dBm) |            |        | Tune-up Limit (dBm) | WCDMA Band IV (dBm) |        |        | Tune-up Limit (dBm) | WCDMA Band V (dBm) |            |       | Tune-up Limit (dBm) |
|-----------------|-------------------------|---------------------|------------|--------|---------------------|---------------------|--------|--------|---------------------|--------------------|------------|-------|---------------------|
| TX Channel      |                         | 9262                | 9400       | 9538   |                     | 1312                | 1413   | 1513   |                     | 4132               | 4182       | 4233  |                     |
| Rx Channel      |                         | 9662                | 9800       | 9938   |                     | 1537                | 1638   | 1738   |                     | 4357               | 4407       | 4458  |                     |
| Frequency (MHz) |                         | 1852.4              | 1880       | 1907.6 |                     | 1712.4              | 1732.6 | 1752.6 |                     | 826.4              | 836.4      | 846.6 |                     |
| 3GPP Rel 99     | RMC 12.2Kbps            | 23.25               | 23.19      | 23.15  | 23.80               | 23.12               | 23.20  | 23.05  | 23.80               | 24.14              | 24.25      | 24.22 | 24.80               |
| 3GPP Rel 5      | HSDPA Subtest-1         | 22.90               | 22.50      | 22.40  | 23.30               | 22.67               | 22.84  | 22.57  | 23.30               | 23.36              | 23.52      | 23.70 | 24.30               |
| 3GPP Rel 5      | HSDPA Subtest-2         | 22.88               | 22.60      | 22.41  | 23.30               | 22.68               | 22.87  | 22.55  | 23.30               | 23.34              | 23.53      | 23.79 | 24.30               |
| 3GPP Rel 5      | HSDPA Subtest-3         | 22.40               | 22.03      | 21.92  | 22.80               | 22.19               | 22.34  | 22.07  | 22.80               | 22.87              | 22.96      | 23.19 | 23.80               |
| 3GPP Rel 5      | HSDPA Subtest-4         | 22.41               | 22.02      | 21.85  | 22.80               | 22.23               | 22.37  | 22.06  | 22.80               | 22.84              | 23.02      | 23.18 | 23.80               |
| 3GPP Rel 8      | DC-HSDPA Subtest-1      | 22.91               | 22.64      | 22.46  | 23.30               | 22.67               | 22.91  | 22.63  | 23.30               | 23.38              | 23.54      | 23.75 | 24.30               |
| 3GPP Rel 8      | DC-HSDPA Subtest-2      | 22.93               | 22.62      | 22.44  | 23.30               | 22.69               | 22.90  | 22.65  | 23.30               | 23.36              | 23.58      | 23.76 | 24.30               |
| 3GPP Rel 8      | DC-HSDPA Subtest-3      | 22.38               | 22.10      | 22.00  | 22.80               | 22.18               | 22.39  | 22.12  | 22.80               | 22.86              | 23.06      | 23.25 | 23.80               |
| 3GPP Rel 8      | DC-HSDPA Subtest-4      | 22.42               | 22.15      | 21.99  | 22.80               | 22.16               | 22.41  | 22.09  | 22.80               | 22.91              | 23.06      | 23.21 | 23.80               |
| 3GPP Rel 6      | HSUPA Subtest-1         | 22.95               | 22.65      | 22.47  | 23.30               | 22.64               | 22.83  | 22.59  | 23.30               | 23.38              | 23.57      | 23.72 | 24.30               |
| 3GPP Rel 6      | HSUPA Subtest-2         | 22.40               | 22.11      | 21.98  | 22.80               | 22.14               | 22.28  | 22.16  | 22.80               | 22.83              | 23.00      | 23.22 | 23.80               |
| 3GPP Rel 6      | HSUPA Subtest-3         | 22.88               | 22.60      | 22.40  | 23.30               | 22.70               | 22.85  | 22.57  | 23.30               | 23.26              | 23.53      | 23.73 | 24.30               |
| 3GPP Rel 6      | HSUPA Subtest-4         | 22.94               | 22.58      | 22.42  | 23.30               | 22.65               | 22.81  | 22.56  | 23.30               | 23.30              | 23.53      | 23.71 | 24.30               |
| 3GPP Rel 6      | HSUPA Subtest-5         | 22.96               | 22.61      | 22.44  | 23.30               | 22.67               | 22.86  | 22.56  | 23.30               | 23.36              | 23.45      | 23.74 | 24.30               |
| 3GPP Rel 7      | HSPA+ (16QAM) Subtest-1 | 22.35               | 22.01      | 21.92  | 22.80               | 22.10               | 22.36  | 22.16  | 22.80               | 22.85              | 23.01      | 23.25 | 23.80               |
| Attenuator      |                         |                     | Cable Loss | 0.8    |                     | Cable Loss          |        |        | 0.8                 |                    | Cable Loss | 0.6   |                     |
| Mode            |                         |                     | Max.       | 23.25  |                     | Max.                |        |        | 23.20               |                    | Max.       | 24.25 |                     |

| Band 2 (1900MHz Band) (dBm)<br>Part 24E |            |         |           |             |                |              |                     |
|-----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                 |            |         |           | 18700       | 18900          | 19100        | 23.8                |
| Frequency (MHz)                         |            |         |           | 1860        | 1880           | 1900         |                     |
| 20                                      | QPSK       | 1       | 0         | 22.87       | 22.93          | 22.84        | 23.8                |
| 20                                      | QPSK       | 1       | 49        | 22.81       | 22.82          | 22.65        |                     |
| 20                                      | QPSK       | 1       | 99        | 22.74       | 22.79          | 22.61        |                     |
| 20                                      | QPSK       | 50      | 0         | 21.81       | 21.87          | 21.79        | 22.8                |
| 20                                      | QPSK       | 50      | 24        | 21.78       | 21.72          | 21.60        |                     |
| 20                                      | QPSK       | 50      | 50        | 21.70       | 21.61          | 21.66        |                     |
| 20                                      | QPSK       | 100     | 0         | 21.74       | 21.65          | 21.61        | 22.8                |
| 20                                      | 16QAM      | 1       | 0         | 21.98       | 22.01          | 21.97        |                     |
| 20                                      | 16QAM      | 1       | 49        | 21.94       | 21.93          | 21.88        |                     |
| 20                                      | 16QAM      | 1       | 99        | 21.95       | 21.89          | 21.90        | 21.8                |
| 20                                      | 16QAM      | 50      | 0         | 20.77       | 20.76          | 20.74        |                     |
| 20                                      | 16QAM      | 50      | 24        | 20.73       | 20.69          | 20.70        |                     |
| 20                                      | 16QAM      | 50      | 50        | 20.65       | 20.58          | 20.60        | 21.8                |
| 20                                      | 16QAM      | 100     | 0         | 20.68       | 20.63          | 20.61        |                     |
| 20                                      | 64QAM      | 1       | 0         | 20.80       | 20.98          | 20.75        |                     |
| 20                                      | 64QAM      | 1       | 49        | 20.76       | 20.78          | 20.71        | 20.8                |
| 20                                      | 64QAM      | 1       | 99        | 20.71       | 20.73          | 20.67        |                     |
| 20                                      | 64QAM      | 50      | 0         | 19.70       | 19.73          | 19.65        |                     |
| 20                                      | 64QAM      | 50      | 24        | 19.64       | 19.66          | 19.50        | 20.8                |
| 20                                      | 64QAM      | 50      | 50        | 19.57       | 19.60          | 19.55        |                     |
| 20                                      | 64QAM      | 100     | 0         | 19.56       | 19.63          | 19.58        |                     |
| Channel                                 |            |         |           | 18675       | 18900          | 19125        | 23.8                |
| Frequency (MHz)                         |            |         |           | 1857.5      | 1880           | 1902.5       |                     |
| 15                                      | QPSK       | 1       | 0         | 22.82       | 22.89          | 22.77        | 23.8                |
| 15                                      | QPSK       | 1       | 37        | 22.68       | 22.71          | 22.52        |                     |
| 15                                      | QPSK       | 1       | 74        | 22.65       | 22.54          | 22.60        |                     |
| 15                                      | QPSK       | 36      | 0         | 21.75       | 21.80          | 21.76        | 22.8                |
| 15                                      | QPSK       | 36      | 20        | 21.78       | 21.68          | 21.63        |                     |
| 15                                      | QPSK       | 36      | 39        | 21.55       | 21.60          | 21.57        |                     |
| 15                                      | QPSK       | 75      | 0         | 21.68       | 21.74          | 21.53        | 22.8                |
| 15                                      | 16QAM      | 1       | 0         | 21.99       | 22.02          | 21.94        |                     |
| 15                                      | 16QAM      | 1       | 37        | 21.91       | 21.90          | 21.83        |                     |
| 15                                      | 16QAM      | 1       | 74        | 21.97       | 21.81          | 21.82        | 21.8                |
| 15                                      | 16QAM      | 36      | 0         | 20.86       | 20.66          | 20.70        |                     |
| 15                                      | 16QAM      | 36      | 20        | 20.63       | 20.55          | 20.79        |                     |
| 15                                      | 16QAM      | 36      | 39        | 20.70       | 20.53          | 20.62        | 21.8                |
| 15                                      | 16QAM      | 75      | 0         | 20.63       | 20.60          | 20.60        |                     |
| 15                                      | 64QAM      | 1       | 0         | 20.81       | 20.94          | 20.79        |                     |
| 15                                      | 64QAM      | 1       | 37        | 20.86       | 20.77          | 20.62        | 20.8                |
| 15                                      | 64QAM      | 1       | 74        | 20.75       | 20.68          | 20.66        |                     |
| 15                                      | 64QAM      | 36      | 0         | 19.67       | 19.81          | 19.55        |                     |
| 15                                      | 64QAM      | 36      | 20        | 19.57       | 19.52          | 19.55        | 20.8                |
| 15                                      | 64QAM      | 36      | 39        | 19.65       | 19.63          | 19.64        |                     |
| 15                                      | 64QAM      | 75      | 0         | 19.53       | 19.73          | 19.58        |                     |
| Channel                                 |            |         |           | 18650       | 18900          | 19150        | 23.8                |
| Frequency (MHz)                         |            |         |           | 1855        | 1880           | 1905         |                     |
| 10                                      | QPSK       | 1       | 0         | 22.75       | 22.86          | 22.79        | 23.8                |
| 10                                      | QPSK       | 1       | 25        | 22.73       | 22.80          | 22.67        |                     |
| 10                                      | QPSK       | 1       | 49        | 22.61       | 22.58          | 22.53        |                     |
| 10                                      | QPSK       | 25      | 0         | 21.78       | 21.80          | 21.53        | 22.8                |
| 10                                      | QPSK       | 25      | 12        | 21.74       | 21.57          | 21.57        |                     |
| 10                                      | QPSK       | 25      | 25        | 21.63       | 21.64          | 21.54        |                     |
| 10                                      | QPSK       | 50      | 0         | 21.61       | 21.66          | 21.54        | 22.8                |
| 10                                      | 16QAM      | 1       | 0         | 21.97       | 22.03          | 21.89        |                     |
| 10                                      | 16QAM      | 1       | 25        | 21.94       | 21.96          | 21.90        |                     |
| 10                                      | 16QAM      | 1       | 49        | 21.95       | 21.75          | 21.85        | 21.8                |
| 10                                      | 16QAM      | 25      | 0         | 20.69       | 20.66          | 20.71        |                     |
| 10                                      | 16QAM      | 25      | 12        | 20.70       | 20.63          | 20.78        |                     |
| 10                                      | 16QAM      | 25      | 25        | 20.71       | 20.67          | 20.64        | 21.8                |
| 10                                      | 16QAM      | 50      | 0         | 20.70       | 20.60          | 20.69        |                     |
| 10                                      | 64QAM      | 1       | 0         | 20.84       | 20.79          | 20.60        |                     |
| 10                                      | 64QAM      | 1       | 25        | 20.74       | 20.88          | 20.75        | 20.8                |
| 10                                      | 64QAM      | 1       | 49        | 20.63       | 20.63          | 20.68        |                     |
| 10                                      | 64QAM      | 25      | 0         | 19.69       | 19.79          | 19.64        |                     |
| 10                                      | 64QAM      | 25      | 12        | 19.69       | 19.74          | 19.61        | 20.8                |
| 10                                      | 64QAM      | 25      | 25        | 19.57       | 19.64          | 19.59        |                     |
| 10                                      | 64QAM      | 50      | 0         | 19.63       | 19.66          | 19.62        |                     |
| Channel                                 |            |         |           | 18625       | 18900          | 19175        | 23.8                |
| Frequency (MHz)                         |            |         |           | 1852.5      | 1880           | 1907.5       |                     |
| 5                                       | QPSK       | 1       | 0         | 22.79       | 22.85          | 22.68        | 23.8                |
| 5                                       | QPSK       | 1       | 12        | 22.70       | 22.73          | 22.73        |                     |
| 5                                       | QPSK       | 1       | 24        | 22.69       | 22.56          | 22.50        |                     |
| 5                                       | QPSK       | 12      | 0         | 21.83       | 21.76          | 21.63        | 22.8                |
| 5                                       | QPSK       | 12      | 7         | 21.72       | 21.62          | 21.61        |                     |
| 5                                       | QPSK       | 12      | 13        | 21.59       | 21.64          | 21.65        |                     |
| 5                                       | QPSK       | 25      | 0         | 21.63       | 21.69          | 21.67        | 22.8                |
| 5                                       | 16QAM      | 1       | 0         | 22.00       | 22.00          | 21.86        |                     |
| 5                                       | 16QAM      | 1       | 12        | 21.94       | 21.93          | 21.85        |                     |
| 5                                       | 16QAM      | 1       | 24        | 21.96       | 21.75          | 21.79        | 21.8                |
| 5                                       | 16QAM      | 12      | 0         | 20.73       | 20.82          | 20.66        |                     |
| 5                                       | 16QAM      | 12      | 7         | 20.74       | 20.75          | 20.66        |                     |
| 5                                       | 16QAM      | 12      | 13        | 20.62       | 20.55          | 20.60        | 21.8                |
| 5                                       | 16QAM      | 25      | 0         | 20.60       | 20.61          | 20.62        |                     |
| 5                                       | 64QAM      | 1       | 0         | 20.80       | 20.67          | 20.62        |                     |
| 5                                       | 64QAM      | 1       | 12        | 20.79       | 20.79          | 20.71        | 20.8                |
| 5                                       | 64QAM      | 1       | 24        | 20.65       | 20.76          | 20.69        |                     |
| 5                                       | 64QAM      | 12      | 0         | 19.64       | 19.73          | 19.75        |                     |
| 5                                       | 64QAM      | 12      | 7         | 19.62       | 19.68          | 19.59        | 20.8                |
| 5                                       | 64QAM      | 12      | 13        | 19.57       | 19.69          | 19.58        |                     |
| 5                                       | 64QAM      | 25      | 0         | 19.62       | 19.72          | 19.67        |                     |
| Channel                                 |            |         |           | 18615       | 18900          | 19185        | 23.8                |
| Frequency (MHz)                         |            |         |           | 1851.5      | 1880           | 1908.5       |                     |
| 3                                       | QPSK       | 1       | 0         | 22.78       | 22.86          | 22.65        | 23.8                |
| 3                                       | QPSK       | 1       | 8         | 22.71       | 22.79          | 22.61        |                     |
| 3                                       | QPSK       | 1       | 14        | 22.65       | 22.68          | 22.57        |                     |

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required) |            |         |           |             |                |              |                     |
|----------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                       | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                        |            |         |           | 20050       | 20175          | 20300        | 23.8                |
| Frequency (MHz)                                                |            |         |           | 1720        | 1732.5         | 1745         |                     |
| 20                                                             | QPSK       | 1       | 0         | 22.79       | 22.86          | 22.81        | 23.8                |
| 20                                                             | QPSK       | 1       | 49        | 22.77       | 22.75          | 22.75        |                     |
| 20                                                             | QPSK       | 1       | 99        | 22.69       | 22.80          | 22.71        |                     |
| 20                                                             | QPSK       | 50      | 0         | 21.81       | 21.90          | 21.84        | 22.8                |
| 20                                                             | QPSK       | 50      | 24        | 21.87       | 21.70          | 21.69        |                     |
| 20                                                             | QPSK       | 50      | 50        | 21.73       | 21.76          | 21.63        |                     |
| 20                                                             | QPSK       | 100     | 0         | 21.69       | 21.72          | 21.78        | 22.8                |
| 20                                                             | 16QAM      | 1       | 0         | 21.95       | 22.10          | 21.99        |                     |
| 20                                                             | 16QAM      | 1       | 49        | 21.96       | 22.03          | 21.88        |                     |
| 20                                                             | 16QAM      | 1       | 99        | 21.88       | 21.99          | 21.95        | 21.8                |
| 20                                                             | 16QAM      | 50      | 0         | 20.87       | 20.90          | 20.70        |                     |
| 20                                                             | 16QAM      | 50      | 24        | 20.74       | 20.68          | 20.76        |                     |
| 20                                                             | 16QAM      | 50      | 50        | 20.63       | 20.70          | 20.74        | 21.8                |
| 20                                                             | 16QAM      | 100     | 0         | 20.55       | 20.82          | 20.64        |                     |
| 20                                                             | 64QAM      | 1       | 0         | 20.86       | 21.01          | 20.87        |                     |
| 20                                                             | 64QAM      | 1       | 49        | 20.73       | 20.74          | 20.90        | 21.8                |
| 20                                                             | 64QAM      | 1       | 99        | 20.75       | 20.74          | 20.87        |                     |
| 20                                                             | 64QAM      | 50      | 0         | 19.75       | 19.84          | 19.82        |                     |
| 20                                                             | 64QAM      | 50      | 24        | 19.69       | 19.83          | 19.61        | 20.8                |
| 20                                                             | 64QAM      | 50      | 50        | 19.66       | 19.64          | 19.65        |                     |
| 20                                                             | 64QAM      | 100     | 0         | 19.65       | 19.79          | 19.70        |                     |
| Channel                                                        |            |         |           | 20025       | 20175          | 20325        | 23.8                |
| Frequency (MHz)                                                |            |         |           | 1717.5      | 1732.5         | 1747.5       |                     |
| 15                                                             | QPSK       | 1       | 0         | 22.81       | 22.83          | 22.75        | 23.8                |
| 15                                                             | QPSK       | 1       | 37        | 22.79       | 22.79          | 22.71        |                     |
| 15                                                             | QPSK       | 1       | 74        | 22.64       | 22.75          | 22.70        |                     |
| 15                                                             | QPSK       | 36      | 0         | 21.85       | 21.88          | 21.70        | 22.8                |
| 15                                                             | QPSK       | 36      | 20        | 21.67       | 21.87          | 21.64        |                     |
| 15                                                             | QPSK       | 36      | 39        | 21.72       | 21.59          | 21.55        |                     |
| 15                                                             | QPSK       | 75      | 0         | 21.74       | 21.73          | 21.76        | 22.8                |
| 15                                                             | 16QAM      | 1       | 0         | 21.99       | 22.07          | 21.96        |                     |
| 15                                                             | 16QAM      | 1       | 37        | 21.89       | 22.05          | 21.87        |                     |
| 15                                                             | 16QAM      | 1       | 74        | 21.98       | 21.85          | 22.01        | 21.8                |
| 15                                                             | 16QAM      | 36      | 0         | 20.86       | 20.91          | 20.70        |                     |
| 15                                                             | 16QAM      | 36      | 20        | 20.65       | 20.70          | 20.65        |                     |
| 15                                                             | 16QAM      | 36      | 39        | 20.53       | 20.77          | 20.72        | 21.8                |
| 15                                                             | 16QAM      | 75      | 0         | 20.67       | 20.83          | 20.60        |                     |
| 15                                                             | 64QAM      | 1       | 0         | 20.76       | 20.85          | 20.84        |                     |
| 15                                                             | 64QAM      | 1       | 37        | 20.68       | 20.78          | 20.79        | 21.8                |
| 15                                                             | 64QAM      | 1       | 74        | 20.67       | 20.75          | 20.68        |                     |
| 15                                                             | 64QAM      | 36      | 0         | 19.73       | 19.83          | 19.73        |                     |
| 15                                                             | 64QAM      | 36      | 20        | 19.53       | 19.78          | 19.59        | 20.8                |
| 15                                                             | 64QAM      | 36      | 39        | 19.56       | 19.56          | 19.72        |                     |
| 15                                                             | 64QAM      | 75      | 0         | 19.48       | 19.82          | 19.76        |                     |
| Channel                                                        |            |         |           | 20000       | 20175          | 20350        | 23.8                |
| Frequency (MHz)                                                |            |         |           | 1715        | 1732.5         | 1750         |                     |
| 10                                                             | QPSK       | 1       | 0         | 22.77       | 22.81          | 22.74        | 23.8                |
| 10                                                             | QPSK       | 1       | 25        | 22.74       | 22.65          | 22.61        |                     |
| 10                                                             | QPSK       | 1       | 49        | 22.67       | 22.75          | 22.61        |                     |
| 10                                                             | QPSK       | 25      | 0         | 21.85       | 21.90          | 21.61        | 22.8                |
| 10                                                             | QPSK       | 25      | 12        | 21.82       | 21.78          | 21.68        |                     |
| 10                                                             | QPSK       | 25      | 25        | 21.59       | 21.66          | 21.75        |                     |
| 10                                                             | QPSK       | 50      | 0         | 21.76       | 21.79          | 21.75        | 22.8                |
| 10                                                             | 16QAM      | 1       | 0         | 22.02       | 22.06          | 21.95        |                     |
| 10                                                             | 16QAM      | 1       | 25        | 22.05       | 21.97          | 21.84        |                     |
| 10                                                             | 16QAM      | 1       | 49        | 22.04       | 22.03          | 21.97        | 21.8                |
| 10                                                             | 16QAM      | 25      | 0         | 20.73       | 20.89          | 20.83        |                     |
| 10                                                             | 16QAM      | 25      | 12        | 20.74       | 20.66          | 20.66        |                     |
| 10                                                             | 16QAM      | 25      | 25        | 20.62       | 20.65          | 20.78        | 21.8                |
| 10                                                             | 16QAM      | 50      | 0         | 20.61       | 20.73          | 20.60        |                     |
| 10                                                             | 64QAM      | 1       | 0         | 20.85       | 20.89          | 20.84        |                     |
| 10                                                             | 64QAM      | 1       | 25        | 20.83       | 20.84          | 20.82        | 21.8                |
| 10                                                             | 64QAM      | 1       | 49        | 20.66       | 20.81          | 20.85        |                     |
| 10                                                             | 64QAM      | 25      | 0         | 19.79       | 19.83          | 19.79        |                     |
| 10                                                             | 64QAM      | 25      | 12        | 19.71       | 19.75          | 19.59        | 20.8                |
| 10                                                             | 64QAM      | 25      | 25        | 19.64       | 19.65          | 19.65        |                     |
| 10                                                             | 64QAM      | 50      | 0         | 19.50       | 19.66          | 19.75        |                     |
| Channel                                                        |            |         |           | 19975       | 20175          | 20375        | 23.8                |
| Frequency (MHz)                                                |            |         |           | 1712.5      | 1732.5         | 1752.5       |                     |
| 5                                                              | QPSK       | 1       | 0         | 22.76       | 22.80          | 22.73        | 23.8                |
| 5                                                              | QPSK       | 1       | 12        | 22.74       | 22.75          | 22.67        |                     |
| 5                                                              | QPSK       | 1       | 24        | 22.72       | 22.74          | 22.60        |                     |
| 5                                                              | QPSK       | 12      | 0         | 21.84       | 21.99          | 21.73        | 22.8                |
| 5                                                              | QPSK       | 12      | 7         | 21.84       | 21.74          | 21.64        |                     |
| 5                                                              | QPSK       | 12      | 13        | 21.69       | 21.61          | 21.65        |                     |
| 5                                                              | QPSK       | 25      | 0         | 21.79       | 21.78          | 21.64        | 22.8                |
| 5                                                              | 16QAM      | 1       | 0         | 22.03       | 22.08          | 21.95        |                     |
| 5                                                              | 16QAM      | 1       | 12        | 22.07       | 21.98          | 22.07        |                     |
| 5                                                              | 16QAM      | 1       | 24        | 21.85       | 21.93          | 21.99        | 21.8                |
| 5                                                              | 16QAM      | 12      | 0         | 20.77       | 20.77          | 20.87        |                     |
| 5                                                              | 16QAM      | 12      | 7         | 20.74       | 20.84          | 20.83        |                     |
| 5                                                              | 16QAM      | 12      | 13        | 20.59       | 20.78          | 20.57        | 21.8                |
| 5                                                              | 16QAM      | 25      | 0         | 20.56       | 20.71          | 20.74        |                     |
| 5                                                              | 64QAM      | 1       | 0         | 20.78       | 20.86          | 20.80        |                     |
| 5                                                              | 64QAM      | 1       | 12        | 20.77       | 20.91          | 20.74        | 21.8                |
| 5                                                              | 64QAM      | 1       | 24        | 20.57       | 20.74          | 20.65        |                     |
| 5                                                              | 64QAM      | 12      | 0         | 19.75       | 19.91          | 19.80        |                     |
| 5                                                              | 64QAM      | 12      | 7         | 19.59       | 19.84          | 19.59        | 20.8                |
| 5                                                              | 64QAM      | 12      | 13        | 19.54       | 19.80          | 19.60        |                     |
| 5                                                              | 64QAM      | 25      | 0         | 19.55       | 19.60          | 19.63        |                     |
| Channel                                                        |            |         |           | 19965       | 20175          | 20385        | 23.8                |
| Frequency (MHz)                                                |            |         |           | 1711.5      | 1732.5         | 1753.5       |                     |
| 3                                                              | QPSK       | 1       | 0         | 22.78       | 22.82          | 22.76        | 23.8                |
| 3                                                              | QPSK       | 1       | 8         | 22.66       | 22.78          | 22.73        |                     |
| 3                                                              | QPSK       | 1       | 14        | 22.67       | 22.66          | 22.70        |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | QPSK  | 8  | 0  | 21.92  | 21.84  | 21.76  | 22.8                |
| 3               | QPSK  | 8  | 4  | 21.83  | 21.76  | 21.56  |                     |
| 3               | QPSK  | 8  | 7  | 21.69  | 21.64  | 21.59  |                     |
| 3               | QPSK  | 15 | 0  | 21.74  | 21.67  | 21.58  | 22.8                |
| 3               | 16QAM | 1  | 0  | 21.99  | 21.98  | 21.83  |                     |
| 3               | 16QAM | 1  | 8  | 21.93  | 21.92  | 21.86  |                     |
| 3               | 16QAM | 1  | 14 | 21.98  | 21.86  | 21.76  | 21.8                |
| 3               | 16QAM | 8  | 0  | 20.66  | 20.66  | 20.59  |                     |
| 3               | 16QAM | 8  | 4  | 20.72  | 20.55  | 20.74  |                     |
| 3               | 16QAM | 8  | 7  | 20.63  | 20.56  | 20.52  | 21.8                |
| 3               | 16QAM | 15 | 0  | 20.55  | 20.57  | 20.56  |                     |
| 3               | 64QAM | 1  | 0  | 20.69  | 20.72  | 20.83  |                     |
| 3               | 64QAM | 1  | 8  | 20.66  | 20.70  | 20.62  | 20.8                |
| 3               | 64QAM | 1  | 14 | 20.80  | 20.80  | 20.57  |                     |
| 3               | 64QAM | 8  | 0  | 19.55  | 19.79  | 19.70  |                     |
| 3               | 64QAM | 8  | 4  | 19.71  | 19.54  | 19.60  | 20.8                |
| 3               | 64QAM | 8  | 7  | 19.50  | 19.51  | 19.54  |                     |
| 3               | 64QAM | 15 | 0  | 19.54  | 19.61  | 19.66  |                     |
| Channel         |       |    |    | 1860.7 | 1890.0 | 1919.3 | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1850.7 | 1880   | 1909.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 22.77  | 22.84  | 22.72  | 23.8                |
| 1.4             | QPSK  | 1  | 3  | 22.69  | 22.60  | 22.53  |                     |
| 1.4             | QPSK  | 1  | 5  | 22.68  | 22.67  | 22.55  |                     |
| 1.4             | QPSK  | 3  | 0  | 21.79  | 21.89  | 21.74  | 22.8                |
| 1.4             | QPSK  | 3  | 1  | 21.75  | 21.78  | 21.72  |                     |
| 1.4             | QPSK  | 3  | 3  | 21.77  | 21.73  | 21.70  |                     |
| 1.4             | QPSK  | 6  | 0  | 21.64  | 21.69  | 21.64  | 22.8                |
| 1.4             | 16QAM | 1  | 0  | 21.97  | 22.01  | 21.95  |                     |
| 1.4             | 16QAM | 1  | 3  | 21.91  | 21.93  | 21.81  |                     |
| 1.4             | 16QAM | 1  | 5  | 21.91  | 21.87  | 21.96  | 21.8                |
| 1.4             | 16QAM | 3  | 0  | 20.85  | 20.63  | 20.61  |                     |
| 1.4             | 16QAM | 3  | 1  | 20.76  | 20.61  | 20.60  |                     |
| 1.4             | 16QAM | 3  | 3  | 20.73  | 20.59  | 20.69  | 21.8                |
| 1.4             | 16QAM | 6  | 0  | 20.70  | 20.59  | 20.64  |                     |
| 1.4             | 64QAM | 1  | 0  | 20.82  | 20.69  | 20.60  |                     |
| 1.4             | 64QAM | 1  | 3  | 20.84  | 20.63  | 20.67  | 20.8                |
| 1.4             | 64QAM | 1  | 5  | 20.74  | 20.73  | 20.72  |                     |
| 1.4             | 64QAM | 3  | 0  | 19.59  | 19.67  | 19.70  |                     |
| 1.4             | 64QAM | 3  | 1  | 19.54  | 19.55  | 19.69  | 20.8                |
| 1.4             | 64QAM | 3  | 3  | 19.67  | 19.62  | 19.62  |                     |
| 1.4             | 64QAM | 6  | 0  | 19.59  | 19.55  | 19.56  |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | QPSK  | 8  | 0  | 21.83  | 21.80  | 21.61  | 22.8                |
| 3               | QPSK  | 8  | 4  | 21.88  | 21.88  | 21.63  |                     |
| 3               | QPSK  | 8  | 7  | 21.74  | 21.66  | 21.59  |                     |
| 3               | QPSK  | 15 | 0  | 21.67  | 21.84  | 21.72  | 22.8                |
| 3               | 16QAM | 1  | 0  | 22.05  | 22.07  | 22.03  |                     |
| 3               | 16QAM | 1  | 8  | 22.00  | 21.91  | 22.04  |                     |
| 3               | 16QAM | 1  | 14 | 21.96  | 22.01  | 21.97  | 21.8                |
| 3               | 16QAM | 8  | 0  | 20.68  | 20.78  | 20.84  |                     |
| 3               | 16QAM | 8  | 4  | 20.71  | 20.76  | 20.82  |                     |
| 3               | 16QAM | 8  | 7  | 20.60  | 20.59  | 20.72  | 21.8                |
| 3               | 16QAM | 15 | 0  | 20.57  | 20.74  | 20.68  |                     |
| 3               | 64QAM | 1  | 0  | 20.85  | 20.89  | 20.81  |                     |
| 3               | 64QAM | 1  | 8  | 20.63  | 20.83  | 20.81  | 20.8                |
| 3               | 64QAM | 1  | 14 | 20.80  | 20.71  | 20.78  |                     |
| 3               | 64QAM | 8  | 0  | 19.79  | 19.86  | 19.68  |                     |
| 3               | 64QAM | 8  | 4  | 19.61  | 19.85  | 19.60  | 20.8                |
| 3               | 64QAM | 8  | 7  | 19.55  | 19.59  | 19.69  |                     |
| 3               | 64QAM | 15 | 0  | 19.53  | 19.64  | 19.75  |                     |
| Channel         |       |    |    | 1995.7 | 2017.5 | 2039.3 | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 22.73  | 22.80  | 22.72  | 23.8                |
| 1.4             | QPSK  | 1  | 3  | 22.75  | 22.74  | 22.69  |                     |
| 1.4             | QPSK  | 1  | 5  | 22.67  | 22.68  | 22.64  |                     |
| 1.4             | QPSK  | 3  | 0  | 21.78  | 21.98  | 21.75  | 22.8                |
| 1.4             | QPSK  | 3  | 1  | 21.88  | 21.80  | 21.74  |                     |
| 1.4             | QPSK  | 3  | 3  | 21.75  | 21.79  | 21.70  |                     |
| 1.4             | QPSK  | 6  | 0  | 21.64  | 21.68  | 21.64  | 22.8                |
| 1.4             | 16QAM | 1  | 0  | 22.03  | 22.07  | 22.04  |                     |
| 1.4             | 16QAM | 1  | 3  | 22.08  | 21.99  | 21.83  |                     |
| 1.4             | 16QAM | 1  | 5  | 22.02  | 22.04  | 21.87  | 21.8                |
| 1.4             | 16QAM | 3  | 0  | 20.64  | 20.74  | 20.85  |                     |
| 1.4             | 16QAM | 3  | 1  | 20.62  | 20.64  | 20.74  |                     |
| 1.4             | 16QAM | 3  | 3  | 20.59  | 20.64  | 20.69  | 21.8                |
| 1.4             | 16QAM | 6  | 0  | 20.73  | 20.60  | 20.72  |                     |
| 1.4             | 64QAM | 1  | 0  | 20.82  | 20.97  | 20.90  |                     |
| 1.4             | 64QAM | 1  | 3  | 20.71  | 20.97  | 20.80  | 20.8                |
| 1.4             | 64QAM | 1  | 5  | 20.62  | 20.90  | 20.66  |                     |
| 1.4             | 64QAM | 3  | 0  | 19.67  | 19.69  | 19.72  |                     |
| 1.4             | 64QAM | 3  | 1  | 19.71  | 19.72  | 19.56  | 20.8                |
| 1.4             | 64QAM | 3  | 3  | 19.55  | 19.79  | 19.53  |                     |
| 1.4             | 64QAM | 6  | 0  | 19.56  | 19.59  | 19.63  |                     |

| Band 5 (Celluar Band) (dBm)<br>Part 22H(only on channel required) |            |         |           |             |                |              |                     |
|-------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                          | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                           |            |         |           | 20450       | 20525          | 20600        | 23.8                |
| Frequency (MHz)                                                   |            |         |           | 829         | 836.5          | 844          |                     |
| 10                                                                | QPSK       | 1       | 0         | 22.98       | 23.05          | 23.01        | 23.8                |
| 10                                                                | QPSK       | 1       | 25        | 23.00       | 22.99          | 22.86        |                     |
| 10                                                                | QPSK       | 1       | 49        | 22.93       | 22.91          | 22.85        |                     |
| 10                                                                | QPSK       | 25      | 0         | 21.95       | 21.97          | 21.92        |                     |
| 10                                                                | QPSK       | 25      | 12        | 21.90       | 21.97          | 21.79        | 22.8                |
| 10                                                                | QPSK       | 25      | 25        | 21.86       | 21.86          | 21.78        |                     |
| 10                                                                | QPSK       | 50      | 0         | 21.86       | 21.85          | 21.78        |                     |
| 10                                                                | 16QAM      | 1       | 0         | 22.37       | 22.27          | 22.17        |                     |
| 10                                                                | 16QAM      | 1       | 25        | 22.20       | 22.22          | 22.18        | 22.8                |
| 10                                                                | 16QAM      | 1       | 49        | 22.16       | 22.19          | 22.24        |                     |
| 10                                                                | 16QAM      | 25      | 0         | 20.98       | 21.08          | 21.11        |                     |
| 10                                                                | 16QAM      | 25      | 12        | 20.85       | 21.05          | 21.03        |                     |
| 10                                                                | 16QAM      | 25      | 25        | 20.89       | 20.88          | 20.86        | 21.8                |
| 10                                                                | 16QAM      | 50      | 0         | 20.92       | 20.99          | 20.91        |                     |
| 10                                                                | 64QAM      | 1       | 0         | 20.94       | 21.15          | 20.98        |                     |
| 10                                                                | 64QAM      | 1       | 25        | 20.81       | 21.04          | 20.94        |                     |
| 10                                                                | 64QAM      | 1       | 49        | 20.97       | 20.95          | 21.03        | 21.8                |
| 10                                                                | 64QAM      | 25      | 0         | 19.81       | 20.05          | 19.81        |                     |
| 10                                                                | 64QAM      | 25      | 12        | 19.69       | 19.98          | 19.72        |                     |
| 10                                                                | 64QAM      | 25      | 25        | 19.71       | 19.96          | 19.70        |                     |
| 10                                                                | 64QAM      | 50      | 0         | 19.62       | 19.79          | 19.89        | 20.8                |
| Channel                                                           |            |         |           | 20425       | 20525          | 20625        |                     |
| Frequency (MHz)                                                   |            |         |           | 826.5       | 836.5          | 846.5        | 23.8                |
| 5                                                                 | QPSK       | 1       | 0         | 23.00       | 23.01          | 22.95        |                     |
| 5                                                                 | QPSK       | 1       | 12        | 22.94       | 22.98          | 22.99        | 23.8                |
| 5                                                                 | QPSK       | 1       | 24        | 22.88       | 22.85          | 22.90        |                     |
| 5                                                                 | QPSK       | 12      | 0         | 22.13       | 22.19          | 22.03        |                     |
| 5                                                                 | QPSK       | 12      | 7         | 22.02       | 22.05          | 21.95        |                     |
| 5                                                                 | QPSK       | 12      | 13        | 21.81       | 21.96          | 21.83        | 22.8                |
| 5                                                                 | QPSK       | 25      | 0         | 21.94       | 22.03          | 22.00        |                     |
| 5                                                                 | 16QAM      | 1       | 0         | 22.16       | 22.25          | 22.25        |                     |
| 5                                                                 | 16QAM      | 1       | 12        | 22.30       | 22.13          | 22.21        |                     |
| 5                                                                 | 16QAM      | 1       | 24        | 22.02       | 22.20          | 22.17        | 22.8                |
| 5                                                                 | 16QAM      | 12      | 0         | 21.03       | 21.00          | 21.07        |                     |
| 5                                                                 | 16QAM      | 12      | 7         | 20.93       | 20.97          | 21.08        |                     |
| 5                                                                 | 16QAM      | 12      | 13        | 20.81       | 20.85          | 20.85        |                     |
| 5                                                                 | 16QAM      | 25      | 0         | 20.79       | 20.80          | 20.88        | 21.8                |
| 5                                                                 | 64QAM      | 1       | 0         | 20.94       | 20.99          | 21.10        |                     |
| 5                                                                 | 64QAM      | 1       | 12        | 20.88       | 20.96          | 20.88        |                     |
| 5                                                                 | 64QAM      | 1       | 24        | 20.80       | 21.04          | 21.01        |                     |
| 5                                                                 | 64QAM      | 12      | 0         | 19.78       | 19.96          | 19.97        | 20.8                |
| 5                                                                 | 64QAM      | 12      | 7         | 19.88       | 20.00          | 19.80        |                     |
| 5                                                                 | 64QAM      | 12      | 13        | 19.65       | 19.79          | 19.81        |                     |
| 5                                                                 | 64QAM      | 25      | 0         | 19.66       | 19.79          | 19.83        |                     |
| Channel                                                           |            |         |           | 20415       | 20525          | 20635        | 23.8                |
| Frequency (MHz)                                                   |            |         |           | 825.5       | 836.5          | 847.5        |                     |
| 3                                                                 | QPSK       | 1       | 0         | 23.01       | 23.02          | 22.88        | 23.8                |
| 3                                                                 | QPSK       | 1       | 8         | 23.00       | 22.97          | 22.93        |                     |
| 3                                                                 | QPSK       | 1       | 14        | 22.97       | 22.85          | 22.78        |                     |
| 3                                                                 | QPSK       | 8       | 0         | 21.99       | 22.08          | 21.91        |                     |
| 3                                                                 | QPSK       | 8       | 4         | 21.96       | 21.91          | 21.87        | 22.8                |
| 3                                                                 | QPSK       | 8       | 7         | 21.82       | 21.87          | 21.80        |                     |
| 3                                                                 | QPSK       | 15      | 0         | 21.81       | 21.99          | 21.93        |                     |
| 3                                                                 | 16QAM      | 1       | 0         | 22.25       | 22.33          | 22.15        |                     |
| 3                                                                 | 16QAM      | 1       | 8         | 22.19       | 22.22          | 22.04        | 22.8                |
| 3                                                                 | 16QAM      | 1       | 14        | 22.00       | 22.25          | 22.09        |                     |
| 3                                                                 | 16QAM      | 8       | 0         | 20.83       | 20.93          | 20.97        |                     |
| 3                                                                 | 16QAM      | 8       | 4         | 20.93       | 20.95          | 20.99        |                     |
| 3                                                                 | 16QAM      | 8       | 7         | 20.85       | 20.82          | 20.90        | 21.8                |
| 3                                                                 | 16QAM      | 15      | 0         | 20.84       | 20.81          | 20.87        |                     |
| 3                                                                 | 64QAM      | 1       | 0         | 20.89       | 21.04          | 21.09        |                     |
| 3                                                                 | 64QAM      | 1       | 8         | 20.81       | 21.06          | 21.04        |                     |
| 3                                                                 | 64QAM      | 1       | 14        | 20.87       | 21.02          | 20.83        | 21.8                |
| 3                                                                 | 64QAM      | 8       | 0         | 19.98       | 20.10          | 20.00        |                     |
| 3                                                                 | 64QAM      | 8       | 4         | 19.81       | 19.93          | 19.82        |                     |
| 3                                                                 | 64QAM      | 8       | 7         | 19.87       | 19.94          | 19.84        |                     |
| 3                                                                 | 64QAM      | 15      | 0         | 19.72       | 19.99          | 19.84        | 20.8                |
| Channel                                                           |            |         |           | 20407       | 20525          | 20643        |                     |
| Frequency (MHz)                                                   |            |         |           | 824.7       | 836.5          | 848.3        | 23.8                |
| 1.4                                                               | QPSK       | 1       | 0         | 22.95       | 23.00          | 22.93        |                     |
| 1.4                                                               | QPSK       | 1       | 3         | 22.91       | 22.85          | 22.90        | 23.8                |
| 1.4                                                               | QPSK       | 1       | 5         | 22.89       | 22.92          | 22.81        |                     |
| 1.4                                                               | QPSK       | 3       | 0         | 22.03       | 22.09          | 21.84        |                     |
| 1.4                                                               | QPSK       | 3       | 1         | 22.08       | 21.90          | 21.84        |                     |
| 1.4                                                               | QPSK       | 3       | 3         | 21.82       | 22.01          | 21.81        | 22.8                |
| 1.4                                                               | QPSK       | 6       | 0         | 21.90       | 21.87          | 21.95        |                     |
| 1.4                                                               | 16QAM      | 1       | 0         | 22.16       | 22.37          | 22.25        |                     |
| 1.4                                                               | 16QAM      | 1       | 3         | 22.34       | 22.21          | 22.04        |                     |
| 1.4                                                               | 16QAM      | 1       | 5         | 22.09       | 22.15          | 22.09        | 22.8                |
| 1.4                                                               | 16QAM      | 3       | 0         | 20.82       | 21.11          | 21.12        |                     |
| 1.4                                                               | 16QAM      | 3       | 1         | 20.83       | 21.03          | 21.08        |                     |
| 1.4                                                               | 16QAM      | 3       | 3         | 20.81       | 20.89          | 20.88        |                     |
| 1.4                                                               | 16QAM      | 6       | 0         | 20.91       | 20.97          | 20.83        | 21.8                |
| 1.4                                                               | 64QAM      | 1       | 0         | 21.09       | 21.17          | 21.07        |                     |
| 1.4                                                               | 64QAM      | 1       | 3         | 20.94       | 21.13          | 20.93        |                     |
| 1.4                                                               | 64QAM      | 1       | 5         | 20.93       | 20.88          | 21.03        |                     |
| 1.4                                                               | 64QAM      | 3       | 0         | 19.89       | 20.08          | 20.03        | 21.8                |
| 1.4                                                               | 64QAM      | 3       | 1         | 19.91       | 19.95          | 19.81        |                     |
| 1.4                                                               | 64QAM      | 3       | 3         | 19.85       | 20.00          | 19.83        |                     |
| 1.4                                                               | 64QAM      | 6       | 0         | 19.85       | 20.02          | 19.93        |                     |

| Band 7 (2600MHz Band) (dBm)<br>Part 27 |            |         |           |             |                |              |                     |
|----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                               | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                |            |         |           | 20850       | 21100          | 21350        |                     |
| Frequency (MHz)                        |            |         |           | 2510        | 2535           | 2560         |                     |
| 20                                     | QPSK       | 1       | 0         | 22.70       | 22.74          | 22.93        | 23.8                |
| 20                                     | QPSK       | 1       | 49        | 22.55       | 22.65          | 22.90        |                     |
| 20                                     | QPSK       | 1       | 99        | 22.62       | 22.59          | 22.79        |                     |
| 20                                     | QPSK       | 50      | 0         | 21.71       | 21.75          | 21.88        |                     |
| 20                                     | QPSK       | 50      | 24        | 21.51       | 21.56          | 21.76        | 22.8                |
| 20                                     | QPSK       | 50      | 50        | 21.56       | 21.58          | 21.81        |                     |
| 20                                     | QPSK       | 100     | 0         | 21.51       | 21.54          | 21.79        |                     |
| 20                                     | 16QAM      | 1       | 0         | 21.83       | 21.87          | 22.04        |                     |
| 20                                     | 16QAM      | 1       | 49        | 21.85       | 21.82          | 21.96        | 22.8                |
| 20                                     | 16QAM      | 1       | 99        | 21.82       | 21.76          | 21.95        |                     |
| 20                                     | 16QAM      | 50      | 0         | 20.63       | 20.60          | 20.86        |                     |
| 20                                     | 16QAM      | 50      | 24        | 20.59       | 20.71          | 20.83        |                     |
| 20                                     | 16QAM      | 50      | 50        | 20.53       | 20.55          | 20.69        | 21.8                |
| 20                                     | 16QAM      | 100     | 0         | 20.62       | 20.51          | 20.77        |                     |
| 20                                     | 64QAM      | 1       | 0         | 20.68       | 20.71          | 20.99        |                     |
| 20                                     | 64QAM      | 1       | 49        | 20.62       | 20.62          | 21.00        |                     |
| 20                                     | 64QAM      | 1       | 99        | 20.66       | 20.63          | 20.81        | 21.8                |
| 20                                     | 64QAM      | 50      | 0         | 19.61       | 19.72          | 19.86        |                     |
| 20                                     | 64QAM      | 50      | 24        | 19.58       | 19.69          | 19.70        |                     |
| 20                                     | 64QAM      | 50      | 50        | 19.53       | 19.54          | 19.63        |                     |
| 20                                     | 64QAM      | 100     | 0         | 19.56       | 19.58          | 19.72        | 20.8                |
| Channel                                |            |         |           | 20825       | 21100          | 21375        |                     |
| Frequency (MHz)                        |            |         |           | 2507.5      | 2535           | 2562.5       | Tune-up limit (dBm) |
| 15                                     | QPSK       | 1       | 0         | 22.68       | 22.70          | 22.90        | 23.8                |
| 15                                     | QPSK       | 1       | 37        | 22.60       | 22.59          | 22.85        |                     |
| 15                                     | QPSK       | 1       | 74        | 22.55       | 22.61          | 22.74        |                     |
| 15                                     | QPSK       | 36      | 0         | 21.75       | 21.77          | 21.85        |                     |
| 15                                     | QPSK       | 36      | 20        | 21.54       | 21.54          | 21.76        | 22.8                |
| 15                                     | QPSK       | 36      | 39        | 21.56       | 21.59          | 21.82        |                     |
| 15                                     | QPSK       | 75      | 0         | 21.64       | 21.58          | 21.80        |                     |
| 15                                     | 16QAM      | 1       | 0         | 21.99       | 21.98          | 22.03        |                     |
| 15                                     | 16QAM      | 1       | 37        | 21.97       | 21.78          | 21.93        | 22.8                |
| 15                                     | 16QAM      | 1       | 74        | 21.73       | 21.94          | 22.01        |                     |
| 15                                     | 16QAM      | 36      | 0         | 20.63       | 20.62          | 20.87        |                     |
| 15                                     | 16QAM      | 36      | 20        | 20.68       | 20.62          | 20.75        |                     |
| 15                                     | 16QAM      | 36      | 39        | 20.55       | 20.53          | 20.85        | 21.8                |
| 15                                     | 16QAM      | 75      | 0         | 20.60       | 20.56          | 20.75        |                     |
| 15                                     | 64QAM      | 1       | 0         | 20.74       | 20.82          | 20.94        |                     |
| 15                                     | 64QAM      | 1       | 37        | 20.63       | 20.75          | 21.05        |                     |
| 15                                     | 64QAM      | 1       | 74        | 20.68       | 20.59          | 20.81        | 21.8                |
| 15                                     | 64QAM      | 36      | 0         | 19.55       | 19.72          | 19.83        |                     |
| 15                                     | 64QAM      | 36      | 20        | 19.47       | 19.50          | 19.65        |                     |
| 15                                     | 64QAM      | 36      | 39        | 19.59       | 19.53          | 19.73        |                     |
| 15                                     | 64QAM      | 75      | 0         | 19.55       | 19.57          | 19.68        | 20.8                |
| Channel                                |            |         |           | 20800       | 21100          | 21400        |                     |
| Frequency (MHz)                        |            |         |           | 2505        | 2535           | 2565         | Tune-up limit (dBm) |
| 10                                     | QPSK       | 1       | 0         | 22.61       | 22.69          | 22.89        | 23.8                |
| 10                                     | QPSK       | 1       | 25        | 22.59       | 22.53          | 22.80        |                     |
| 10                                     | QPSK       | 1       | 49        | 22.60       | 22.57          | 22.72        |                     |
| 10                                     | QPSK       | 25      | 0         | 21.72       | 21.74          | 21.86        |                     |
| 10                                     | QPSK       | 25      | 12        | 21.65       | 21.73          | 21.84        | 22.8                |
| 10                                     | QPSK       | 25      | 25        | 21.57       | 21.65          | 21.69        |                     |
| 10                                     | QPSK       | 50      | 0         | 21.62       | 21.56          | 21.68        |                     |
| 10                                     | 16QAM      | 1       | 0         | 21.88       | 21.95          | 22.09        |                     |
| 10                                     | 16QAM      | 1       | 25        | 21.80       | 21.87          | 22.08        | 22.8                |
| 10                                     | 16QAM      | 1       | 49        | 21.71       | 21.69          | 22.05        |                     |
| 10                                     | 16QAM      | 25      | 0         | 20.68       | 20.75          | 20.90        |                     |
| 10                                     | 16QAM      | 25      | 12        | 20.53       | 20.55          | 20.89        |                     |
| 10                                     | 16QAM      | 25      | 25        | 20.56       | 20.61          | 20.89        | 21.8                |
| 10                                     | 16QAM      | 50      | 0         | 20.53       | 20.59          | 20.85        |                     |
| 10                                     | 64QAM      | 1       | 0         | 20.66       | 20.69          | 20.83        |                     |
| 10                                     | 64QAM      | 1       | 25        | 20.59       | 20.75          | 20.82        |                     |
| 10                                     | 64QAM      | 1       | 49        | 20.60       | 20.67          | 20.89        | 21.8                |
| 10                                     | 64QAM      | 25      | 0         | 19.61       | 19.75          | 19.80        |                     |
| 10                                     | 64QAM      | 25      | 12        | 19.60       | 19.69          | 19.64        |                     |
| 10                                     | 64QAM      | 25      | 25        | 19.55       | 19.55          | 19.70        |                     |
| 10                                     | 64QAM      | 50      | 0         | 19.52       | 19.56          | 19.67        | 20.8                |
| Channel                                |            |         |           | 20775       | 21100          | 21425        |                     |
| Frequency (MHz)                        |            |         |           | 2502.5      | 2535           | 2567.5       | Tune-up limit (dBm) |
| 5                                      | QPSK       | 1       | 0         | 22.68       | 22.71          | 22.86        | 23.8                |
| 5                                      | QPSK       | 1       | 12        | 22.61       | 22.63          | 22.84        |                     |
| 5                                      | QPSK       | 1       | 24        | 22.65       | 22.62          | 22.78        |                     |
| 5                                      | QPSK       | 12      | 0         | 21.67       | 21.72          | 21.84        |                     |
| 5                                      | QPSK       | 12      | 7         | 21.71       | 21.69          | 21.82        | 22.8                |
| 5                                      | QPSK       | 12      | 13        | 21.55       | 21.60          | 21.68        |                     |
| 5                                      | QPSK       | 25      | 0         | 21.61       | 21.68          | 21.74        |                     |
| 5                                      | 16QAM      | 1       | 0         | 21.85       | 21.89          | 22.05        |                     |
| 5                                      | 16QAM      | 1       | 12        | 21.79       | 21.78          | 22.03        | 22.8                |
| 5                                      | 16QAM      | 1       | 24        | 21.86       | 21.72          | 21.99        |                     |
| 5                                      | 16QAM      | 12      | 0         | 20.58       | 20.63          | 20.86        |                     |
| 5                                      | 16QAM      | 12      | 7         | 20.51       | 20.53          | 20.81        |                     |
| 5                                      | 16QAM      | 12      | 13        | 20.60       | 20.58          | 20.67        | 21.8                |
| 5                                      | 16QAM      | 25      | 0         | 20.57       | 20.53          | 20.77        |                     |
| 5                                      | 64QAM      | 1       | 0         | 20.71       | 20.72          | 20.83        |                     |
| 5                                      | 64QAM      | 1       | 12        | 20.62       | 20.70          | 20.78        |                     |
| 5                                      | 64QAM      | 1       | 24        | 20.55       | 20.67          | 20.79        | 21.8                |
| 5                                      | 64QAM      | 12      | 0         | 19.65       | 19.58          | 19.88        |                     |
| 5                                      | 64QAM      | 12      | 7         | 19.53       | 19.56          | 19.79        |                     |
| 5                                      | 64QAM      | 12      | 13        | 19.53       | 19.55          | 19.60        |                     |
| 5                                      | 64QAM      | 25      | 0         | 19.59       | 19.68          | 19.69        | 20.8                |

| Band 12 (700MHz Low Band) (dBm)<br>Part 27F(only on channel required) |            |         |           |             |                |              |                     |  |
|-----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|
| BW [MHz]                                                              | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |
| Channel                                                               |            |         |           | 23060       | 23095          | 23130        |                     |  |
| Frequency (MHz)                                                       |            |         |           | 704         | 707.5          | 711          |                     |  |
| 10                                                                    | QPSK       | 1       | 0         | 24.07       | 24.12          | 24.09        | 24.8                |  |
| 10                                                                    | QPSK       | 1       | 25        | 23.87       | 23.89          | 23.84        |                     |  |
| 10                                                                    | QPSK       | 1       | 49        | 23.90       | 24.02          | 24.05        |                     |  |
| 10                                                                    | QPSK       | 25      | 0         | 23.06       | 23.15          | 23.10        | 23.8                |  |
| 10                                                                    | QPSK       | 25      | 12        | 22.86       | 23.01          | 22.91        |                     |  |
| 10                                                                    | QPSK       | 25      | 25        | 22.87       | 22.95          | 22.91        |                     |  |
| 10                                                                    | QPSK       | 50      | 0         | 22.79       | 22.98          | 22.91        | 23.8                |  |
| 10                                                                    | 16QAM      | 1       | 0         | 23.22       | 23.33          | 23.18        |                     |  |
| 10                                                                    | 16QAM      | 1       | 25        | 23.05       | 23.07          | 23.05        |                     |  |
| 10                                                                    | 16QAM      | 1       | 49        | 23.10       | 23.23          | 23.00        | 22.8                |  |
| 10                                                                    | 16QAM      | 25      | 0         | 21.77       | 22.00          | 21.84        |                     |  |
| 10                                                                    | 16QAM      | 25      | 12        | 21.73       | 22.04          | 22.00        |                     |  |
| 10                                                                    | 16QAM      | 25      | 25        | 21.84       | 21.71          | 21.82        | 22.8                |  |
| 10                                                                    | 16QAM      | 50      | 0         | 21.78       | 21.89          | 21.78        |                     |  |
| 10                                                                    | 64QAM      | 1       | 0         | 21.78       | 22.15          | 21.86        |                     |  |
| 10                                                                    | 64QAM      | 1       | 25        | 21.86       | 22.13          | 22.00        | 21.8                |  |
| 10                                                                    | 64QAM      | 1       | 49        | 21.91       | 21.89          | 21.80        |                     |  |
| 10                                                                    | 64QAM      | 25      | 0         | 20.86       | 21.02          | 20.85        |                     |  |
| 10                                                                    | 64QAM      | 25      | 12        | 20.81       | 20.82          | 20.90        | 21.8                |  |
| 10                                                                    | 64QAM      | 25      | 25        | 20.72       | 20.87          | 20.85        |                     |  |
| 10                                                                    | 64QAM      | 50      | 0         | 20.72       | 20.74          | 20.78        |                     |  |
| Channel                                                               |            |         |           | 23035       | 23095          | 23155        | Tune-up limit (dBm) |  |
| Frequency (MHz)                                                       |            |         |           | 701.5       | 707.5          | 713.5        |                     |  |
| 5                                                                     | QPSK       | 1       | 0         | 23.99       | 24.07          | 24.01        | 24.8                |  |
| 5                                                                     | QPSK       | 1       | 12        | 23.91       | 24.01          | 23.93        |                     |  |
| 5                                                                     | QPSK       | 1       | 24        | 23.93       | 23.83          | 23.87        |                     |  |
| 5                                                                     | QPSK       | 12      | 0         | 22.82       | 23.02          | 22.96        | 23.8                |  |
| 5                                                                     | QPSK       | 12      | 7         | 22.79       | 22.98          | 22.92        |                     |  |
| 5                                                                     | QPSK       | 12      | 13        | 22.79       | 22.74          | 22.83        |                     |  |
| 5                                                                     | QPSK       | 25      | 0         | 22.70       | 22.79          | 22.84        | 23.8                |  |
| 5                                                                     | 16QAM      | 1       | 0         | 23.06       | 23.27          | 23.22        |                     |  |
| 5                                                                     | 16QAM      | 1       | 12        | 23.16       | 23.23          | 23.03        |                     |  |
| 5                                                                     | 16QAM      | 1       | 24        | 23.14       | 23.14          | 23.07        | 22.8                |  |
| 5                                                                     | 16QAM      | 12      | 0         | 21.79       | 22.06          | 21.87        |                     |  |
| 5                                                                     | 16QAM      | 12      | 7         | 21.82       | 21.89          | 21.88        |                     |  |
| 5                                                                     | 16QAM      | 12      | 13        | 21.81       | 21.79          | 21.81        | 22.8                |  |
| 5                                                                     | 16QAM      | 25      | 0         | 21.82       | 21.81          | 21.80        |                     |  |
| 5                                                                     | 64QAM      | 1       | 0         | 21.85       | 22.06          | 22.00        |                     |  |
| 5                                                                     | 64QAM      | 1       | 12        | 21.80       | 22.08          | 21.97        | 21.8                |  |
| 5                                                                     | 64QAM      | 1       | 24        | 21.86       | 22.07          | 21.82        |                     |  |
| 5                                                                     | 64QAM      | 12      | 0         | 20.89       | 21.04          | 20.99        |                     |  |
| 5                                                                     | 64QAM      | 12      | 7         | 20.83       | 20.86          | 20.83        | 21.8                |  |
| 5                                                                     | 64QAM      | 12      | 13        | 20.77       | 20.78          | 20.67        |                     |  |
| 5                                                                     | 64QAM      | 25      | 0         | 20.65       | 20.83          | 20.82        |                     |  |
| Channel                                                               |            |         |           | 23025       | 23095          | 23165        | Tune-up limit (dBm) |  |
| Frequency (MHz)                                                       |            |         |           | 700.5       | 707.5          | 714.5        |                     |  |
| 3                                                                     | QPSK       | 1       | 0         | 24.02       | 24.09          | 24.05        | 24.8                |  |
| 3                                                                     | QPSK       | 1       | 8         | 23.97       | 24.05          | 24.00        |                     |  |
| 3                                                                     | QPSK       | 1       | 14        | 23.75       | 23.90          | 23.73        |                     |  |
| 3                                                                     | QPSK       | 8       | 0         | 23.01       | 23.06          | 22.95        | 23.8                |  |
| 3                                                                     | QPSK       | 8       | 4         | 22.88       | 22.87          | 22.79        |                     |  |
| 3                                                                     | QPSK       | 8       | 7         | 22.88       | 22.82          | 22.74        |                     |  |
| 3                                                                     | QPSK       | 15      | 0         | 22.79       | 22.85          | 22.82        | 23.8                |  |
| 3                                                                     | 16QAM      | 1       | 0         | 23.22       | 23.21          | 23.26        |                     |  |
| 3                                                                     | 16QAM      | 1       | 8         | 23.03       | 23.06          | 23.05        |                     |  |
| 3                                                                     | 16QAM      | 1       | 14        | 23.05       | 23.24          | 23.14        | 22.8                |  |
| 3                                                                     | 16QAM      | 8       | 0         | 21.75       | 22.07          | 21.95        |                     |  |
| 3                                                                     | 16QAM      | 8       | 4         | 21.89       | 21.83          | 21.96        |                     |  |
| 3                                                                     | 16QAM      | 8       | 7         | 21.83       | 21.84          | 21.71        | 22.8                |  |
| 3                                                                     | 16QAM      | 15      | 0         | 21.69       | 21.73          | 21.71        |                     |  |
| 3                                                                     | 64QAM      | 1       | 0         | 21.97       | 22.02          | 21.92        |                     |  |
| 3                                                                     | 64QAM      | 1       | 8         | 21.89       | 22.13          | 21.90        | 21.8                |  |
| 3                                                                     | 64QAM      | 1       | 14        | 21.83       | 21.90          | 22.02        |                     |  |
| 3                                                                     | 64QAM      | 8       | 0         | 20.76       | 20.91          | 20.85        |                     |  |
| 3                                                                     | 64QAM      | 8       | 4         | 20.65       | 20.93          | 20.75        | 21.8                |  |
| 3                                                                     | 64QAM      | 8       | 7         | 20.72       | 20.79          | 20.68        |                     |  |
| 3                                                                     | 64QAM      | 15      | 0         | 20.84       | 20.90          | 20.93        |                     |  |
| Channel                                                               |            |         |           | 23017       | 23095          | 23173        | Tune-up limit (dBm) |  |
| Frequency (MHz)                                                       |            |         |           | 699.7       | 707.5          | 715.3        |                     |  |
| 1.4                                                                   | QPSK       | 1       | 0         | 24.03       | 24.08          | 23.99        | 24.8                |  |
| 1.4                                                                   | QPSK       | 1       | 3         | 23.89       | 23.98          | 23.89        |                     |  |
| 1.4                                                                   | QPSK       | 1       | 5         | 23.81       | 23.87          | 23.76        |                     |  |
| 1.4                                                                   | QPSK       | 3       | 0         | 22.86       | 23.00          | 22.96        | 23.8                |  |
| 1.4                                                                   | QPSK       | 3       | 1         | 22.80       | 23.05          | 22.90        |                     |  |
| 1.4                                                                   | QPSK       | 3       | 3         | 22.80       | 22.88          | 22.91        |                     |  |
| 1.4                                                                   | QPSK       | 6       | 0         | 22.80       | 22.99          | 22.88        | 23.8                |  |
| 1.4                                                                   | 16QAM      | 1       | 0         | 23.07       | 23.24          | 23.17        |                     |  |
| 1.4                                                                   | 16QAM      | 1       | 3         | 23.08       | 23.03          | 23.08        |                     |  |
| 1.4                                                                   | 16QAM      | 1       | 5         | 22.90       | 23.15          | 23.03        | 22.8                |  |
| 1.4                                                                   | 16QAM      | 3       | 0         | 21.91       | 22.04          | 22.01        |                     |  |
| 1.4                                                                   | 16QAM      | 3       | 1         | 21.90       | 21.90          | 21.92        |                     |  |
| 1.4                                                                   | 16QAM      | 3       | 3         | 21.85       | 21.84          | 21.87        | 22.8                |  |
| 1.4                                                                   | 16QAM      | 6       | 0         | 21.78       | 21.92          | 21.75        |                     |  |
| 1.4                                                                   | 64QAM      | 1       | 0         | 21.98       | 21.91          | 22.00        |                     |  |
| 1.4                                                                   | 64QAM      | 1       | 3         | 21.72       | 22.03          | 21.98        | 21.8                |  |
| 1.4                                                                   | 64QAM      | 1       | 5         | 21.72       | 21.92          | 21.98        |                     |  |
| 1.4                                                                   | 64QAM      | 3       | 0         | 20.89       | 21.06          | 20.88        |                     |  |
| 1.4                                                                   | 64QAM      | 3       | 1         | 20.91       | 20.83          | 20.81        | 21.8                |  |
| 1.4                                                                   | 64QAM      | 3       | 3         | 20.83       | 20.82          | 20.84        |                     |  |
| 1.4                                                                   | 64QAM      | 6       | 0         | 20.74       | 20.94          | 20.69        |                     |  |

| Band 13(700MHz Band) (dBm)<br>Part 27F |            |         |           |             |                |              |                     |  |
|----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|--|
| BW [MHz]                               | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |  |
| Channel                                |            |         |           | 23230       |                |              |                     |  |
| Frequency (MHz)                        |            |         |           | 782         |                |              |                     |  |
| 10                                     | QPSK       | 1       | 0         |             | 24.03          |              | 24.8                |  |
| 10                                     | QPSK       | 1       | 25        |             | 23.95          |              |                     |  |
| 10                                     | QPSK       | 1       | 49        |             | 23.88          |              |                     |  |
| 10                                     | QPSK       | 25      | 0         |             | 22.96          |              | 23.8                |  |
| 10                                     | QPSK       | 25      | 12        |             | 22.84          |              |                     |  |
| 10                                     | QPSK       | 25      | 25        |             | 22.88          |              |                     |  |
| 10                                     | QPSK       | 50      | 0         |             | 22.74          |              | 23.8                |  |
| 10                                     | 16QAM      | 1       | 0         |             | 23.11          |              |                     |  |
| 10                                     | 16QAM      | 1       | 25        |             | 23.03          |              |                     |  |
| 10                                     | 16QAM      | 1       | 49        |             | 22.98          |              | 22.8                |  |
| 10                                     | 16QAM      | 25      | 0         |             | 21.94          |              |                     |  |
| 10                                     | 16QAM      | 25      | 12        |             | 21.90          |              |                     |  |
| 10                                     | 16QAM      | 25      | 25        |             | 21.80          |              | 22.8                |  |
| 10                                     | 16QAM      | 50      | 0         |             | 21.99          |              |                     |  |
| 10                                     | 64QAM      | 1       | 0         |             | 21.95          |              |                     |  |
| 10                                     | 64QAM      | 1       | 25        |             | 21.87          |              | 21.8                |  |
| 10                                     | 64QAM      | 1       | 49        |             | 21.96          |              |                     |  |
| 10                                     | 64QAM      | 25      | 0         |             | 20.92          |              |                     |  |
| 10                                     | 64QAM      | 25      | 12        |             | 20.75          |              | 21.8                |  |
| 10                                     | 64QAM      | 25      | 25        |             | 20.84          |              |                     |  |
| 10                                     | 64QAM      | 50      | 0         |             | 20.78          |              |                     |  |
| Channel                                |            |         |           | 23205       | 23230          | 23255        | Tune-up limit (dBm) |  |
| Frequency (MHz)                        |            |         |           | 779.5       | 782            | 784.5        |                     |  |
| 5                                      | QPSK       | 1       | 0         | 23.94       | 23.99          | 23.92        | 24.8                |  |
| 5                                      | QPSK       | 1       | 12        | 23.89       | 23.96          | 23.88        |                     |  |
| 5                                      | QPSK       | 1       | 24        | 23.73       | 23.84          | 23.86        |                     |  |
| 5                                      | QPSK       | 12      | 0         | 22.83       | 23.08          | 22.96        | 23.8                |  |
| 5                                      | QPSK       | 12      | 7         | 22.83       | 23.01          | 22.95        |                     |  |
| 5                                      | QPSK       | 12      | 13        | 22.77       | 22.85          | 22.79        |                     |  |
| 5                                      | QPSK       | 25      | 0         | 22.81       | 22.77          | 22.83        | 23.8                |  |
| 5                                      | 16QAM      | 1       | 0         | 23.22       | 23.15          | 23.07        |                     |  |
| 5                                      | 16QAM      | 1       | 12        | 23.22       | 23.15          | 23.23        |                     |  |
| 5                                      | 16QAM      | 1       | 24        | 23.14       | 23.19          | 23.03        | 22.8                |  |
| 5                                      | 16QAM      | 12      | 0         | 21.88       | 21.90          | 22.00        |                     |  |
| 5                                      | 16QAM      | 12      | 7         | 21.85       | 22.02          | 21.84        |                     |  |
| 5                                      | 16QAM      | 12      | 13        | 21.84       | 21.78          | 21.87        | 22.8                |  |
| 5                                      | 16QAM      | 25      | 0         | 21.67       | 21.79          | 21.74        |                     |  |
| 5                                      | 64QAM      | 1       | 0         | 21.77       | 21.93          | 22.02        |                     |  |
| 5                                      | 64QAM      | 1       | 12        | 21.71       | 22.05          | 22.02        | 21.8                |  |
| 5                                      | 64QAM      | 1       | 24        | 21.79       | 21.91          | 21.92        |                     |  |
| 5                                      | 64QAM      | 12      | 0         | 20.88       | 20.91          | 20.95        |                     |  |
| 5                                      | 64QAM      | 12      | 7         | 20.79       | 20.87          | 20.85        | 21.8                |  |
| 5                                      | 64QAM      | 12      | 13        | 20.75       | 20.70          | 20.80        |                     |  |
| 5                                      | 64QAM      | 25      | 0         | 20.72       | 20.93          | 20.87        |                     |  |

| Band 66 (dBm)   |            |         |           |             |                |              |                     |
|-----------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |            |         |           | 132072      | 132322         | 132572       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1720        | 1745           | 1770         |                     |
| 20              | QPSK       | 1       | 0         | 22.85       | 22.97          | 22.93        | 23.8                |
| 20              | QPSK       | 1       | 49        | 22.79       | 22.91          | 22.86        |                     |
| 20              | QPSK       | 1       | 99        | 22.68       | 22.89          | 22.74        |                     |
| 20              | QPSK       | 50      | 0         | 21.83       | 21.92          | 21.87        | 22.8                |
| 20              | QPSK       | 50      | 24        | 21.83       | 21.91          | 21.82        |                     |
| 20              | QPSK       | 50      | 50        | 21.85       | 21.75          | 21.77        |                     |
| 20              | QPSK       | 100     | 0         | 21.75       | 21.82          | 21.83        | 22.8                |
| 20              | 16QAM      | 1       | 0         | 21.98       | 22.07          | 22.06        |                     |
| 20              | 16QAM      | 1       | 49        | 22.02       | 21.95          | 21.89        |                     |
| 20              | 16QAM      | 1       | 99        | 21.87       | 21.96          | 22.03        | 21.8                |
| 20              | 16QAM      | 50      | 0         | 20.88       | 20.95          | 20.90        |                     |
| 20              | 16QAM      | 50      | 24        | 20.70       | 20.87          | 20.95        |                     |
| 20              | 16QAM      | 50      | 50        | 20.71       | 20.77          | 20.73        | 21.8                |
| 20              | 16QAM      | 100     | 0         | 20.70       | 20.73          | 20.75        |                     |
| 20              | 64QAM      | 1       | 0         | 20.81       | 20.92          | 20.85        |                     |
| 20              | 64QAM      | 1       | 49        | 20.75       | 20.89          | 20.92        | 20.8                |
| 20              | 64QAM      | 1       | 99        | 20.67       | 20.88          | 20.82        |                     |
| 20              | 64QAM      | 50      | 0         | 19.72       | 19.86          | 19.82        |                     |
| 20              | 64QAM      | 50      | 24        | 19.57       | 19.78          | 19.69        | 20.8                |
| 20              | 64QAM      | 50      | 50        | 19.71       | 19.82          | 19.59        |                     |
| 20              | 64QAM      | 100     | 0         | 19.59       | 19.82          | 19.84        |                     |
| Channel         |            |         |           | 132047      | 132322         | 132597       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15              | QPSK       | 1       | 0         | 22.81       | 22.94          | 22.90        | 23.8                |
| 15              | QPSK       | 1       | 37        | 22.72       | 22.83          | 22.68        |                     |
| 15              | QPSK       | 1       | 74        | 22.71       | 22.66          | 22.63        |                     |
| 15              | QPSK       | 36      | 0         | 21.78       | 21.96          | 21.87        | 22.8                |
| 15              | QPSK       | 36      | 20        | 21.80       | 21.78          | 21.70        |                     |
| 15              | QPSK       | 36      | 39        | 21.70       | 21.86          | 21.73        |                     |
| 15              | QPSK       | 75      | 0         | 21.74       | 21.73          | 21.75        | 22.8                |
| 15              | 16QAM      | 1       | 0         | 22.01       | 22.09          | 22.05        |                     |
| 15              | 16QAM      | 1       | 37        | 22.03       | 22.00          | 21.91        |                     |
| 15              | 16QAM      | 1       | 74        | 21.97       | 21.96          | 22.06        | 21.8                |
| 15              | 16QAM      | 36      | 0         | 20.83       | 20.93          | 20.95        |                     |
| 15              | 16QAM      | 36      | 20        | 20.78       | 20.86          | 20.78        |                     |
| 15              | 16QAM      | 36      | 39        | 20.73       | 20.81          | 20.85        | 21.8                |
| 15              | 16QAM      | 75      | 0         | 20.66       | 20.78          | 20.82        |                     |
| 15              | 64QAM      | 1       | 0         | 20.84       | 20.97          | 20.90        |                     |
| 15              | 64QAM      | 1       | 37        | 20.67       | 20.91          | 20.80        | 20.8                |
| 15              | 64QAM      | 1       | 74        | 20.73       | 20.84          | 20.82        |                     |
| 15              | 64QAM      | 36      | 0         | 19.84       | 19.90          | 19.85        |                     |
| 15              | 64QAM      | 36      | 20        | 19.63       | 19.67          | 19.57        | 20.8                |
| 15              | 64QAM      | 36      | 39        | 19.72       | 19.61          | 19.74        |                     |
| 15              | 64QAM      | 75      | 0         | 19.68       | 19.79          | 19.59        |                     |
| Channel         |            |         |           | 132022      | 132322         | 132622       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1715        | 1745           | 1775         |                     |
| 10              | QPSK       | 1       | 0         | 22.84       | 22.90          | 22.86        | 23.8                |
| 10              | QPSK       | 1       | 25        | 22.83       | 22.86          | 22.72        |                     |
| 10              | QPSK       | 1       | 49        | 22.73       | 22.85          | 22.61        |                     |
| 10              | QPSK       | 25      | 0         | 21.79       | 21.93          | 21.90        | 22.8                |
| 10              | QPSK       | 25      | 12        | 21.86       | 21.83          | 21.71        |                     |
| 10              | QPSK       | 25      | 25        | 21.63       | 21.72          | 21.80        |                     |
| 10              | QPSK       | 50      | 0         | 21.75       | 21.77          | 21.83        | 22.8                |
| 10              | 16QAM      | 1       | 0         | 22.02       | 22.10          | 22.09        |                     |
| 10              | 16QAM      | 1       | 25        | 21.92       | 22.03          | 21.96        |                     |
| 10              | 16QAM      | 1       | 49        | 21.94       | 22.04          | 22.07        | 21.8                |
| 10              | 16QAM      | 25      | 0         | 20.78       | 20.96          | 20.92        |                     |
| 10              | 16QAM      | 25      | 12        | 20.71       | 20.88          | 20.95        |                     |
| 10              | 16QAM      | 25      | 25        | 21.69       | 20.66          | 20.71        | 21.8                |
| 10              | 16QAM      | 50      | 0         | 20.84       | 20.70          | 20.80        |                     |
| 10              | 64QAM      | 1       | 0         | 20.79       | 20.87          | 20.89        |                     |
| 10              | 64QAM      | 1       | 25        | 20.87       | 20.90          | 20.79        | 20.8                |
| 10              | 64QAM      | 1       | 49        | 20.71       | 20.97          | 20.69        |                     |
| 10              | 64QAM      | 25      | 0         | 19.79       | 19.87          | 19.84        |                     |
| 10              | 64QAM      | 25      | 12        | 19.72       | 19.79          | 19.63        | 20.8                |
| 10              | 64QAM      | 25      | 25        | 19.62       | 19.68          | 19.81        |                     |
| 10              | 64QAM      | 50      | 0         | 19.66       | 19.73          | 19.76        |                     |
| Channel         |            |         |           | 131997      | 132322         | 132647       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5               | QPSK       | 1       | 0         | 22.79       | 22.91          | 22.85        | 23.8                |
| 5               | QPSK       | 1       | 12        | 22.73       | 22.90          | 22.75        |                     |
| 5               | QPSK       | 1       | 24        | 22.79       | 22.80          | 22.63        |                     |
| 5               | QPSK       | 12      | 0         | 21.90       | 21.94          | 21.90        | 22.8                |
| 5               | QPSK       | 12      | 7         | 21.84       | 21.93          | 21.69        |                     |
| 5               | QPSK       | 12      | 13        | 21.72       | 21.74          | 21.71        |                     |
| 5               | QPSK       | 25      | 0         | 21.83       | 21.88          | 21.66        | 22.8                |
| 5               | 16QAM      | 1       | 0         | 22.08       | 22.10          | 22.07        |                     |
| 5               | 16QAM      | 1       | 12        | 21.96       | 22.03          | 22.02        |                     |
| 5               | 16QAM      | 1       | 24        | 22.03       | 22.05          | 21.96        | 21.8                |
| 5               | 16QAM      | 12      | 0         | 20.85       | 20.81          | 20.79        |                     |
| 5               | 16QAM      | 12      | 7         | 20.82       | 20.91          | 20.71        |                     |
| 5               | 16QAM      | 12      | 13        | 20.75       | 20.74          | 20.65        | 21.8                |
| 5               | 16QAM      | 25      | 0         | 20.66       | 20.88          | 20.63        |                     |
| 5               | 64QAM      | 1       | 0         | 20.96       | 20.91          | 20.86        |                     |
| 5               | 64QAM      | 1       | 12        | 20.92       | 20.84          | 20.80        | 20.8                |
| 5               | 64QAM      | 1       | 24        | 20.79       | 20.79          | 20.73        |                     |
| 5               | 64QAM      | 12      | 0         | 19.61       | 19.84          | 19.77        |                     |
| 5               | 64QAM      | 12      | 7         | 19.78       | 19.67          | 19.56        | 20.8                |
| 5               | 64QAM      | 12      | 13        | 19.64       | 19.70          | 19.57        |                     |
| 5               | 64QAM      | 25      | 0         | 19.59       | 19.80          | 19.80        |                     |
| Channel         |            |         |           | 131987      | 132322         | 132697       | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3               | QPSK       | 1       | 0         | 22.83       | 22.92          | 22.87        | 23.8                |
| 3               | QPSK       | 1       | 8         | 22.86       | 22.85          | 22.81        |                     |
| 3               | QPSK       | 1       | 14        | 22.76       | 22.66          | 22.64        |                     |

|                 |       |    |    |         |         |         |                        |
|-----------------|-------|----|----|---------|---------|---------|------------------------|
| 3               | QPSK  | 8  | 0  | 21.90   | 21.92   | 21.77   | 22.8                   |
| 3               | QPSK  | 8  | 4  | 21.71   | 21.78   | 21.79   |                        |
| 3               | QPSK  | 8  | 7  | 21.64   | 21.73   | 21.65   |                        |
| 3               | QPSK  | 15 | 0  | 21.88   | 21.87   | 21.70   | 22.8                   |
| 3               | 16QAM | 1  | 0  | 22.05   | 22.10   | 21.98   |                        |
| 3               | 16QAM | 1  | 8  | 21.99   | 22.08   | 21.93   |                        |
| 3               | 16QAM | 1  | 14 | 21.86   | 21.99   | 21.98   | 21.8                   |
| 3               | 16QAM | 8  | 0  | 20.82   | 20.78   | 20.87   |                        |
| 3               | 16QAM | 8  | 4  | 20.87   | 20.92   | 20.80   |                        |
| 3               | 16QAM | 8  | 7  | 20.67   | 20.60   | 20.82   | 21.8                   |
| 3               | 16QAM | 15 | 0  | 20.82   | 20.65   | 20.66   |                        |
| 3               | 64QAM | 1  | 0  | 20.92   | 21.06   | 20.92   |                        |
| 3               | 64QAM | 1  | 8  | 20.82   | 20.93   | 20.72   | 20.8                   |
| 3               | 64QAM | 1  | 14 | 20.77   | 20.97   | 20.72   |                        |
| 3               | 64QAM | 8  | 0  | 19.68   | 19.99   | 19.80   |                        |
| 3               | 64QAM | 8  | 4  | 19.63   | 19.90   | 19.65   | 20.8                   |
| 3               | 64QAM | 8  | 7  | 19.66   | 19.75   | 19.67   |                        |
| 3               | 64QAM | 15 | 0  | 19.64   | 19.64   | 19.65   |                        |
| Channel         |       |    |    | 13197.9 | 13232.2 | 13266.5 | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1710.7  | 1745    | 1779.3  |                        |
| 1.4             | QPSK  | 1  | 0  | 22.84   | 22.89   | 22.81   | 23.8                   |
| 1.4             | QPSK  | 1  | 3  | 22.87   | 22.82   | 22.67   |                        |
| 1.4             | QPSK  | 1  | 5  | 22.71   | 22.77   | 22.62   |                        |
| 1.4             | QPSK  | 3  | 0  | 21.86   | 21.86   | 21.89   |                        |
| 1.4             | QPSK  | 3  | 1  | 21.81   | 21.85   | 21.81   |                        |
| 1.4             | QPSK  | 3  | 3  | 21.79   | 21.77   | 21.80   |                        |
| 1.4             | QPSK  | 6  | 0  | 21.77   | 21.70   | 21.65   | 22.8                   |
| 1.4             | 16QAM | 1  | 0  | 22.00   | 22.08   | 22.02   |                        |
| 1.4             | 16QAM | 1  | 3  | 22.06   | 22.07   | 22.01   |                        |
| 1.4             | 16QAM | 1  | 5  | 22.00   | 21.93   | 22.05   |                        |
| 1.4             | 16QAM | 3  | 0  | 20.78   | 20.89   | 20.84   |                        |
| 1.4             | 16QAM | 3  | 1  | 20.76   | 20.92   | 20.96   |                        |
| 1.4             | 16QAM | 3  | 3  | 20.79   | 20.86   | 20.81   | 21.8                   |
| 1.4             | 16QAM | 6  | 0  | 20.84   | 20.83   | 20.67   |                        |
| 1.4             | 64QAM | 1  | 0  | 20.72   | 20.89   | 20.77   |                        |
| 1.4             | 64QAM | 1  | 3  | 20.84   | 20.86   | 20.72   |                        |
| 1.4             | 64QAM | 1  | 5  | 20.72   | 20.89   | 20.84   |                        |
| 1.4             | 64QAM | 3  | 0  | 19.82   | 19.86   | 19.74   |                        |
| 1.4             | 64QAM | 3  | 1  | 19.60   | 19.90   | 19.54   | 20.8                   |
| 1.4             | 64QAM | 3  | 3  | 19.55   | 19.82   | 19.59   |                        |
| 1.4             | 64QAM | 6  | 0  | 19.59   | 19.64   | 19.77   |                        |

| Band 48 (3.5G Band) (dBm) |            |         |           |                      |                    |                    |                     |              |                     |  |
|---------------------------|------------|---------|-----------|----------------------|--------------------|--------------------|---------------------|--------------|---------------------|--|
| BW [MHz]                  | Modulation | RB Size | RB Offset | Power Low Ch. / Freq | Middle-Low Channel | Middle-Low Channel | Middle-High Channel | High Channel | Tune-up limit (dBm) |  |
| Channel                   |            |         |           | 55340                | 55830              | 55990              | 56150               | 56640        |                     |  |
| Frequency (MHz)           |            |         |           | 3560                 | 3609               | 3625               | 3641                | 3690         |                     |  |
| 20                        | QPSK       | 1       | 0         | 23.11                | 23.06              | 22.96              | 22.95               | 23.21        | 23.8                |  |
| 20                        | QPSK       | 1       | 49        | 23.07                | 22.96              | 22.80              | 22.86               | 23.15        |                     |  |
| 20                        | QPSK       | 1       | 99        | 23.00                | 22.94              | 22.90              | 22.79               | 23.02        |                     |  |
| 20                        | QPSK       | 50      | 0         | 22.08                | 21.92              | 22.02              | 21.88               | 22.17        |                     |  |
| 20                        | QPSK       | 50      | 24        | 22.06                | 21.97              | 21.77              | 21.81               | 22.17        | 22.8                |  |
| 20                        | QPSK       | 50      | 50        | 21.98                | 21.90              | 21.87              | 21.77               | 22.14        |                     |  |
| 20                        | QPSK       | 100     | 0         | 22.06                | 21.86              | 21.91              | 21.89               | 22.26        |                     |  |
| 20                        | 16QAM      | 1       | 0         | 22.29                | 22.19              | 22.17              | 22.03               | 22.31        |                     |  |
| 20                        | 16QAM      | 1       | 49        | 22.28                | 22.13              | 22.12              | 22.09               | 22.30        | 22.8                |  |
| 20                        | 16QAM      | 1       | 99        | 22.21                | 21.97              | 22.09              | 22.12               | 22.27        |                     |  |
| 20                        | 16QAM      | 50      | 0         | 20.96                | 20.80              | 21.04              | 20.98               | 21.15        |                     |  |
| 20                        | 16QAM      | 50      | 24        | 20.98                | 20.89              | 20.94              | 20.89               | 21.11        |                     |  |
| 20                        | 16QAM      | 50      | 50        | 20.92                | 20.87              | 20.78              | 20.89               | 21.07        | 21.8                |  |
| 20                        | 16QAM      | 100     | 0         | 21.05                | 20.85              | 20.77              | 20.75               | 21.09        |                     |  |
| 20                        | 64QAM      | 1       | 0         | 20.99                | 20.96              | 20.86              | 20.93               | 21.18        |                     |  |
| 20                        | 64QAM      | 1       | 49        | 21.04                | 20.81              | 20.88              | 20.92               | 21.08        |                     |  |
| 20                        | 64QAM      | 1       | 99        | 21.07                | 20.85              | 20.85              | 20.88               | 21.15        | 21.8                |  |
| 20                        | 64QAM      | 50      | 0         | 19.99                | 19.83              | 19.88              | 19.85               | 20.05        |                     |  |
| 20                        | 64QAM      | 50      | 24        | 19.99                | 19.79              | 19.79              | 19.75               | 20.01        |                     |  |
| 20                        | 64QAM      | 50      | 50        | 19.90                | 19.76              | 19.80              | 19.72               | 20.03        |                     |  |
| 20                        | 64QAM      | 100     | 0         | 19.79                | 19.73              | 19.83              | 19.81               | 20.00        | 20.8                |  |
| Channel                   |            |         |           | 55315                | 55820              | 55990              | 56160               | 56665        |                     |  |
| Frequency (MHz)           |            |         |           | 3557.5               | 3608               | 3625               | 3642                | 3692.5       |                     |  |
| 15                        | QPSK       | 1       | 0         | 23.01                | 22.93              | 22.81              | 22.88               | 23.18        | 23.8                |  |
| 15                        | QPSK       | 1       | 37        | 23.02                | 22.98              | 22.75              | 22.76               | 23.15        |                     |  |
| 15                        | QPSK       | 1       | 74        | 22.90                | 22.86              | 22.76              | 22.75               | 23.02        |                     |  |
| 15                        | QPSK       | 36      | 0         | 22.11                | 22.04              | 22.07              | 21.87               | 22.14        |                     |  |
| 15                        | QPSK       | 36      | 20        | 22.05                | 21.94              | 21.87              | 21.79               | 22.13        | 22.8                |  |
| 15                        | QPSK       | 36      | 39        | 21.91                | 21.82              | 21.80              | 21.75               | 22.07        |                     |  |
| 15                        | QPSK       | 75      | 0         | 22.02                | 21.83              | 21.93              | 21.80               | 22.17        |                     |  |
| 15                        | 16QAM      | 1       | 0         | 22.15                | 22.09              | 22.05              | 22.14               | 22.22        |                     |  |
| 15                        | 16QAM      | 1       | 37        | 22.09                | 22.04              | 22.04              | 21.98               | 22.16        | 22.8                |  |
| 15                        | 16QAM      | 1       | 74        | 22.10                | 22.03              | 22.05              | 22.06               | 22.09        |                     |  |
| 15                        | 16QAM      | 36      | 0         | 21.06                | 21.00              | 20.80              | 20.91               | 21.16        |                     |  |
| 15                        | 16QAM      | 36      | 20        | 20.96                | 20.96              | 20.94              | 20.80               | 21.19        |                     |  |
| 15                        | 16QAM      | 36      | 39        | 20.81                | 20.89              | 20.81              | 20.82               | 20.97        | 21.8                |  |
| 15                        | 16QAM      | 75      | 0         | 21.03                | 20.91              | 20.80              | 20.90               | 21.05        |                     |  |
| 15                        | 64QAM      | 1       | 0         | 20.95                | 20.91              | 21.10              | 20.88               | 21.17        |                     |  |
| 15                        | 64QAM      | 1       | 37        | 21.04                | 20.89              | 20.84              | 20.79               | 21.16        |                     |  |
| 15                        | 64QAM      | 1       | 74        | 21.08                | 20.84              | 20.79              | 20.81               | 21.14        | 21.8                |  |
| 15                        | 64QAM      | 36      | 0         | 19.93                | 19.90              | 19.86              | 19.82               | 20.00        |                     |  |
| 15                        | 64QAM      | 36      | 20        | 19.89                | 19.76              | 19.95              | 19.74               | 20.03        |                     |  |
| 15                        | 64QAM      | 36      | 39        | 19.95                | 19.70              | 19.68              | 19.76               | 19.90        |                     |  |
| 15                        | 64QAM      | 75      | 0         | 19.88                | 19.75              | 19.81              | 19.80               | 19.92        | 20.8                |  |
| Channel                   |            |         |           | 55290                | 55815              | 55990              | 56165               | 56690        |                     |  |
| Frequency (MHz)           |            |         |           | 3555                 | 3607.5             | 3625               | 3642.5              | 3695         |                     |  |
| 10                        | QPSK       | 1       | 0         | 22.97                | 23.03              | 23.00              | 22.92               | 23.17        | 23.8                |  |
| 10                        | QPSK       | 1       | 25        | 22.92                | 22.98              | 22.74              | 22.83               | 23.05        |                     |  |
| 10                        | QPSK       | 1       | 49        | 22.89                | 22.82              | 22.79              | 22.81               | 23.02        |                     |  |
| 10                        | QPSK       | 25      | 0         | 22.05                | 22.09              | 21.95              | 21.82               | 22.12        |                     |  |
| 10                        | QPSK       | 25      | 12        | 22.03                | 21.77              | 21.82              | 21.81               | 22.11        | 22.8                |  |
| 10                        | QPSK       | 25      | 25        | 21.93                | 21.94              | 21.79              | 21.76               | 22.01        |                     |  |
| 10                        | QPSK       | 50      | 0         | 21.91                | 21.86              | 21.87              | 21.84               | 22.09        |                     |  |
| 10                        | 16QAM      | 1       | 0         | 22.21                | 22.19              | 22.17              | 22.08               | 22.29        |                     |  |
| 10                        | 16QAM      | 1       | 25        | 22.14                | 22.05              | 22.16              | 22.07               | 22.25        | 22.8                |  |
| 10                        | 16QAM      | 1       | 49        | 22.10                | 21.94              | 22.11              | 22.03               | 22.17        |                     |  |
| 10                        | 16QAM      | 25      | 0         | 21.04                | 20.78              | 20.83              | 20.99               | 21.11        |                     |  |
| 10                        | 16QAM      | 25      | 12        | 21.03                | 20.74              | 20.73              | 20.93               | 21.12        |                     |  |
| 10                        | 16QAM      | 25      | 25        | 20.82                | 20.76              | 20.79              | 20.76               | 21.01        | 21.8                |  |
| 10                        | 16QAM      | 50      | 0         | 21.03                | 20.83              | 20.76              | 20.90               | 21.05        |                     |  |
| 10                        | 64QAM      | 1       | 0         | 21.10                | 20.94              | 21.01              | 20.92               | 21.08        |                     |  |
| 10                        | 64QAM      | 1       | 25        | 21.09                | 20.80              | 20.91              | 20.98               | 21.06        |                     |  |
| 10                        | 64QAM      | 1       | 49        | 21.03                | 20.70              | 20.82              | 20.87               | 21.02        | 21.8                |  |
| 10                        | 64QAM      | 25      | 0         | 20.02                | 19.78              | 19.89              | 19.70               | 20.06        |                     |  |
| 10                        | 64QAM      | 25      | 12        | 19.89                | 19.72              | 19.91              | 19.76               | 19.93        |                     |  |
| 10                        | 64QAM      | 25      | 25        | 19.74                | 19.75              | 19.85              | 19.84               | 20.07        |                     |  |
| 10                        | 64QAM      | 50      | 0         | 19.78                | 19.79              | 19.91              | 19.86               | 19.84        | 20.8                |  |
| Channel                   |            |         |           | 55265                | 55810              | 55990              | 56170               | 56175        |                     |  |
| Frequency (MHz)           |            |         |           | 3552.5               | 3607               | 3625               | 3643                | 3697.5       |                     |  |
| 5                         | QPSK       | 1       | 0         | 23.05                | 22.90              | 23.02              | 22.94               | 23.15        | 23.8                |  |
| 5                         | QPSK       | 1       | 12        | 23.04                | 22.96              | 22.75              | 22.72               | 23.13        |                     |  |
| 5                         | QPSK       | 1       | 24        | 23.00                | 22.88              | 22.77              | 22.78               | 23.09        |                     |  |
| 5                         | QPSK       | 12      | 0         | 22.05                | 22.02              | 21.82              | 21.79               | 22.12        |                     |  |
| 5                         | QPSK       | 12      | 7         | 22.01                | 21.98              | 21.94              | 21.80               | 22.11        | 22.8                |  |
| 5                         | QPSK       | 12      | 13        | 21.85                | 21.90              | 21.79              | 21.84               | 22.08        |                     |  |
| 5                         | QPSK       | 25      | 0         | 22.04                | 21.86              | 21.80              | 21.85               | 22.06        |                     |  |
| 5                         | 16QAM      | 1       | 0         | 22.16                | 22.13              | 22.08              | 22.06               | 22.17        |                     |  |
| 5                         | 16QAM      | 1       | 12        | 22.14                | 22.11              | 22.08              | 22.08               | 22.09        | 22.8                |  |
| 5                         | 16QAM      | 1       | 24        | 22.05                | 22.06              | 22.01              | 22.02               | 22.12        |                     |  |
| 5                         | 16QAM      | 12      | 0         | 21.04                | 20.79              | 20.94              | 20.91               | 21.06        |                     |  |
| 5                         | 16QAM      | 12      | 7         | 20.92                | 20.96              | 20.73              | 20.99               | 21.05        |                     |  |
| 5                         | 16QAM      | 12      | 13        | 20.96                | 20.77              | 20.71              | 20.80               | 21.02        | 21.8                |  |
| 5                         | 16QAM      | 25      | 0         | 20.91                | 20.72              | 20.83              | 20.89               | 21.01        |                     |  |
| 5                         | 64QAM      | 1       | 0         | 21.09                | 20.98              | 21.01              | 20.98               | 21.19        |                     |  |
| 5                         | 64QAM      | 1       | 12        | 21.04                | 20.88              | 20.96              | 20.85               | 21.14        |                     |  |
| 5                         | 64QAM      | 1       | 24        | 20.96                | 20.86              | 20.95              | 20.79               | 21.13        | 21.8                |  |
| 5                         | 64QAM      | 12      | 0         | 19.93                | 19.80              | 19.79              | 19.86               | 20.14        |                     |  |
| 5                         | 64QAM      | 12      | 7         | 19.87                | 19.85              | 19.91              | 19.79               | 20.05        |                     |  |
| 5                         | 64QAM      | 12      | 13        | 19.82                | 19.76              | 19.80              | 19.77               | 19.99        |                     |  |
| 5                         | 64QAM      | 25      | 0         | 19.98                | 19.89              | 19.80              | 19.81               | 20.09        | 20.8                |  |

| n2 (PC3)        |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 372000      | 376000         | 380000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.87       | 22.83          | 22.53        | 24.00               |
| 20              |                      | 1      | 53       | 22.93       | 22.62          | 22.57        |                     |
| 20              |                      | 1      | 104      | 22.66       | 22.54          | 22.51        |                     |
| 20              |                      | 50     | 1        | 23.08       | 22.80          | 22.64        | 24.00               |
| 20              |                      | 50     | 25       | 23.02       | 22.80          | 22.63        |                     |
| 20              |                      | 50     | 50       | 22.98       | 22.77          | 22.67        |                     |
| 20              |                      | 100    | 0        | 22.98       | 22.80          | 22.61        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.07       | 23.13          | 23.02        | 24.00               |
| 20              |                      | 1      | 53       | 22.92       | 22.72          | 22.95        |                     |
| 20              |                      | 1      | 104      | 22.76       | 22.67          | 22.63        |                     |
| 20              |                      | 50     | 1        | 23.05       | 23.08          | 23.07        | 24.00               |
| 20              |                      | 50     | 25       | 23.03       | 22.69          | 22.68        |                     |
| 20              |                      | 50     | 50       | 22.95       | 22.69          | 22.74        |                     |
| 20              |                      | 100    | 0        | 23.01       | 22.79          | 22.63        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 23.11       | 22.97          | 22.71        | 24.00               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 21.58       | 21.50          | 21.22        | 22.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 19.20       | 19.16          | 18.90        | 20.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 22.48       | 22.39          | 22.15        | 23.50               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 21.98       | 21.95          | 21.68        | 23.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 20.64       | 20.56          | 20.25        | 21.50               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 17.31       | 17.23          | 16.90        | 18.00               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 23.09       | 22.83          | 22.59        | 24.00               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 23.08       | 22.81          | 22.70        | 24.00               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 23.06       | 22.63          | 22.59        | 24.00               |

## n5 (PC3)

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 166800      | 167300         | 167800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 834         | 836.5          | 839          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 23.61       | 23.67          | 23.67        | 24.50               |
| 20              |                      | 1      | 53       | 23.53       | 23.51          | 23.55        |                     |
| 20              |                      | 1      | 104      | 23.27       | 23.21          | 23.29        |                     |
| 20              |                      | 50     | 1        | 23.72       | 23.71          | 23.72        | 24.50               |
| 20              |                      | 50     | 25       | 23.62       | 23.66          | 23.59        |                     |
| 20              |                      | 50     | 50       | 23.62       | 23.51          | 23.49        |                     |
| 20              |                      | 100    | 0        | 23.70       | 23.62          | 23.54        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 23.77       | 23.82          | 23.81        | 24.50               |
| 20              |                      | 1      | 53       | 23.60       | 23.60          | 23.68        |                     |
| 20              |                      | 1      | 104      | 23.35       | 23.24          | 23.32        |                     |
| 20              |                      | 50     | 1        | 23.71       | 23.73          | 23.64        | 24.50               |
| 20              |                      | 50     | 25       | 23.65       | 23.65          | 23.56        |                     |
| 20              |                      | 50     | 50       | 23.50       | 23.54          | 23.31        |                     |
| 20              |                      | 100    | 0        | 23.69       | 23.67          | 23.51        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 23.72       | 23.76          | 23.75        | 23.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 22.14       | 22.33          | 22.36        | 22.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 19.98       | 20.07          | 20.00        | 19.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 23.21       | 23.31          | 23.11        | 25.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 22.80       | 22.82          | 22.77        | 24.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 21.27       | 21.42          | 21.32        | 23.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 18.01       | 18.11          | 18.10        | 19.00               |
| Channel         |                      |        |          | 166300      | 167300         | 168300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 831.5       | 836.5          | 841.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 23.75       | 23.79          | 23.57        | 24.50               |
| Channel         |                      |        |          | 165800      | 167300         | 168800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 829         | 836.5          | 844          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 23.53       | 23.35          | 23.48        | 24.50               |
| Channel         |                      |        |          | 165300      | 167300         | 169300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 826.5       | 836.5          | 846.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 23.59       | 23.52          | 23.28        | 24.50               |

| n48 (PC2)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 638000      | 639834             | 641666         | 643500              | 645332       |                     |
| Frequency (MHz) |                      |        |          | 3570        | 3597.51            | 3624.99        | 3652.5              | 3679.98      |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 24.92       | 24.63              | 23.81          | 23.62               | 25.48        | 27.5                |
| 40              |                      | 1      | 53       | 25.69       | 24.19              | 22.82          | 25.01               | 26.20        |                     |
| 40              |                      | 1      | 104      | 24.58       | 25.35              | 24.41          | 26.01               | 26.25        |                     |
| 40              |                      | 50     | 1        | 24.41       | 24.01              | 22.81          | 23.83               | 25.36        | 27.5                |
| 40              |                      | 50     | 25       | 24.83       | 24.31              | 23.24          | 24.95               | 26.18        |                     |
| 40              |                      | 50     | 50       | 24.14       | 23.31              | 22.98          | 24.81               | 25.43        |                     |
| 40              |                      | 100    | 0        | 24.25       | 23.78              | 22.83          | 24.41               | 25.69        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 26.55       | 26.61              | 26.73          | 26.63               | 26.67        | 27.5                |
| 40              |                      | 1      | 53       | 24.83       | 24.18              | 22.83          | 25.04               | 26.22        |                     |
| 40              |                      | 1      | 104      | 25.58       | 23.33              | 24.41          | 26.04               | 26.70        |                     |
| 40              |                      | 50     | 1        | 25.72       | 25.66              | 25.83          | 25.53               | 25.67        | 26.5                |
| 40              |                      | 50     | 25       | 24.87       | 24.30              | 25.11          | 24.92               | 25.58        |                     |
| 40              |                      | 50     | 50       | 24.56       | 25.26              | 25.45          | 25.38               | 25.50        |                     |
| 40              |                      | 100    | 0        | 25.55       | 25.30              | 25.35          | 24.78               | 25.19        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 23.81       | 23.49              | 23.66          | 23.53               | 24.36        | 25.5                |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 22.40       | 22.06              | 22.26          | 22.10               | 22.33        | 25.5                |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 20.25       | 19.98              | 19.14          | 18.93               | 20.76        | 21.5                |
| 40              | CP-OFDM QPSK         | 1      | 1        | 23.44       | 23.13              | 22.30          | 22.15               | 23.97        | 25                  |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 22.89       | 22.60              | 21.86          | 21.69               | 23.54        | 24.5                |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 21.02       | 20.69              | 19.88          | 19.69               | 21.57        | 23                  |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 18.25       | 17.99              | 17.05          | 16.94               | 18.75        | 19.5                |
| Channel         |                      |        |          | 637334      | 639500             | 641666         | 643832              | 646000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3560.01     | 3592.5             | 3624.99        | 3657.48             | 3690         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 24.75       | 24.39              | 23.14          | 24.67               | 26.29        | 27.5                |

| n66 (PC3)       |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 344000      | 349000         | 354000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 22.81       | 22.65          | 22.57        | 23.5                |
| 20              |                      | 1      | 53       | 22.73       | 22.60          | 22.51        |                     |
| 20              |                      | 1      | 104      | 22.63       | 22.66          | 22.53        |                     |
| 20              |                      | 50     | 1        | 22.88       | 22.71          | 22.66        | 23.5                |
| 20              |                      | 50     | 25       | 22.87       | 22.66          | 22.61        |                     |
| 20              |                      | 50     | 50       | 22.79       | 22.67          | 22.60        |                     |
| 20              |                      | 100    | 0        | 22.83       | 22.68          | 22.65        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 22.88       | 22.90          | 22.86        | 23.5                |
| 20              |                      | 1      | 53       | 22.81       | 22.59          | 22.49        |                     |
| 20              |                      | 1      | 104      | 22.66       | 22.64          | 22.52        |                     |
| 20              |                      | 50     | 1        | 22.80       | 22.84          | 22.79        | 23.5                |
| 20              |                      | 50     | 25       | 22.78       | 22.74          | 22.59        |                     |
| 20              |                      | 50     | 50       | 22.76       | 22.68          | 22.56        |                     |
| 20              |                      | 100    | 0        | 22.82       | 22.74          | 22.56        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 22.81       | 22.76          | 22.66        | 23.5                |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 21.46       | 21.24          | 21.17        | 21.5                |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 19.09       | 18.90          | 18.81        | 19.5                |
| 20              | CP-OFDM QPSK         | 1      | 1        | 22.47       | 22.29          | 22.19        | 23                  |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 22.01       | 21.70          | 21.67        | 23                  |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 20.56       | 20.35          | 20.28        | 21                  |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 17.09       | 16.92          | 16.79        | 18                  |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | Tune-up limit       |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 22.96       | 22.84          | 22.76        | 23.5                |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | Tune-up limit       |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 22.78       | 22.65          | 22.57        | 23.5                |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | Tune-up limit       |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 22.83       | 22.69          | 22.73        | 23.5                |

| n77(3450-3550MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 26.82          |                     |              | 27.5                |
| 100                     |                      | 1      | 136      |             |                    | 26.17          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 25.95          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 26.22          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 26.51          |                     |              | 27.5                |
| 100                     |                      | 135    | 136      |             |                    | 25.49          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 25.95          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 26.93          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 1      | 136      |             |                    | 26.45          |                     |              | 27.5                |
| 100                     |                      | 1      | 271      |             |                    | 25.89          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 26.51          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 26.49          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 25.96          |                     |              | 27                  |
| 100                     |                      | 270    | 0        |             |                    | 26.42          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 25.83          |                     |              | 26.5                |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 24.47          |                     |              | 25.5                |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 22.28          |                     |              | 22.5                |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 25.42          |                     |              | 26.5                |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 24.91          |                     |              | 25.5                |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 23.03          |                     |              | 24                  |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 20.29          |                     |              | 21                  |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.83       | 26.84              | 26.82          | 26.68               | 26.59        | 27.5                |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.03       | 26.85              | 26.62          | 26.48               | 26.54        | 27.5                |
| Channel                 |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.89       | 26.83              | 26.86          | 26.82               | 26.69        | 27.5                |
| Channel                 |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.84       | 26.85              | 26.80          | 26.81               | 26.45        | 27.5                |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.81       | 26.84              | 26.75          | 26.59               | 26.19        | 27.5                |

| n77(3700-3980MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       |                     |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 26.08       | 27.68              | 27.80          | 27.69               | 26.75        | 29.50               |
| 100                     |                      | 1      | 136      | 27.77       | 27.91              | 27.68          | 26.71               | 27.65        |                     |
| 100                     |                      | 1      | 271      | 27.57       | 27.59              | 26.68          | 26.56               | 26.45        |                     |
| 100                     |                      | 135    | 1        | 27.02       | 27.55              | 27.30          | 26.54               | 26.76        | 28.50               |
| 100                     |                      | 135    | 67       | 27.87       | 27.92              | 27.70          | 26.73               | 25.71        |                     |
| 100                     |                      | 135    | 136      | 27.02       | 27.26              | 26.38          | 25.50               | 25.09        |                     |
| 100                     |                      | 270    | 0        | 27.01       | 27.49              | 27.17          | 26.26               | 26.68        |                     |
| 100                     |                      | 1      | 1        | 28.52       | 28.65              | 28.67          | 28.57               | 28.62        | 29.50               |
| 100                     | DFT-s-OFDM QPSK      | 1      | 136      | 28.13       | 27.89              | 27.71          | 26.72               | 25.52        |                     |
| 100                     |                      | 1      | 271      | 27.58       | 27.55              | 26.70          | 25.54               | 25.41        |                     |
| 100                     |                      | 135    | 1        | 27.54       | 27.63              | 27.87          | 27.75               | 27.79        | 28.50               |
| 100                     |                      | 135    | 67       | 27.25       | 26.68              | 27.66          | 26.75               | 25.69        |                     |
| 100                     |                      | 135    | 136      | 26.54       | 26.75              | 25.88          | 25.03               | 25.22        |                     |
| 100                     |                      | 270    | 0        | 27.44       | 27.01              | 26.69          | 25.76               | 25.34        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        | 26.93       | 27.56              | 26.43          | 26.58               | 25.66        | 28.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 26.80       | 26.31              | 25.34          | 25.40               | 24.35        | 27.50               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 21.37       | 23.94              | 23.15          | 23.01               | 22.05        | 23.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        | 24.57       | 27.15              | 26.32          | 26.21               | 25.25        | 25.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 24.07       | 24.22              | 25.89          | 25.74               | 24.77        | 24.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 22.17       | 24.84              | 23.89          | 23.85               | 22.85        | 23.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 20.39       | 22.00              | 21.06          | 21.04               | 20.08        | 22.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.05       | 28.52              | 27.91          | 27.34               | 26.22        | 29.50               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.09       | 28.34              | 27.86          | 26.85               | 25.57        | 29.50               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.50       | 28.50              | 28.07          | 27.13               | 24.94        | 29.50               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.42       | 28.29              | 27.95          | 26.79               | 24.98        | 29.50               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.34       | 28.25              | 27.99          | 26.64               | 25.36        | 29.50               |

| n78(3450-3550MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 27.99          |                     |              | 29.00               |
| 100                     |                      | 1      | 136      |             |                    | 26.84          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 26.15          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 26.85          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 135    | 67       |             |                    | 27.05          |                     |              | 28.00               |
| 100                     |                      | 135    | 136      |             |                    | 25.74          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 26.45          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 28.02          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 1      | 136      |             |                    | 26.89          |                     |              | 29.00               |
| 100                     |                      | 1      | 271      |             |                    | 26.12          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 27.03          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 26.88          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 135    | 136      |             |                    | 26.28          |                     |              | 28.00               |
| 100                     |                      | 270    | 0        |             |                    | 26.93          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 26.82          |                     |              | 27.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 25.50          |                     |              | 26.50               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 23.37          |                     |              | 24.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 26.29          |                     |              | 27.50               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 25.83          |                     |              | 26.50               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 24.19          |                     |              | 25.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 21.30          |                     |              | 22.00               |
| Channel                 |                      |        |          | 633000      | 633166             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.49            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.98       | 27.94              | 27.81          | 27.70               | 27.66        | 29.00               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3450               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.98       | 27.90              | 27.75          | 27.62               | 27.38        | 29.00               |
| Channel                 |                      |        |          | 632334      | 632634             | 633334         | 633832              | 634332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.99       | 27.85              | 27.63          | 27.37               | 27.15        | 29.00               |
| Channel                 |                      |        |          | 632000      | 632666             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3489.99            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.94       | 27.73              | 27.48          | 27.16               | 27.12        | 29.00               |
| Channel                 |                      |        |          | 631668      | 632500             | 633334         | 634166              | 635000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3512.49             | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.93       | 27.64              | 27.26          | 27.08               | 26.99        | 29.00               |
| Channel                 |                      |        |          | 631334      | 636672             | 633334         | 634334              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3515.01             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.99       | 27.10              | 27.43          | 27.30               | 27.04        | 29.00               |
| Channel                 |                      |        |          | 631000      | 632166             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.49            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.96       | 27.68              | 27.32          | 27.09               | 26.63        | 29.00               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634668              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3520.02             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 27.90       | 27.59              | 27.30          | 26.89               | 26.40        | 29.00               |

| n78(3700-3800MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 650000         |                     |              | 28.50               |
| Frequency (MHz)         |                      |        |          |             |                    | 3750           |                     |              |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 26.51          |                     |              | 28.50               |
| 100                     |                      | 1      | 136      |             |                    | 27.71          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 27.60          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 27.10          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 27.68          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 26.88          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 27.00          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 1      | 1        |             |                    | 27.73          |                     |              | 28.50               |
| 100                     |                      | 1      | 136      |             |                    | 26.89          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 27.09          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 27.61          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 27.49          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 27.37          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 27.41          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 25.38          |                     |              | 26.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 24.07          |                     |              | 25.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 21.78          |                     |              | 22.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 24.98          |                     |              | 26.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 24.62          |                     |              | 25.50               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 22.69          |                     |              | 23.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 19.81          |                     |              | 20.50               |
| Channel                 |                      |        |          | 649668      | 649834             | 650000         | 650166              | 650332       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3745.02     | 3747.51            | 3750           | 3752.49             | 3754.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.47       | 26.51              | 26.65          | 26.73               | 26.92        | 28.50               |
| Channel                 |                      |        |          | 649334      | 649666             | 650000         | 650334              | 650666       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3744.99            | 3750           | 3755.01             | 3759.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.52       | 26.74              | 26.95          | 27.14               | 27.43        | 28.50               |
| Channel                 |                      |        |          | 649000      | 649500             | 650000         | 650500              | 651000       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3735        | 3742.5             | 3750           | 3757.5              | 3765         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.53       | 26.86              | 27.18          | 27.55               | 27.68        | 28.50               |
| Channel                 |                      |        |          | 648668      | 649334             | 650000         | 650666              | 651332       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3740.01            | 3750           | 3759.99             | 3769.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.42       | 26.89              | 27.43          | 27.62               | 27.58        | 28.50               |
| Channel                 |                      |        |          | 648334      | 649166             | 650000         | 650834              | 651666       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3737.49            | 3750           | 3762.51             | 3774.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.59       | 27.15              | 27.67          | 27.66               | 27.68        | 28.50               |
| Channel                 |                      |        |          | 648000      | 649000             | 650000         | 651000              | 652000       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3720        | 3735               | 3750           | 3765                | 3780         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.80       | 27.57              | 27.63          | 27.63               | 27.89        | 28.50               |
| Channel                 |                      |        |          | 647668      | 648834             | 650000         | 651166              | 652332       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3732.51            | 3750           | 3767.49             | 3784.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.68       | 27.56              | 27.67          | 27.59               | 27.51        | 28.50               |
| Channel                 |                      |        |          | 647334      | 648666             | 650000         | 651334              | 652666       | 28.50               |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3729.99            | 3750           | 3770.01             | 3789.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 26.66       | 27.60              | 27.66          | 27.66               | 27.54        | 28.50               |

| CA_5B                              |                    |             |            |         |           |         |           |               |                      |                     |                    |
|------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:10MHz+10MHz(50RB+50RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                        | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                    |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 20450                              | 20450              | 20549       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.83               | 23.80              |
| 20525                              | 20476              | 20575       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.86               | 23.80              |
| 20600                              | 20501              | 20600       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.75               | 23.80              |
| 20450                              | 20450              | 20549       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.08               | 22.80              |
| 20525                              | 20476              | 20575       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.03               | 22.80              |
| 20600                              | 20501              | 20600       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.01               | 22.80              |
| 20450                              | 20450              | 20549       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.98               | 21.80              |
| 20525                              | 20476              | 20575       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.03               | 21.80              |
| 20600                              | 20501              | 20600       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.00               | 21.80              |
| 20450                              | 20450              | 20549       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 18.21               | 18.80              |
| 20525                              | 20476              | 20575       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 18.25               | 18.80              |
| 20600                              | 20501              | 20600       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 18.19               | 18.80              |
| 20450                              | 20450              | 20549       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 21.85               | 22.80              |
| 20525                              | 20476              | 20575       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 21.86               | 22.80              |
| 20600                              | 20501              | 20600       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 21.81               | 22.80              |

| CA_48C                               |                    |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 55340                                | 55340              | 55538       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.80               | 23.80              |
| 55990                                | 55891              | 56089       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.65               | 23.80              |
| 56640                                | 56442              | 56640       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.88               | 23.80              |
| 55340                                | 55340              | 55538       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.13               | 22.80              |
| 55990                                | 55891              | 56089       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.02               | 22.80              |
| 56640                                | 56442              | 56640       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.28               | 22.80              |
| 55340                                | 55340              | 55538       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.25               | 21.80              |
| 55990                                | 55891              | 56089       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.15               | 21.80              |
| 56640                                | 56442              | 56640       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.21               | 21.80              |
| 55340                                | 55340              | 55538       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 18.18               | 18.80              |
| 55990                                | 55891              | 56089       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 18.05               | 18.80              |
| 56640                                | 56442              | 56640       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 18.15               | 18.80              |
| 55340                                | 55340              | 55538       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 21.76               | 22.80              |
| 55990                                | 55891              | 56089       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 21.65               | 22.80              |
| 56640                                | 56442              | 56640       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 21.70               | 22.80              |

| CA_66B                             |                    |             |            |         |           |         |           |               |                      |                     |                    |
|------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:10MHz+10MHz(50RB+50RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                        | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                    |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 132072                             | 132022             | 132121      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.68               | 23.80              |
| 132322                             | 132373             | 132472      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.75               | 23.80              |
| 132572                             | 132523             | 132622      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.71               | 23.80              |
| 132072                             | 132022             | 132121      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.89               | 22.80              |
| 132322                             | 132373             | 132472      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.12               | 22.80              |
| 132572                             | 132523             | 132622      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.14               | 22.80              |
| 132072                             | 132022             | 132121      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.92               | 21.80              |
| 132322                             | 132373             | 132472      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.94               | 21.80              |
| 132572                             | 132523             | 132622      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.12               | 21.80              |
| 132072                             | 132022             | 132121      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.79               | 18.80              |
| 132322                             | 132373             | 132472      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 18.01               | 18.80              |
| 132572                             | 132523             | 132622      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.95               | 18.80              |
| 132072                             | 132022             | 132121      | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 21.71               | 22.80              |
| 132322                             | 132373             | 132472      | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 21.88               | 22.80              |
| 132572                             | 132523             | 132622      | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 21.84               | 22.80              |

| CA_66C |  |  |  |  |  |  |  |  |  |  |  |
|--------|--|--|--|--|--|--|--|--|--|--|--|
|--------|--|--|--|--|--|--|--|--|--|--|--|

| Combination:20MHz+20MHz(100RB+100RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| PCC Channel                          | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 132072                               | 132072             | 132270      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.66               | 23.80              |
| 132322                               | 132323             | 132521      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.74               | 23.80              |
| 132572                               | 132374             | 132572      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 22.70               | 23.80              |
| 132072                               | 132072             | 132270      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 22.00               | 22.80              |
| 132322                               | 132323             | 132521      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.95               | 22.80              |
| 132572                               | 132374             | 132572      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.96               | 22.80              |
| 132072                               | 132072             | 132270      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.77               | 21.80              |
| 132322                               | 132323             | 132521      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.94               | 21.80              |
| 132572                               | 132374             | 132572      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.88               | 21.80              |
| 132072                               | 132072             | 132270      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.53               | 18.80              |
| 132322                               | 132323             | 132521      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.86               | 18.80              |
| 132572                               | 132374             | 132572      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.79               | 18.80              |
| 132072                               | 132072             | 132270      | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 21.73               | 22.80              |
| 132322                               | 132323             | 132521      | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 21.83               | 22.80              |
| 132572                               | 132374             | 132572      | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 21.86               | 22.80              |

| 2CC LTE Uplink |                  |      |          |            |               |                                |      |          |            |               |                     |                    |
|----------------|------------------|------|----------|------------|---------------|--------------------------------|------|----------|------------|---------------|---------------------|--------------------|
| Configure      | CA Configuration | PCC  |          |            |               |                                | SCC  |          |            |               | Power               |                    |
|                |                  | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation/RB/Offset) | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | Measured Power(dBm) | Tune-up limit(dBm) |
| Inter-band     | CA_2A-4A         | 2    | 20       | 18700      | 1860          | QPSK/1#0                       | 4    | 20       | 20300      | 2145          | 22.23               | 22.93              |
|                | CA_2A-5A         | 2    | 20       | 18700      | 1860          | QPSK/1#0                       | 5    | 10       | 20600      | 844           | 22.18               | 22.93              |
|                | CA_2A-13A        | 2    | 20       | 18700      | 1860          | QPSK/1#0                       | 13   | 10       | 23230      | 782           | 22.20               | 22.93              |
|                | CA_2A-66A        | 2    | 20       | 18700      | 1860          | QPSK/1#0                       | 66   | 20       | 67236      | 2190          | 22.17               | 22.93              |
|                | CA_4A-5A         | 4    | 10       | 20175      | 1732.5        | QPSK/1#0                       | 5    | 10       | 20450      | 829           | 22.55               | 22.86              |
|                | CA_4A-13A        | 4    | 10       | 20175      | 1732.5        | QPSK/1#0                       | 13   | 10       | 23230      | 782           | 22.44               | 22.86              |
|                | CA_5A-66A        | 5    | 10       | 20450      | 829           | QPSK/1#0                       | 66   | 20       | 66886      | 2155          | 22.89               | 23.05              |
|                | CA_13A-66A       | 13   | 10       | 23230      | 782           | QPSK/1#0                       | 66   | 20       | 66886      | 2155          | 22.57               | 22.93              |

| 2CC LTE Downlink        |                  |       |      |          |            |               |                                |      |          |            |               |             |                |
|-------------------------|------------------|-------|------|----------|------------|---------------|--------------------------------|------|----------|------------|---------------|-------------|----------------|
| Configure               | CA Configuration | Ant   | PCC  |          |            |               |                                | SCC  |          |            |               | Power       |                |
|                         |                  |       | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation/RB/Offset) | Band | BW (MHz) | DL Channel | DL Fre. (MHz) | CA TX (dBm) | Rel 8 TX (dBm) |
| Intra-band & Inter-band | CA_4A-5A         | Ant 1 | 4    | 10       | 20175      | 1732.5        | QPSK/180                       | 5    | 10       | 20450      | 829           | 22.52       | 22.86          |
|                         | CA_4A-13A        | Ant 1 | 4    | 10       | 20175      | 1732.5        | QPSK/180                       | 13   | 10       | 23230      | 782           | 22.48       | 22.86          |
|                         | CA_4A-48A        | Ant 1 | 4    | 20       | 20050      | 1720          | QPSK/180                       | 48   | 20       | 56640      | 3690          | 22.33       | 22.86          |
|                         | CA_66B           | Ant 1 | 66   | 10       | 132373     | 1750.1        | QPSK/180                       | 66   | 10       | 67286      | 2195          | 22.43       | 22.97          |
|                         | CA_66C           | Ant 1 | 66   | 20       | 132323     | 1745.1        | QPSK/180                       | 66   | 20       | 67236      | 2190          | 22.36       | 22.97          |
|                         | CA_66A-66A       | Ant 1 | 66   | 20       | 132072     | 1720          | QPSK/180                       | 66   | 20       | 67236      | 2190          | 22.09       | 22.97          |

| 3CC LTE Downlink        |                  |       |      |          |            |               |                                |      |          |            |               |      |          |            |               |             |                |
|-------------------------|------------------|-------|------|----------|------------|---------------|--------------------------------|------|----------|------------|---------------|------|----------|------------|---------------|-------------|----------------|
| Configure               | CA Configuration | Ant   | PCC  |          |            |               |                                | SCC  |          |            | SCC           |      |          | Power      |               |             |                |
|                         |                  |       | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation/RB/Offset) | Band | BW (MHz) | DL Channel | DL Fre. (MHz) | Band | BW (MHz) | DL Channel | DL Fre. (MHz) | CA TX (dBm) | Rel.8 TX (dBm) |
| Intra-band & Inter-band | CA_2A-4A-5A      | Ant 1 | 2    | 20       | 18700      | 1860          | QPSK/180                       | 4    | 20       | 20300      | 2145          | 5    | 10       | 20600      | 844           | 22.15       | 22.93          |
|                         | CA_2A-4A-13A     | Ant 1 | 2    | 20       | 18700      | 1860          | QPSK/180                       | 4    | 20       | 20300      | 2145          | 13   | 10       | 23230      | 782           | 22.18       | 22.93          |
|                         | CA_2A-66B        | Ant 1 | 2    | 20       | 18700      | 1860          | QPSK/180                       | 66   | 10       | 67187      | 2185.1        | 66   | 10       | 67286      | 2195          | 22.08       | 22.93          |
|                         | CA_2A-66C        | Ant 1 | 2    | 20       | 18700      | 1860          | QPSK/180                       | 66   | 20       | 67038      | 2170.2        | 66   | 20       | 67236      | 2190          | 22.05       | 22.93          |
|                         | CA_4A-4A-5A      | Ant 1 | 4    | 20       | 20050      | 1720          | QPSK/180                       | 4    | 20       | 20300      | 1745          | 5    | 10       | 20600      | 844           | 22.26       | 22.86          |
|                         | CA_4A-4A-13A     | Ant 1 | 4    | 20       | 20050      | 1720          | QPSK/180                       | 4    | 20       | 20300      | 1745          | 13   | 10       | 23230      | 782           | 22.15       | 22.86          |
|                         | CA_4A-5B         | Ant 1 | 4    | 20       | 20050      | 1720          | QPSK/180                       | 5    | 10       | 20476      | 831.6         | 5    | 10       | 20575      | 841.5         | 22.12       | 22.86          |
|                         | CA_5A-66A-66A    | Ant 1 | 5    | 10       | 20450      | 829           | QPSK/180                       | 66   | 20       | 66886      | 2155          | 66   | 20       | 67236      | 2190          | 22.85       | 23.05          |
|                         | CA_5A-66B        | Ant 1 | 5    | 10       | 20450      | 829           | QPSK/180                       | 66   | 10       | 67187      | 2185.1        | 66   | 10       | 67286      | 2195          | 22.90       | 23.05          |
|                         | CA_5A-66C        | Ant 1 | 5    | 10       | 20450      | 829           | QPSK/180                       | 66   | 20       | 67038      | 2170.2        | 66   | 20       | 67236      | 2190          | 22.84       | 23.05          |
|                         | CA_5B-66A        | Ant 1 | 5    | 10       | 20476      | 831.6         | QPSK/180                       | 5    | 10       | 20575      | 841.5         | 66   | 20       | 67236      | 2190          | 22.92       | 23.05          |
|                         | CA_13A-66A-66A   | Ant 1 | 13   | 10       | 23230      | 782           | QPSK/180                       | 66   | 20       | 66886      | 2155          | 66   | 20       | 67236      | 2190          | 22.53       | 22.93          |
|                         | CA_13A-66B       | Ant 1 | 13   | 10       | 23230      | 782           | QPSK/180                       | 66   | 10       | 67187      | 2185.1        | 66   | 10       | 67286      | 2195          | 22.58       | 22.93          |
|                         | CA_13A-66C       | Ant 1 | 13   | 10       | 23230      | 782           | QPSK/180                       | 66   | 20       | 67038      | 2170.2        | 66   | 20       | 67236      | 2190          | 22.63       | 22.93          |
|                         | CA_66A-66C       | Ant 1 | 66   | 20       | 132072     | 1720          | QPSK/180                       | 66   | 20       | 67038      | 2170.2        | 66   | 20       | 67236      | 2190          | 22.08       | 22.97          |
|                         | CA_66A-66A-66A   | Ant 1 | 66   | 20       | 132072     | 1720          | QPSK/180                       | 66   | 20       | 66886      | 2155          | 66   | 20       | 67236      | 2190          | 21.99       | 22.97          |
|                         | CA_2A-48A-48A    | Ant 1 | 2    | 20       | 18700      | 1860          | QPSK/180                       | 48   | 20       | 55340      | 3560          | 48   | 20       | 56640      | 3690          | 22.08       | 22.93          |
|                         | CA_13A-48A-48A   | Ant 1 | 13   | 10       | 23230      | 782           | QPSK/180                       | 48   | 20       | 55340      | 3560          | 48   | 20       | 56640      | 3690          | 22.58       | 22.93          |
|                         | CA_13A-48A-66A   | Ant 1 | 13   | 10       | 23230      | 782           | QPSK/180                       | 48   | 20       | 56640      | 3690          | 66   | 20       | 67236      | 2190          | 22.62       | 22.93          |
|                         | CA_2A-13A-48A    | Ant 1 | 2    | 20       | 18700      | 1860          | QPSK/180                       | 13   | 10       | 23230      | 782           | 48   | 20       | 56640      | 3690          | 22.13       | 22.93          |
|                         | CA_2A-5A-48A     | Ant 1 | 2    | 20       | 18700      | 1860          | QPSK/180                       | 5    | 10       | 20600      | 844           | 48   | 20       | 56089      | 3634.9        | 22.09       | 22.93          |
|                         | CA_48A-66A-66A   | Ant 1 | 48   | 20       | 55340      | 3560          | QPSK/180                       | 66   | 20       | 66886      | 2155          | 66   | 20       | 67236      | 2190          | 21.09       | 23.11          |
|                         | CA_48A-66B       | Ant 1 | 48   | 20       | 55340      | 3560          | QPSK/180                       | 66   | 10       | 67187      | 2185.1        | 66   | 10       | 67286      | 2195          | 21.52       | 23.11          |
|                         | CA_48A-66C       | Ant 1 | 48   | 20       | 55340      | 3560          | QPSK/180                       | 66   | 20       | 67038      | 2170.2        | 66   | 20       | 67236      | 2190          | 21.60       | 23.11          |
|                         | CA_4A-48C        | Ant 1 | 4    | 20       | 20050      | 1720          | QPSK/180                       | 48   | 20       | 56442      | 3670.2        | 48   | 20       | 56640      | 3690          | 22.08       | 22.86          |
|                         | CA_5A-48A-66A    | Ant 1 | 5    | 10       | 20450      | 829           | QPSK/180                       | 48   | 20       | 56640      | 3690          | 66   | 20       | 67236      | 2190          | 22.78       | 23.05          |

| 4CC LTE Downlink        |                   |       |      |          |            |                |                                |      |          |            |                |      |          |            |                |      |          |            |                |             |                |
|-------------------------|-------------------|-------|------|----------|------------|----------------|--------------------------------|------|----------|------------|----------------|------|----------|------------|----------------|------|----------|------------|----------------|-------------|----------------|
| Configure               | CA Configuration  | Ant   | PCC  |          |            |                |                                | SCC  |          |            | SCC            |      |          | SCC        |                |      | Power    |            |                |             |                |
|                         |                   |       | Band | BW (MHz) | UL Channel | UL Freq. (MHz) | UL Mode (Modulation/RB/Offset) | Band | BW (MHz) | DL Channel | DL Freq. (MHz) | Band | BW (MHz) | DL Channel | DL Freq. (MHz) | Band | BW (MHz) | DL Channel | DL Freq. (MHz) | CA TX (dBm) | Rel.8 TX (dBm) |
| Intra-band & Inter-band | CA_2A-2A-4A-4A    | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 2    | 20       | 19100      | 1900           | 4    | 20       | 20050      | 1720           | 4    | 20       | 20300      | 1745           | 22.14       | 22.93          |
|                         | CA_2A-2A-4A-5A    | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 2    | 20       | 19100      | 1900           | 4    | 20       | 20300      | 1745           | 5    | 10       | 20600      | 844            | 22.13       | 22.93          |
|                         | CA_2A-2A-5A-66A   | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 2    | 20       | 19100      | 1900           | 5    | 10       | 20600      | 844            | 66   | 20       | 67236      | 2190           | 22.09       | 22.93          |
|                         | CA_2A-2A-13A-66A  | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 2    | 20       | 19100      | 1900           | 13   | 10       | 23230      | 782            | 66   | 20       | 67236      | 2190           | 22.05       | 22.93          |
|                         | CA_2A-2A-66A-66A  | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 2    | 20       | 19100      | 1900           | 66   | 20       | 66886      | 2155           | 66   | 20       | 67236      | 2190           | 22.11       | 22.93          |
|                         | CA_2A-2A-66B      | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 2    | 20       | 19100      | 1900           | 66   | 10       | 67187      | 2185.1         | 66   | 10       | 67286      | 2195           | 22.08       | 22.93          |
|                         | CA_2A-2A-66C      | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 2    | 20       | 19100      | 1900           | 66   | 20       | 67038      | 2170.2         | 66   | 20       | 67236      | 2190           | 22.04       | 22.93          |
|                         | CA_2A-4A-4A-5A    | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 4    | 20       | 20050      | 1720           | 4    | 20       | 20300      | 1745           | 5    | 10       | 20600      | 844            | 22.16       | 22.93          |
|                         | CA_2A-4A-5B       | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 4    | 20       | 20300      | 1745           | 5    | 10       | 20476      | 831.6          | 5    | 10       | 20575      | 841.5          | 22.12       | 22.93          |
|                         | CA_2A-5A-5A-66A   | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 5    | 10       | 20600      | 844            | 5    | 10       | 20450      | 829.0          | 66   | 20       | 66886      | 2155.0         | 22.07       | 22.93          |
|                         | CA_2A-5A-66A-66A  | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 5    | 10       | 20600      | 844            | 66   | 20       | 66886      | 2155           | 66   | 20       | 67236      | 2190           | 22.06       | 22.93          |
|                         | CA_2A-5A-66B      | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 5    | 10       | 20600      | 844            | 66   | 10       | 67187      | 2185.1         | 66   | 10       | 67286      | 2195           | 22.05       | 22.93          |
|                         | CA_2A-5A-66C      | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 5    | 10       | 20600      | 844            | 66   | 20       | 67038      | 2170.2         | 66   | 20       | 67236      | 2190           | 22.18       | 22.93          |
|                         | CA_2A-5B-66A      | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 5    | 10       | 20476      | 831.6          | 5    | 10       | 20575      | 841.5          | 66   | 20       | 66886      | 2155.0         | 22.14       | 22.93          |
|                         | CA_2A-13A-66A-66A | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 13   | 10       | 23230      | 782            | 66   | 20       | 66886      | 2155           | 66   | 20       | 67236      | 2190           | 22.16       | 22.93          |
|                         | CA_2A-13A-66B     | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 13   | 10       | 23230      | 782            | 66   | 10       | 67187      | 2185.1         | 66   | 10       | 67286      | 2195           | 22.11       | 22.93          |
|                         | CA_2A-13A-66C     | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 13   | 10       | 23230      | 782            | 66   | 20       | 67038      | 2170.2         | 66   | 20       | 67236      | 2190           | 22.03       | 22.93          |
|                         | CA_4A-4A-5B       | Ant 1 | 4    | 20       | 20050      | 1720           | QPSK/180                       | 4    | 20       | 20300      | 1745           | 5    | 10       | 20476      | 831.6          | 5    | 10       | 20575      | 841.5          | 22.05       | 22.86          |
|                         | CA_5A-5A-66A-66A  | Ant 1 | 5    | 10       | 20450      | 829            | QPSK/180                       | 5    | 10       | 20600      | 844.0          | 66   | 20       | 66886      | 2155           | 66   | 20       | 67236      | 2190           | 22.72       | 23.05          |
|                         | CA_5A-5A-66B      | Ant 1 | 5    | 10       | 20450      | 829            | QPSK/180                       | 5    | 10       | 20600      | 844.0          | 66   | 10       | 67187      | 2185.1         | 66   | 10       | 67286      | 2195           | 22.78       | 23.05          |
|                         | CA_5A-5A-66C      | Ant 1 | 5    | 10       | 20450      | 829            | QPSK/180                       | 5    | 10       | 20600      | 844.0          | 66   | 20       | 67038      | 2170.2         | 66   | 20       | 67236      | 2190           | 22.76       | 23.05          |
|                         | CA_5B-66A-66A     | Ant 1 | 5    | 10       | 20476      | 831.6          | QPSK/180                       | 5    | 10       | 20575      | 841.5          | 66   | 20       | 66886      | 2155           | 66   | 20       | 67236      | 2190           | 22.82       | 23.05          |
|                         | CA_5B-66B         | Ant 1 | 5    | 10       | 20476      | 831.6          | QPSK/180                       | 5    | 10       | 20575      | 841.5          | 66   | 10       | 67187      | 2185.1         | 66   | 10       | 67286      | 2195           | 22.80       | 23.05          |
|                         | CA_5B-66C         | Ant 1 | 5    | 10       | 20476      | 831.6          | QPSK/180                       | 5    | 10       | 20575      | 841.5          | 66   | 20       | 67038      | 2170.2         | 66   | 20       | 67236      | 2190           | 22.72       | 23.05          |
|                         | CA_2A-66A-66A-66A | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 66   | 20       | 132072     | 1720           | 66   | 20       | 66886      | 2155           | 66   | 20       | 67236      | 2190           | 22.14       | 22.93          |
|                         | CA_13A-48A-48C    | Ant 1 | 13   | 10       | 23230      | 782            | QPSK/180                       | 48   | 20       | 55340      | 3560.0         | 48   | 20       | 55891      | 3615.1         | 48   | 20       | 56089      | 3634.9         | 22.55       | 22.93          |
|                         | CA_13A-48A-66B    | Ant 1 | 13   | 10       | 23230      | 782            | QPSK/180                       | 48   | 20       | 55340      | 3560.0         | 66   | 10       | 67187      | 2185.1         | 66   | 10       | 67286      | 2195.0         | 22.54       | 22.93          |
|                         | CA_13A-48A-66C    | Ant 1 | 13   | 10       | 23230      | 782            | QPSK/180                       | 48   | 10       | 56440      | 3690.0         | 66   | 20       | 67038      | 2170.2         | 66   | 10       | 67236      | 2190           | 22.58       | 22.93          |
|                         | CA_13A-48C-66A    | Ant 1 | 13   | 10       | 23230      | 782            | QPSK/180                       | 48   | 20       | 56442      | 3670.2         | 48   | 20       | 56640      | 3690           | 66   | 20       | 67236      | 2190           | 22.51       | 22.93          |
|                         | CA_13A-48D        | Ant 1 | 13   | 10       | 23230      | 782            | QPSK/180                       | 48   | 20       | 55792      | 3605.2         | 48   | 20       | 55990      | 3625           | 48   | 20       | 56188      | 3644.8         | 22.49       | 22.93          |
|                         | CA_2A-13A-48C     | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 13   | 10       | 23230      | 782            | 48   | 20       | 56442      | 3670.2         | 48   | 20       | 56640      | 3690           | 22.09       | 22.93          |
|                         | CA_2A-48A-48C     | Ant 1 | 2    | 20       | 18700      | 1860           | QPSK/180                       | 48   | 20       | 55340      | 3560           | 48   | 20       | 55891      | 3615.1         | 48   | 20       | 56089      | 3634.9         | 22.15       | 22.93          |
| CA_2A-48C-66A           | Ant 1             | 2     | 20   | 18700    | 1860       | QPSK/180       | 48                             | 20   | 55891    | 3615.1     | 48             | 20   | 56089    | 3634.9     | 66             | 20   | 67236    | 2190       | 22.18          | 22.93       |                |
| CA_2A-48D               | Ant 1             | 2     | 20   | 18700    | 1860       | QPSK/180       | 48                             | 20   | 55792    | 3605.2     | 48             | 20   | 55990    | 3625       | 48             | 20   | 56188    | 3644.8     | 22.12          | 22.93       |                |
| CA_2A-5A-48C            | Ant 1             | 2     | 20   | 18700    | 1860       | QPSK/180       | 5                              | 10   | 20600    | 844        | 48             | 20   | 55891    | 3615.1     | 48             | 20   | 56089    | 3634.9     | 22.17          | 22.93       |                |
| CA_48A-48A-66A-66A      | Ant 1             | 48    | 20   | 55340    | 3560       | QPSK/180       | 48                             | 20   | 56640    | 3690       | 66             | 20   | 66886    | 2155       | 66             | 20   | 67236    | 2190       | 21.15          | 23.11       |                |
| CA_48A-48A-66B          | Ant 1             | 48    | 20   | 55340    | 3560       | QPSK/180       | 48                             | 20   | 56640    | 3690       | 66             | 10   | 67187    | 2185.1     | 66             | 10   | 67286    | 2195.0     | 21.08          | 23.11       |                |
| CA_48A-48A-66C          | Ant 1             | 48    | 20   | 55340    | 3560       | QPSK/180       | 48                             | 20   | 56640    | 3690       | 66             | 20   | 67038    | 2170.2     | 66             | 10   | 67236    | 2190       | 21.12          | 23.11       |                |
| CA_48A-48C-66A          | Ant 1             | 48    | 20   | 55340    | 3560       | QPSK/180       | 48                             | 20   | 55891    | 3615.1     | 48             | 20   | 56089    | 3634.9     | 66             | 20   | 67236    | 2190       | 21.11          | 23.11       |                |
| CA_48C-66A-66A          | Ant 1             | 48    | 20   | 55891    | 3615.1     | QPSK/180       | 48                             | 20   | 56089    | 3634.9     | 66             | 20   | 66886    | 2155       | 66             | 20   | 67236    | 2190       | 21.09          | 23.11       |                |
| CA_48C-66B              | Ant 1             | 48    | 20   | 55891    | 3615.1     | QPSK/180       | 48                             | 20   | 56089    | 3634.9     | 66             | 10   | 67187    | 2185.1     | 66             | 10   | 67286    | 2195       | 21.10          | 23.11       |                |
| CA_48C-66C              | Ant 1             | 48    | 20   | 55891    | 3615.1     | QPSK/180       | 48                             | 20   | 56089    | 3634.9     | 66             | 20   | 67038    | 2170.2     | 66             | 20   | 67236    | 2190       | 21.05          | 23.11       |                |
| CA_48D-66A              | Ant 1             | 48    | 20   | 56244    | 3650.4     | QPSK/180       | 48                             | 20   | 56442    | 3670.2     | 48             | 20   | 56640    | 3690       | 66             | 20   | 67236    | 2190       | 21.06          | 23.11       |                |
| CA_48E                  | Ant 1             | 48    | 20   | 55340    | 3560       | QPSK/180       | 48                             | 20   | 55538    | 3579.8     | 48             | 20   | 55736    | 3599.6     | 48             | 5    | 55653    | 3611.3     | 21.10          | 23.11       |                |
| CA_4A-48D               | Ant 1             | 4     | 20   | 20050    | 1720       | QPSK/180       | 48                             | 20   | 56244    | 3650.4     | 48             | 20   | 56442    | 3670.2     | 48             | 20   | 56640    | 3690       | 22.49          | 22.86       |                |
| CA_5A-48C-66A           | Ant 1             | 5     | 10   | 20450    | 829        | QPSK/180       | 48                             | 20   | 55891    | 3615.1     | 48             | 20   | 56089    | 3634.9     | 66             | 20   | 67236    | 2190       | 22.83          | 23.05       |                |
| CA_5A-48D               | Ant 1             | 5     | 10   | 20450    | 829        | QPSK/180       | 48                             | 20   | 55792    | 3605.2     | 48             | 20   | 55990    | 3625       | 48             | 20   | 56188    | 3644.8     | 22.88          | 23.05       |                |

| 2CC LTE Downlink        |                  |      |          |            |               |                                 |      |          |            |               |             |                |
|-------------------------|------------------|------|----------|------------|---------------|---------------------------------|------|----------|------------|---------------|-------------|----------------|
| Configure               | CA Configuration | PCC  |          |            |               |                                 | SCC  |          |            |               | Power       |                |
|                         |                  | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | UL Mode (Modulation /RB/Offset) | Band | BW (MHz) | UL Channel | UL Fre. (MHz) | CA TX (dBm) | Rel 8 TX (dBm) |
| Intra-band & Inter-band | CA_n2(2A)        | n2A  | 20       | 388000     | 1940          | QPSK/1#0                        | n2A  | 20       | 396000     | 1980          | 22.42       | 23.13          |
|                         | CA_n2A-n5A       | n2A  | 20       | 396000     | 1980          | QPSK/1#0                        | n5A  | 20       | 176300     | 881.5         | 22.48       | 23.13          |
|                         | CA_n2A-n48A      | n2A  | 20       | 396000     | 1980          | QPSK/1#0                        | n48A | 100      | 641666     | 3624.99       | 22.43       | 23.13          |
|                         | CA_n2A-n66A      | n2A  | 20       | 396000     | 1980          | QPSK/1#0                        | n66A | 30       | 431000     | 2515          | 22.52       | 23.13          |
|                         | CA_n5(2A)        | n5A  | 20       | 175800     | 879           | QPSK/1#0                        | n5A  | 20       | 176800     | 884           | 23.15       | 23.82          |
|                         | CA_n5B           | n5A  | 20       | 175800     | 879           | QPSK/1#0                        | n5A  | 20       | 176800     | 884           | 23.21       | 23.82          |
|                         | CA_n5A-n48A      | n5A  | 20       | 176300     | 881.5         | QPSK/1#0                        | n48A | 100      | 641666     | 3624.99       | 23.12       | 23.82          |
|                         | CA_n5A-n66A      | n5A  | 20       | 176300     | 881.5         | QPSK/1#0                        | n66A | 30       | 431000     | 2515          | 23.05       | 23.82          |
|                         | CA_n66(2A)       | n66A | 20       | 424000     | 2120          | QPSK/1#0                        | n66A | 20       | 434000     | 2170          | 22.36       | 22.99          |
|                         | CA_n66B          | n66B | 10       | 423000     | 2115          | QPSK/1#0                        | n66B | 15       | 435000     | 2175          | 22.25       | 22.99          |

### 2.4GHz WLAN ANT 8

|                   | Mode              | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|-------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
| 2.4GHz WLAN ANT 8 | 802.11b 1Mbps     | CH 1    | 2412            | 20.25               | 21.00         | 19.50         | 98.77        |
|                   |                   | CH 6    | 2437            | 19.65               | 20.50         |               |              |
|                   |                   | CH 11   | 2462            | 20.31               | 21.00         |               |              |
|                   | 802.11g 6Mbps     | CH 1    | 2412            | 18.51               | 19.50         | 18.50         | 98.26        |
|                   |                   | CH 6    | 2437            | 18.30               | 19.50         |               |              |
|                   |                   | CH 11   | 2462            | 18.55               | 19.50         |               |              |
|                   | 802.11n-HT20 MCS0 | CH 1    | 2412            | 18.42               | 19.50         | 18.50         | 98.13        |
|                   |                   | CH 6    | 2437            | 18.08               | 19.00         |               |              |
|                   |                   | CH 11   | 2462            | 18.48               | 19.50         |               |              |
|                   | 802.11n-HT40 MCS0 | CH 3    | 2422            | 18.83               | 19.50         | 18.50         | 94.90        |
|                   |                   | CH 6    | 2437            | 18.79               | 19.50         |               |              |
|                   |                   | CH 9    | 2452            | 19.25               | 20.00         |               |              |

### 5GHz WLAN ANT 8

|                   | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
| 5.2GHz WLAN ANT 8 | 802.11a 6Mbps       | CH 36   | 5180            | 18.11               | 19.00         | 18.50         | 98.26        |
|                   |                     | CH 44   | 5220            | 18.14               | 19.00         |               |              |
|                   |                     | CH 48   | 5240            | 17.94               | 19.00         |               |              |
|                   | 802.11n-HT20 MCS0   | CH 36   | 5180            | 17.44               | 18.50         | 18.00         | 98.13        |
|                   |                     | CH 44   | 5220            | 17.54               | 18.50         |               |              |
|                   |                     | CH 48   | 5240            | 17.26               | 18.00         |               |              |
|                   | 802.11n-HT40 MCS0   | CH 38   | 5190            | 18.06               | 19.00         | 18.00         | 96.47        |
|                   |                     | CH 46   | 5230            | 17.94               | 19.00         |               |              |
|                   |                     | CH 36   | 5180            | 17.40               | 18.50         |               |              |
|                   | 802.11ac-VHT20 MCS0 | CH 44   | 5220            | 17.56               | 18.50         | 18.00         | 98.13        |
|                   |                     | CH 48   | 5240            | 17.28               | 18.00         |               |              |
|                   |                     | CH 38   | 5190            | 18.07               | 19.00         |               |              |
|                   | 802.11ac-VHT40 MCS0 | CH 46   | 5230            | 17.94               | 19.00         | 18.00         | 96.30        |
|                   |                     | CH 36   | 5180            | 17.40               | 18.50         |               |              |
|                   |                     | CH 42   | 5210            | 18.36               | 19.00         |               |              |
|                   | 802.11ac-VHT80 MCS0 | CH 42   | 5210            | 18.36               | 19.00         | 18.00         | 93.09        |

### 5GHz WLAN ANT 8

|                   | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
| 5.8GHz WLAN ANT 8 | 802.11a 6Mbps       | CH 149  | 5745            | 19.16               | 20.00         | 18.50         | 98.26        |
|                   |                     | CH 157  | 5785            | 19.09               | 20.00         |               |              |
|                   |                     | CH 165  | 5825            | 19.22               | 20.00         |               |              |
|                   | 802.11n-HT20 MCS0   | CH 149  | 5745            | 18.46               | 19.50         | 18.00         | 98.13        |
|                   |                     | CH 157  | 5785            | 18.44               | 19.50         |               |              |
|                   |                     | CH 165  | 5825            | 18.53               | 19.50         |               |              |
|                   | 802.11n-HT40 MCS0   | CH 151  | 5755            | 19.30               | 20.00         | 18.00         | 96.47        |
|                   |                     | CH 159  | 5795            | 19.03               | 20.00         |               |              |
|                   |                     | CH 149  | 5745            | 18.50               | 19.50         |               |              |
|                   | 802.11ac-VHT20 MCS0 | CH 157  | 5785            | 18.42               | 19.50         | 18.00         | 98.13        |
|                   |                     | CH 165  | 5825            | 18.54               | 19.50         |               |              |
|                   |                     | CH 151  | 5755            | 19.31               | 20.00         |               |              |
|                   | 802.11ac-VHT40 MCS0 | CH 159  | 5795            | 19.03               | 20.00         | 18.00         | 96.30        |
|                   |                     | CH 155  | 5775            | 19.06               | 20.00         |               |              |
|                   |                     | CH 155  | 5775            | 19.06               | 20.00         | 18.00         | 92.68        |

| Mode          | Channel | Frequency (MHz) | 1Mbps               |               | 2Mbps               |               | 3Mbps               |               |
|---------------|---------|-----------------|---------------------|---------------|---------------------|---------------|---------------------|---------------|
|               |         |                 | Average power (dBm) | Tune-up Limit | Average power (dBm) | Tune-up Limit | Average power (dBm) | Tune-up Limit |
| BR / EDR      | CH 00   | 2402            | 11.88               | 13.00         | 10.44               | 11.50         | 10.45               | 11.50         |
|               | CH 39   | 2441            | 11.84               | 13.00         | 9.72                | 10.50         | 9.73                | 10.50         |
|               | CH 78   | 2480            | 11.71               | 13.00         | 10.57               | 11.50         | 10.48               | 11.50         |
| Duty Cycle %  |         |                 | 76.96               |               | 77.25               |               | 77.28               |               |
| Power Setting |         |                 | Default             |               | Default             |               | Default             |               |

| Mode          | Channel | Frequency (MHz) | Average power (dBm) |      | Tune-up Limit |
|---------------|---------|-----------------|---------------------|------|---------------|
|               |         |                 | GFSK                |      |               |
| LE            | CH 00   | 2402            | 6.81                | 8.00 |               |
|               | CH 19   | 2440            | 6.43                | 7.50 |               |
|               | CH 39   | 2480            | 8.01                | 9.00 |               |
| Duty Cycle %  |         |                 | 61.9                |      |               |
| Power Setting |         |                 | Default             |      |               |

# Reduced Power Level 1 for ANT 1 & ANT 4 & ANT 5 & ANT 6 & ANT 8

| Band            |                         | WCDMA Band V (dBm) |            |       | Tune-up<br>Limit<br>(dBm) |
|-----------------|-------------------------|--------------------|------------|-------|---------------------------|
| TX Channel      |                         | 4132               | 4182       | 4233  |                           |
| Rx Channel      |                         | 4357               | 4407       | 4458  |                           |
| Frequency (MHz) |                         | 826.4              | 836.4      | 846.6 |                           |
| 3GPP Rel 99     | RMC 12.2Kbps            | 22.14              | 22.25      | 22.22 | 22.80                     |
| 3GPP Rel 5      | HSDPA Subtest-1         | 21.36              | 21.52      | 21.70 | 22.30                     |
| 3GPP Rel 5      | HSDPA Subtest-2         | 21.34              | 21.53      | 21.79 | 22.30                     |
| 3GPP Rel 5      | HSDPA Subtest-3         | 20.87              | 20.96      | 21.19 | 21.80                     |
| 3GPP Rel 5      | HSDPA Subtest-4         | 20.84              | 21.02      | 21.18 | 21.80                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-1      | 21.38              | 21.54      | 21.75 | 22.30                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-2      | 21.36              | 21.58      | 21.76 | 22.30                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-3      | 20.86              | 21.06      | 21.25 | 21.80                     |
| 3GPP Rel 8      | DC-HSDPA Subtest-4      | 20.91              | 21.06      | 21.21 | 21.80                     |
| 3GPP Rel 6      | HSUPA Subtest-1         | 21.38              | 21.57      | 21.72 | 22.30                     |
| 3GPP Rel 6      | HSUPA Subtest-2         | 20.83              | 21.00      | 21.22 | 21.80                     |
| 3GPP Rel 6      | HSUPA Subtest-3         | 21.26              | 21.53      | 21.73 | 22.30                     |
| 3GPP Rel 6      | HSUPA Subtest-4         | 21.30              | 21.53      | 21.71 | 22.30                     |
| 3GPP Rel 6      | HSUPA Subtest-5         | 21.36              | 21.45      | 21.74 | 22.30                     |
| 3GPP Rel 7      | HSPA+ (16QAM) Subtest-1 | 20.85              | 21.01      | 21.25 | 21.80                     |
| Attenuator      |                         |                    | Cable Loss | 0.6   |                           |
| Mode            |                         |                    | Max.       | 22.25 |                           |

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required)_Ant 4 |            |         |           |             |                |              |                     |
|----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                             | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                              |            |         |           | 20050       | 20175          | 20300        |                     |
| Frequency (MHz)                                                      |            |         |           | 1720        | 1732.5         | 1745         | 22.8                |
| 20                                                                   | QPSK       | 1       | 0         | 21.79       | 21.86          | 21.81        |                     |
| 20                                                                   | QPSK       | 1       | 49        | 21.77       | 21.75          | 21.75        |                     |
| 20                                                                   | QPSK       | 1       | 99        | 21.69       | 21.80          | 21.71        | 21.8                |
| 20                                                                   | QPSK       | 50      | 0         | 20.81       | 20.90          | 20.84        |                     |
| 20                                                                   | QPSK       | 50      | 24        | 20.87       | 20.70          | 20.69        |                     |
| 20                                                                   | QPSK       | 50      | 50        | 20.73       | 20.76          | 20.63        | 21.8                |
| 20                                                                   | QPSK       | 100     | 0         | 20.69       | 20.72          | 20.78        |                     |
| 20                                                                   | 16QAM      | 1       | 0         | 20.95       | 21.10          | 20.99        |                     |
| 20                                                                   | 16QAM      | 1       | 49        | 20.96       | 21.03          | 20.88        | 21.8                |
| 20                                                                   | 16QAM      | 1       | 99        | 20.88       | 20.99          | 20.95        |                     |
| 20                                                                   | 16QAM      | 50      | 0         | 19.87       | 19.90          | 19.70        |                     |
| 20                                                                   | 16QAM      | 50      | 24        | 19.74       | 19.68          | 19.76        | 20.8                |
| 20                                                                   | 16QAM      | 50      | 50        | 19.63       | 19.70          | 19.74        |                     |
| 20                                                                   | 16QAM      | 100     | 0         | 19.55       | 19.82          | 19.64        |                     |
| 20                                                                   | 64QAM      | 1       | 0         | 19.86       | 20.01          | 19.87        | 20.8                |
| 20                                                                   | 64QAM      | 1       | 49        | 19.73       | 19.74          | 19.90        |                     |
| 20                                                                   | 64QAM      | 1       | 99        | 19.75       | 19.74          | 19.87        |                     |
| 20                                                                   | 64QAM      | 50      | 0         | 18.75       | 18.84          | 18.82        | 19.8                |
| 20                                                                   | 64QAM      | 50      | 24        | 18.69       | 18.83          | 18.61        |                     |
| 20                                                                   | 64QAM      | 50      | 50        | 18.66       | 18.64          | 18.65        |                     |
| 20                                                                   | 64QAM      | 100     | 0         | 18.65       | 18.79          | 18.70        | Tune-up limit (dBm) |
| Channel                                                              |            |         |           | 20025       | 20175          | 20325        |                     |
| Frequency (MHz)                                                      |            |         |           | 1717.5      | 1732.5         | 1747.5       | 22.8                |
| 15                                                                   | QPSK       | 1       | 0         | 21.81       | 21.83          | 21.75        |                     |
| 15                                                                   | QPSK       | 1       | 37        | 21.79       | 21.79          | 21.71        |                     |
| 15                                                                   | QPSK       | 1       | 74        | 21.64       | 21.75          | 21.70        | 21.8                |
| 15                                                                   | QPSK       | 36      | 0         | 20.85       | 20.88          | 20.70        |                     |
| 15                                                                   | QPSK       | 36      | 20        | 20.67       | 20.87          | 20.64        |                     |
| 15                                                                   | QPSK       | 36      | 39        | 20.72       | 20.59          | 20.55        | 21.8                |
| 15                                                                   | QPSK       | 75      | 0         | 20.74       | 20.73          | 20.76        |                     |
| 15                                                                   | 16QAM      | 1       | 0         | 20.99       | 21.07          | 20.96        |                     |
| 15                                                                   | 16QAM      | 1       | 37        | 20.89       | 21.05          | 20.87        | 21.8                |
| 15                                                                   | 16QAM      | 1       | 74        | 20.98       | 20.85          | 21.01        |                     |
| 15                                                                   | 16QAM      | 36      | 0         | 19.86       | 19.91          | 19.70        |                     |
| 15                                                                   | 16QAM      | 36      | 20        | 19.65       | 19.70          | 19.65        | 20.8                |
| 15                                                                   | 16QAM      | 36      | 39        | 19.53       | 19.77          | 19.72        |                     |
| 15                                                                   | 16QAM      | 75      | 0         | 19.67       | 19.83          | 19.60        |                     |
| 15                                                                   | 64QAM      | 1       | 0         | 19.76       | 19.85          | 19.84        | 20.8                |
| 15                                                                   | 64QAM      | 1       | 37        | 19.68       | 19.78          | 19.79        |                     |
| 15                                                                   | 64QAM      | 1       | 74        | 19.67       | 19.75          | 19.68        |                     |
| 15                                                                   | 64QAM      | 36      | 0         | 18.73       | 18.83          | 18.73        | 19.8                |
| 15                                                                   | 64QAM      | 36      | 20        | 18.53       | 18.78          | 18.59        |                     |
| 15                                                                   | 64QAM      | 36      | 39        | 18.56       | 18.56          | 18.72        |                     |
| 15                                                                   | 64QAM      | 75      | 0         | 18.48       | 18.82          | 18.76        | Tune-up limit (dBm) |
| Channel                                                              |            |         |           | 20000       | 20175          | 20350        |                     |
| Frequency (MHz)                                                      |            |         |           | 1715        | 1732.5         | 1750         | 22.8                |
| 10                                                                   | QPSK       | 1       | 0         | 21.77       | 21.81          | 21.74        |                     |
| 10                                                                   | QPSK       | 1       | 25        | 21.74       | 21.65          | 21.61        |                     |
| 10                                                                   | QPSK       | 1       | 49        | 21.67       | 21.75          | 21.61        | 21.8                |
| 10                                                                   | QPSK       | 25      | 0         | 20.85       | 20.90          | 20.61        |                     |
| 10                                                                   | QPSK       | 25      | 12        | 20.82       | 20.78          | 20.68        |                     |
| 10                                                                   | QPSK       | 25      | 25        | 20.59       | 20.66          | 20.75        | 21.8                |
| 10                                                                   | QPSK       | 50      | 0         | 20.76       | 20.79          | 20.75        |                     |
| 10                                                                   | 16QAM      | 1       | 0         | 21.02       | 21.06          | 20.95        |                     |
| 10                                                                   | 16QAM      | 1       | 25        | 21.05       | 20.97          | 20.84        | 21.8                |
| 10                                                                   | 16QAM      | 1       | 49        | 21.04       | 21.03          | 20.97        |                     |
| 10                                                                   | 16QAM      | 25      | 0         | 19.73       | 19.89          | 19.83        |                     |
| 10                                                                   | 16QAM      | 25      | 12        | 19.74       | 19.66          | 19.66        | 20.8                |
| 10                                                                   | 16QAM      | 25      | 25        | 19.62       | 19.65          | 19.78        |                     |
| 10                                                                   | 16QAM      | 50      | 0         | 19.61       | 19.73          | 19.60        |                     |
| 10                                                                   | 64QAM      | 1       | 0         | 19.85       | 19.89          | 19.84        | 20.8                |
| 10                                                                   | 64QAM      | 1       | 25        | 19.83       | 19.84          | 19.82        |                     |
| 10                                                                   | 64QAM      | 1       | 49        | 19.66       | 19.81          | 19.85        |                     |
| 10                                                                   | 64QAM      | 25      | 0         | 18.79       | 18.83          | 18.79        | 19.8                |
| 10                                                                   | 64QAM      | 25      | 12        | 18.71       | 18.75          | 18.59        |                     |
| 10                                                                   | 64QAM      | 25      | 25        | 18.64       | 18.65          | 18.65        |                     |
| 10                                                                   | 64QAM      | 50      | 0         | 18.50       | 18.66          | 18.75        | Tune-up limit (dBm) |
| Channel                                                              |            |         |           | 19975       | 20175          | 20375        |                     |
| Frequency (MHz)                                                      |            |         |           | 1712.5      | 1732.5         | 1752.5       | 22.8                |
| 5                                                                    | QPSK       | 1       | 0         | 21.76       | 21.80          | 21.73        |                     |
| 5                                                                    | QPSK       | 1       | 12        | 21.74       | 21.75          | 21.67        |                     |
| 5                                                                    | QPSK       | 1       | 24        | 21.72       | 21.74          | 21.60        | 21.8                |
| 5                                                                    | QPSK       | 12      | 0         | 20.84       | 20.99          | 20.73        |                     |
| 5                                                                    | QPSK       | 12      | 7         | 20.64       | 20.74          | 20.64        |                     |
| 5                                                                    | QPSK       | 12      | 13        | 20.69       | 20.61          | 20.65        | 21.8                |
| 5                                                                    | QPSK       | 25      | 0         | 20.79       | 20.78          | 20.64        |                     |
| 5                                                                    | 16QAM      | 1       | 0         | 21.03       | 21.08          | 20.95        |                     |
| 5                                                                    | 16QAM      | 1       | 12        | 21.07       | 20.98          | 21.07        | 21.8                |
| 5                                                                    | 16QAM      | 1       | 24        | 20.85       | 20.93          | 20.99        |                     |
| 5                                                                    | 16QAM      | 12      | 0         | 19.77       | 19.77          | 19.87        |                     |
| 5                                                                    | 16QAM      | 12      | 7         | 19.74       | 19.84          | 19.83        | 20.8                |
| 5                                                                    | 16QAM      | 12      | 13        | 19.59       | 19.78          | 19.57        |                     |
| 5                                                                    | 16QAM      | 25      | 0         | 19.56       | 19.71          | 19.74        |                     |
| 5                                                                    | 64QAM      | 1       | 0         | 19.78       | 19.86          | 19.80        | 20.8                |
| 5                                                                    | 64QAM      | 1       | 12        | 19.77       | 19.91          | 19.74        |                     |
| 5                                                                    | 64QAM      | 1       | 24        | 19.57       | 19.74          | 19.65        |                     |
| 5                                                                    | 64QAM      | 12      | 0         | 18.75       | 18.91          | 18.80        | 19.8                |
| 5                                                                    | 64QAM      | 12      | 7         | 18.59       | 18.84          | 18.59        |                     |
| 5                                                                    | 64QAM      | 12      | 13        | 18.54       | 18.80          | 18.60        |                     |
| 5                                                                    | 64QAM      | 25      | 0         | 18.55       | 18.60          | 18.63        | Tune-up limit (dBm) |
| Channel                                                              |            |         |           | 19965       | 20175          | 20385        |                     |
| Frequency (MHz)                                                      |            |         |           | 1711.5      | 1732.5         | 1753.5       | 22.8                |
| 3                                                                    | QPSK       | 1       | 0         | 21.78       | 21.82          | 21.76        |                     |
| 3                                                                    | QPSK       | 1       | 8         | 21.66       | 21.78          | 21.73        |                     |
| 3                                                                    | QPSK       | 1       | 14        | 21.67       | 21.66          | 21.70        | 21.8                |
| 3                                                                    | QPSK       | 8       | 0         | 20.83       | 20.80          | 20.61        |                     |
| 3                                                                    | QPSK       | 8       | 4         | 20.88       | 20.88          | 20.63        |                     |
| 3                                                                    | QPSK       | 8       | 7         | 20.74       | 20.66          | 20.59        | 21.8                |

| Band 5 (Celluar Band) (dBm)<br>Part 22H(only on channel required) |            |         |           |             |                |              |                     |                     |
|-------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|---------------------|
| BW [MHz]                                                          | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |                     |
| Channel                                                           |            |         |           | 20450       | 20525          | 20600        |                     |                     |
| Frequency (MHz)                                                   |            |         |           | 829         | 836.5          | 844          | 22.3                |                     |
| 10                                                                | QPSK       | 1       | 0         | 21.48       | 21.55          | 21.51        |                     |                     |
| 10                                                                | QPSK       | 1       | 25        | 21.50       | 21.49          | 21.36        |                     |                     |
| 10                                                                | QPSK       | 1       | 49        | 21.43       | 21.41          | 21.35        |                     |                     |
| 10                                                                | QPSK       | 25      | 0         | 20.45       | 20.47          | 20.42        | 21.3                |                     |
| 10                                                                | QPSK       | 25      | 12        | 20.40       | 20.47          | 20.29        |                     |                     |
| 10                                                                | QPSK       | 25      | 25        | 20.36       | 20.36          | 20.28        |                     |                     |
| 10                                                                | QPSK       | 50      | 0         | 20.36       | 20.35          | 20.28        |                     |                     |
| 10                                                                | 16QAM      | 1       | 0         | 20.87       | 20.77          | 20.67        | 21.3                |                     |
| 10                                                                | 16QAM      | 1       | 25        | 20.70       | 20.72          | 20.68        |                     |                     |
| 10                                                                | 16QAM      | 1       | 49        | 20.66       | 20.69          | 20.74        |                     |                     |
| 10                                                                | 16QAM      | 25      | 0         | 19.48       | 19.58          | 19.61        |                     |                     |
| 10                                                                | 16QAM      | 25      | 12        | 19.35       | 19.55          | 19.53        | 20.3                |                     |
| 10                                                                | 16QAM      | 25      | 25        | 19.39       | 19.38          | 19.36        |                     |                     |
| 10                                                                | 16QAM      | 50      | 0         | 19.42       | 19.49          | 19.41        |                     |                     |
| 10                                                                | 64QAM      | 1       | 0         | 19.44       | 19.65          | 19.48        |                     |                     |
| 10                                                                | 64QAM      | 1       | 25        | 19.31       | 19.54          | 19.44        | 20.3                |                     |
| 10                                                                | 64QAM      | 1       | 49        | 19.47       | 19.45          | 19.53        |                     |                     |
| 10                                                                | 64QAM      | 25      | 0         | 18.31       | 18.55          | 18.31        |                     |                     |
| 10                                                                | 64QAM      | 25      | 12        | 18.19       | 18.48          | 18.22        |                     |                     |
| 10                                                                | 64QAM      | 25      | 25        | 18.21       | 18.46          | 18.20        | 19.3                |                     |
| 10                                                                | 64QAM      | 50      | 0         | 18.12       | 18.29          | 18.39        |                     |                     |
| Channel                                                           |            |         |           | 20425       | 20525          | 20625        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 826.5       | 836.5          | 846.5        |                     |                     |
| 5                                                                 | QPSK       | 1       | 0         | 21.50       | 21.51          | 21.45        | 22.3                |                     |
| 5                                                                 | QPSK       | 1       | 12        | 21.44       | 21.48          | 21.49        |                     |                     |
| 5                                                                 | QPSK       | 1       | 24        | 21.38       | 21.35          | 21.40        |                     |                     |
| 5                                                                 | QPSK       | 12      | 0         | 20.63       | 20.69          | 20.53        |                     |                     |
| 5                                                                 | QPSK       | 12      | 7         | 20.52       | 20.55          | 20.45        | 21.3                |                     |
| 5                                                                 | QPSK       | 12      | 13        | 20.31       | 20.46          | 20.33        |                     |                     |
| 5                                                                 | QPSK       | 25      | 0         | 20.44       | 20.53          | 20.50        |                     |                     |
| 5                                                                 | 16QAM      | 1       | 0         | 20.66       | 20.75          | 20.75        |                     |                     |
| 5                                                                 | 16QAM      | 1       | 12        | 20.80       | 20.63          | 20.71        | 21.3                |                     |
| 5                                                                 | 16QAM      | 1       | 24        | 20.52       | 20.70          | 20.67        |                     |                     |
| 5                                                                 | 16QAM      | 12      | 0         | 19.53       | 19.50          | 19.57        |                     |                     |
| 5                                                                 | 16QAM      | 12      | 7         | 19.43       | 19.47          | 19.58        |                     |                     |
| 5                                                                 | 16QAM      | 12      | 13        | 19.31       | 19.35          | 19.35        | 20.3                |                     |
| 5                                                                 | 16QAM      | 25      | 0         | 19.29       | 19.30          | 19.38        |                     |                     |
| 5                                                                 | 64QAM      | 1       | 0         | 19.44       | 19.49          | 19.60        |                     |                     |
| 5                                                                 | 64QAM      | 1       | 12        | 19.38       | 19.46          | 19.38        |                     |                     |
| 5                                                                 | 64QAM      | 1       | 24        | 19.30       | 19.54          | 19.51        | 20.3                |                     |
| 5                                                                 | 64QAM      | 12      | 0         | 18.28       | 18.46          | 18.47        |                     |                     |
| 5                                                                 | 64QAM      | 12      | 7         | 18.38       | 18.50          | 18.30        |                     |                     |
| 5                                                                 | 64QAM      | 12      | 13        | 18.15       | 18.29          | 18.31        |                     |                     |
| 5                                                                 | 64QAM      | 25      | 0         | 18.16       | 18.29          | 18.33        | 19.3                |                     |
| Channel                                                           |            |         |           | 20415       | 20525          | 20635        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 825.5       | 836.5          | 847.5        |                     |                     |
| 3                                                                 | QPSK       | 1       | 0         | 21.51       | 21.52          | 21.38        |                     | 22.3                |
| 3                                                                 | QPSK       | 1       | 8         | 21.50       | 21.47          | 21.43        |                     |                     |
| 3                                                                 | QPSK       | 1       | 14        | 21.47       | 21.35          | 21.28        |                     |                     |
| 3                                                                 | QPSK       | 8       | 0         | 20.49       | 20.58          | 20.41        |                     |                     |
| 3                                                                 | QPSK       | 8       | 4         | 20.46       | 20.41          | 20.37        | 21.3                |                     |
| 3                                                                 | QPSK       | 8       | 7         | 20.32       | 20.37          | 20.30        |                     |                     |
| 3                                                                 | QPSK       | 15      | 0         | 20.31       | 20.49          | 20.43        |                     |                     |
| 3                                                                 | 16QAM      | 1       | 0         | 20.75       | 20.83          | 20.65        |                     |                     |
| 3                                                                 | 16QAM      | 1       | 8         | 20.69       | 20.72          | 20.54        | 21.3                |                     |
| 3                                                                 | 16QAM      | 1       | 14        | 20.50       | 20.75          | 20.59        |                     |                     |
| 3                                                                 | 16QAM      | 8       | 0         | 19.33       | 19.43          | 19.47        |                     |                     |
| 3                                                                 | 16QAM      | 8       | 4         | 19.43       | 19.45          | 19.49        |                     |                     |
| 3                                                                 | 16QAM      | 8       | 7         | 19.35       | 19.32          | 19.40        | 20.3                |                     |
| 3                                                                 | 16QAM      | 15      | 0         | 19.34       | 19.31          | 19.37        |                     |                     |
| 3                                                                 | 64QAM      | 1       | 0         | 19.39       | 19.54          | 19.59        |                     |                     |
| 3                                                                 | 64QAM      | 1       | 8         | 19.31       | 19.56          | 19.54        |                     |                     |
| 3                                                                 | 64QAM      | 1       | 14        | 19.37       | 19.52          | 19.33        | 20.3                |                     |
| 3                                                                 | 64QAM      | 8       | 0         | 18.48       | 18.60          | 18.50        |                     |                     |
| 3                                                                 | 64QAM      | 8       | 4         | 18.31       | 18.43          | 18.32        |                     |                     |
| 3                                                                 | 64QAM      | 8       | 7         | 18.37       | 18.44          | 18.34        |                     |                     |
| 3                                                                 | 64QAM      | 15      | 0         | 18.22       | 18.49          | 18.34        | 19.3                |                     |
| Channel                                                           |            |         |           | 20407       | 20525          | 20643        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                   |            |         |           | 824.7       | 836.5          | 848.3        |                     |                     |
| 1.4                                                               | QPSK       | 1       | 0         | 21.45       | 21.50          | 21.43        |                     | 22.3                |
| 1.4                                                               | QPSK       | 1       | 3         | 21.41       | 21.35          | 21.40        |                     |                     |
| 1.4                                                               | QPSK       | 1       | 5         | 21.39       | 21.42          | 21.31        |                     |                     |
| 1.4                                                               | QPSK       | 3       | 0         | 20.53       | 20.59          | 20.34        |                     |                     |
| 1.4                                                               | QPSK       | 3       | 1         | 20.58       | 20.40          | 20.34        | 21.3                |                     |
| 1.4                                                               | QPSK       | 3       | 3         | 20.32       | 20.51          | 20.31        |                     |                     |
| 1.4                                                               | QPSK       | 6       | 0         | 20.40       | 20.37          | 20.45        |                     |                     |
| 1.4                                                               | 16QAM      | 1       | 0         | 20.66       | 20.87          | 20.75        |                     |                     |
| 1.4                                                               | 16QAM      | 1       | 3         | 20.84       | 20.71          | 20.54        | 21.3                |                     |
| 1.4                                                               | 16QAM      | 1       | 5         | 20.59       | 20.65          | 20.59        |                     |                     |
| 1.4                                                               | 16QAM      | 3       | 0         | 19.32       | 19.61          | 19.62        |                     |                     |
| 1.4                                                               | 16QAM      | 3       | 1         | 19.33       | 19.53          | 19.58        |                     |                     |
| 1.4                                                               | 16QAM      | 3       | 3         | 19.31       | 19.39          | 19.38        | 20.3                |                     |
| 1.4                                                               | 16QAM      | 6       | 0         | 19.41       | 19.47          | 19.33        |                     |                     |
| 1.4                                                               | 64QAM      | 1       | 0         | 19.59       | 19.67          | 19.57        |                     |                     |
| 1.4                                                               | 64QAM      | 1       | 3         | 19.44       | 19.63          | 19.43        |                     |                     |
| 1.4                                                               | 64QAM      | 1       | 5         | 19.43       | 19.38          | 19.53        | 20.3                |                     |
| 1.4                                                               | 64QAM      | 3       | 0         | 18.39       | 18.58          | 18.53        |                     |                     |
| 1.4                                                               | 64QAM      | 3       | 1         | 18.41       | 18.45          | 18.31        |                     |                     |
| 1.4                                                               | 64QAM      | 3       | 3         | 18.35       | 18.50          | 18.33        |                     |                     |
| 1.4                                                               | 64QAM      | 6       | 0         | 18.35       | 18.52          | 18.43        | 19.3                |                     |

|                 |       |    |    |        |        |        |                        |
|-----------------|-------|----|----|--------|--------|--------|------------------------|
| 3               | QPSK  | 15 | 0  | 20.67  | 20.84  | 20.72  | 21.8                   |
| 3               | 16QAM | 1  | 0  | 21.05  | 21.07  | 21.03  |                        |
| 3               | 16QAM | 1  | 8  | 21.00  | 20.91  | 21.04  |                        |
| 3               | 16QAM | 1  | 14 | 20.96  | 21.01  | 20.97  | 20.8                   |
| 3               | 16QAM | 8  | 0  | 19.68  | 19.78  | 19.84  |                        |
| 3               | 16QAM | 8  | 4  | 19.71  | 19.76  | 19.82  |                        |
| 3               | 16QAM | 8  | 7  | 19.60  | 19.59  | 19.72  | 20.8                   |
| 3               | 16QAM | 15 | 0  | 19.57  | 19.74  | 19.68  |                        |
| 3               | 64QAM | 1  | 0  | 19.85  | 19.89  | 19.81  |                        |
| 3               | 64QAM | 1  | 8  | 19.63  | 19.83  | 19.81  | 19.8                   |
| 3               | 64QAM | 1  | 14 | 19.80  | 19.71  | 19.78  |                        |
| 3               | 64QAM | 8  | 0  | 18.79  | 18.86  | 18.68  |                        |
| 3               | 64QAM | 8  | 4  | 18.61  | 18.85  | 18.60  | 19.8                   |
| 3               | 64QAM | 8  | 7  | 18.55  | 18.59  | 18.69  |                        |
| 3               | 64QAM | 15 | 0  | 18.53  | 18.64  | 18.75  |                        |
| Channel         |       |    |    | 19957  | 20175  | 20393  | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 21.73  | 21.80  | 21.72  | 22.8                   |
| 1.4             | QPSK  | 1  | 3  | 21.75  | 21.74  | 21.69  |                        |
| 1.4             | QPSK  | 1  | 5  | 21.67  | 21.68  | 21.64  |                        |
| 1.4             | QPSK  | 3  | 0  | 20.78  | 20.98  | 20.75  |                        |
| 1.4             | QPSK  | 3  | 1  | 20.88  | 20.80  | 20.74  |                        |
| 1.4             | QPSK  | 3  | 3  | 20.75  | 20.79  | 20.70  |                        |
| 1.4             | QPSK  | 6  | 0  | 20.64  | 20.68  | 20.64  | 21.8                   |
| 1.4             | 16QAM | 1  | 0  | 21.03  | 21.07  | 21.04  | 21.8                   |
| 1.4             | 16QAM | 1  | 3  | 21.08  | 20.99  | 20.83  |                        |
| 1.4             | 16QAM | 1  | 5  | 21.02  | 21.04  | 20.87  |                        |
| 1.4             | 16QAM | 3  | 0  | 19.64  | 19.74  | 19.85  |                        |
| 1.4             | 16QAM | 3  | 1  | 19.62  | 19.64  | 19.74  |                        |
| 1.4             | 16QAM | 3  | 3  | 19.59  | 19.64  | 19.69  |                        |
| 1.4             | 16QAM | 6  | 0  | 19.73  | 19.60  | 19.72  | 20.8                   |
| 1.4             | 64QAM | 1  | 0  | 19.82  | 19.97  | 19.90  | 20.8                   |
| 1.4             | 64QAM | 1  | 3  | 19.71  | 19.97  | 19.80  |                        |
| 1.4             | 64QAM | 1  | 5  | 19.62  | 19.90  | 19.66  |                        |
| 1.4             | 64QAM | 3  | 0  | 18.67  | 18.69  | 18.72  |                        |
| 1.4             | 64QAM | 3  | 1  | 18.71  | 18.72  | 18.56  |                        |
| 1.4             | 64QAM | 3  | 3  | 18.55  | 18.79  | 18.53  |                        |
| 1.4             | 64QAM | 6  | 0  | 18.56  | 18.59  | 18.63  | 19.8                   |

| Band 7 (2600MHz Band) (dBm)<br>Part 27_Ant 5 |            |         |           |             |                |              |                     |                     |
|----------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|---------------------|
| BW [MHz]                                     | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |                     |
| Channel                                      |            |         |           | 20850       | 21100          | 21350        |                     |                     |
| Frequency (MHz)                              |            |         |           | 2510        | 2535           | 2560         | 20.8                |                     |
| 20                                           | QPSK       | 1       | 0         | 19.70       | 19.74          | 19.93        |                     |                     |
| 20                                           | QPSK       | 1       | 49        | 19.55       | 19.65          | 19.90        |                     |                     |
| 20                                           | QPSK       | 1       | 99        | 19.62       | 19.59          | 19.79        |                     |                     |
| 20                                           | QPSK       | 50      | 0         | 18.71       | 18.75          | 18.88        | 19.8                |                     |
| 20                                           | QPSK       | 50      | 24        | 18.51       | 18.56          | 18.76        |                     |                     |
| 20                                           | QPSK       | 50      | 50        | 18.56       | 18.58          | 18.81        |                     |                     |
| 20                                           | QPSK       | 100     | 0         | 18.51       | 18.54          | 18.79        |                     |                     |
| 20                                           | 16QAM      | 1       | 0         | 18.83       | 18.87          | 19.04        | 19.8                |                     |
| 20                                           | 16QAM      | 1       | 49        | 18.85       | 18.82          | 18.96        |                     |                     |
| 20                                           | 16QAM      | 1       | 99        | 18.82       | 18.76          | 18.95        |                     |                     |
| 20                                           | 16QAM      | 50      | 0         | 17.63       | 17.60          | 17.86        |                     |                     |
| 20                                           | 16QAM      | 50      | 24        | 17.59       | 17.71          | 17.83        | 18.8                |                     |
| 20                                           | 16QAM      | 50      | 50        | 17.53       | 17.55          | 17.69        |                     |                     |
| 20                                           | 16QAM      | 100     | 0         | 17.62       | 17.51          | 17.77        |                     |                     |
| 20                                           | 64QAM      | 1       | 0         | 17.68       | 17.71          | 17.99        |                     |                     |
| 20                                           | 64QAM      | 1       | 49        | 17.62       | 17.62          | 18.00        | 18.8                |                     |
| 20                                           | 64QAM      | 1       | 99        | 17.66       | 17.63          | 17.81        |                     |                     |
| 20                                           | 64QAM      | 50      | 0         | 16.61       | 16.72          | 16.86        |                     |                     |
| 20                                           | 64QAM      | 50      | 24        | 16.58       | 16.69          | 16.70        |                     |                     |
| 20                                           | 64QAM      | 50      | 50        | 16.53       | 16.54          | 16.83        | 17.8                |                     |
| 20                                           | 64QAM      | 100     | 0         | 16.56       | 16.58          | 16.72        |                     |                     |
| Channel                                      |            |         |           | 20825       | 21100          | 21375        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                              |            |         |           | 2507.5      | 2535           | 2562.5       |                     |                     |
| 15                                           | QPSK       | 1       | 0         | 19.68       | 19.70          | 19.90        | 20.8                |                     |
| 15                                           | QPSK       | 1       | 37        | 19.60       | 19.59          | 19.85        |                     |                     |
| 15                                           | QPSK       | 1       | 74        | 19.55       | 19.61          | 19.74        |                     |                     |
| 15                                           | QPSK       | 36      | 0         | 18.75       | 18.77          | 18.85        |                     |                     |
| 15                                           | QPSK       | 36      | 20        | 18.54       | 18.54          | 18.76        | 19.8                |                     |
| 15                                           | QPSK       | 36      | 39        | 18.56       | 18.59          | 18.82        |                     |                     |
| 15                                           | QPSK       | 75      | 0         | 18.64       | 18.58          | 18.80        |                     |                     |
| 15                                           | 16QAM      | 1       | 0         | 18.99       | 18.98          | 19.03        |                     |                     |
| 15                                           | 16QAM      | 1       | 37        | 18.97       | 18.78          | 18.93        | 19.8                |                     |
| 15                                           | 16QAM      | 1       | 74        | 18.73       | 18.94          | 19.01        |                     |                     |
| 15                                           | 16QAM      | 36      | 0         | 17.63       | 17.62          | 17.87        |                     |                     |
| 15                                           | 16QAM      | 36      | 20        | 17.68       | 17.62          | 17.75        |                     |                     |
| 15                                           | 16QAM      | 36      | 39        | 17.55       | 17.53          | 17.85        | 18.8                |                     |
| 15                                           | 16QAM      | 75      | 0         | 17.60       | 17.56          | 17.75        |                     |                     |
| 15                                           | 64QAM      | 1       | 0         | 17.74       | 17.82          | 17.94        |                     |                     |
| 15                                           | 64QAM      | 1       | 37        | 17.63       | 17.75          | 18.05        |                     |                     |
| 15                                           | 64QAM      | 1       | 74        | 17.68       | 17.59          | 17.81        | 18.8                |                     |
| 15                                           | 64QAM      | 36      | 0         | 16.55       | 16.72          | 16.83        |                     |                     |
| 15                                           | 64QAM      | 36      | 20        | 16.47       | 16.50          | 16.65        |                     |                     |
| 15                                           | 64QAM      | 36      | 39        | 16.59       | 16.53          | 16.73        |                     |                     |
| 15                                           | 64QAM      | 75      | 0         | 16.55       | 16.57          | 16.68        | 17.8                |                     |
| Channel                                      |            |         |           | 20800       | 21100          | 21400        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                              |            |         |           | 2505        | 2535           | 2565         |                     |                     |
| 10                                           | QPSK       | 1       | 0         | 19.61       | 19.69          | 19.89        |                     | 20.8                |
| 10                                           | QPSK       | 1       | 25        | 19.59       | 19.53          | 19.80        |                     |                     |
| 10                                           | QPSK       | 1       | 49        | 19.60       | 19.57          | 19.72        |                     |                     |
| 10                                           | QPSK       | 25      | 0         | 18.72       | 18.74          | 18.86        |                     |                     |
| 10                                           | QPSK       | 25      | 12        | 18.65       | 18.73          | 18.84        | 19.8                |                     |
| 10                                           | QPSK       | 25      | 25        | 18.57       | 18.65          | 18.69        |                     |                     |
| 10                                           | QPSK       | 50      | 0         | 18.62       | 18.56          | 18.68        |                     |                     |
| 10                                           | 16QAM      | 1       | 0         | 18.88       | 18.95          | 19.09        |                     |                     |
| 10                                           | 16QAM      | 1       | 25        | 18.80       | 18.87          | 19.08        | 19.8                |                     |
| 10                                           | 16QAM      | 1       | 49        | 18.71       | 18.69          | 19.05        |                     |                     |
| 10                                           | 16QAM      | 25      | 0         | 17.68       | 17.75          | 17.90        |                     |                     |
| 10                                           | 16QAM      | 25      | 12        | 17.53       | 17.55          | 17.89        |                     |                     |
| 10                                           | 16QAM      | 25      | 25        | 17.56       | 17.61          | 17.89        | 18.8                |                     |
| 10                                           | 16QAM      | 50      | 0         | 17.53       | 17.59          | 17.85        |                     |                     |
| 10                                           | 64QAM      | 1       | 0         | 17.66       | 17.69          | 17.83        |                     |                     |
| 10                                           | 64QAM      | 1       | 25        | 17.59       | 17.75          | 17.82        |                     |                     |
| 10                                           | 64QAM      | 1       | 49        | 17.60       | 17.67          | 17.89        | 18.8                |                     |
| 10                                           | 64QAM      | 25      | 0         | 16.61       | 16.75          | 16.80        |                     |                     |
| 10                                           | 64QAM      | 25      | 12        | 16.60       | 16.69          | 16.64        |                     |                     |
| 10                                           | 64QAM      | 25      | 25        | 16.55       | 16.55          | 16.70        |                     |                     |
| 10                                           | 64QAM      | 50      | 0         | 16.52       | 16.56          | 16.67        | 17.8                |                     |
| Channel                                      |            |         |           | 20775       | 21100          | 21425        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                              |            |         |           | 2502.5      | 2535           | 2567.5       |                     |                     |
| 5                                            | QPSK       | 1       | 0         | 19.68       | 19.71          | 19.86        |                     | 20.8                |
| 5                                            | QPSK       | 1       | 12        | 19.61       | 19.63          | 19.84        |                     |                     |
| 5                                            | QPSK       | 1       | 24        | 19.65       | 19.62          | 19.78        |                     |                     |
| 5                                            | QPSK       | 12      | 0         | 18.67       | 18.72          | 18.84        |                     |                     |
| 5                                            | QPSK       | 12      | 7         | 18.71       | 18.69          | 18.82        | 19.8                |                     |
| 5                                            | QPSK       | 12      | 13        | 18.55       | 18.60          | 18.68        |                     |                     |
| 5                                            | QPSK       | 25      | 0         | 18.61       | 18.68          | 18.74        |                     |                     |
| 5                                            | 16QAM      | 1       | 0         | 18.85       | 18.89          | 19.05        |                     |                     |
| 5                                            | 16QAM      | 1       | 12        | 18.79       | 18.78          | 19.03        | 19.8                |                     |
| 5                                            | 16QAM      | 1       | 24        | 18.86       | 18.72          | 18.99        |                     |                     |
| 5                                            | 16QAM      | 12      | 0         | 17.58       | 17.63          | 17.86        |                     |                     |
| 5                                            | 16QAM      | 12      | 7         | 17.51       | 17.53          | 17.81        |                     |                     |
| 5                                            | 16QAM      | 12      | 13        | 17.60       | 17.58          | 17.67        | 18.8                |                     |
| 5                                            | 16QAM      | 25      | 0         | 17.57       | 17.53          | 17.77        |                     |                     |
| 5                                            | 64QAM      | 1       | 0         | 17.71       | 17.72          | 17.83        |                     |                     |
| 5                                            | 64QAM      | 1       | 12        | 17.62       | 17.70          | 17.78        |                     |                     |
| 5                                            | 64QAM      | 1       | 24        | 17.55       | 17.67          | 17.79        | 18.8                |                     |
| 5                                            | 64QAM      | 12      | 0         | 16.65       | 16.58          | 16.88        |                     |                     |
| 5                                            | 64QAM      | 12      | 7         | 16.53       | 16.56          | 16.79        |                     |                     |
| 5                                            | 64QAM      | 12      | 13        | 16.53       | 16.55          | 16.80        |                     |                     |
| 5                                            | 64QAM      | 25      | 0         | 16.59       | 16.68          | 16.69        | 17.8                |                     |

| Band 12 (700MHz Low Band) (dBm)<br>Part 27F(only on channel required) |            |         |           |             |                |              |                     |                     |
|-----------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|---------------------|
| BW [MHz]                                                              | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |                     |
| Channel                                                               |            |         |           | 23060       | 23095          | 23130        |                     |                     |
| Frequency (MHz)                                                       |            |         |           | 704         | 707.5          | 711          | 23.8                |                     |
| 10                                                                    | QPSK       | 1       | 0         | 23.07       | 23.12          | 23.09        |                     |                     |
| 10                                                                    | QPSK       | 1       | 25        | 22.87       | 22.89          | 22.84        |                     |                     |
| 10                                                                    | QPSK       | 1       | 49        | 22.90       | 23.02          | 23.05        |                     |                     |
| 10                                                                    | QPSK       | 25      | 0         | 22.06       | 22.15          | 22.10        | 22.8                |                     |
| 10                                                                    | QPSK       | 25      | 12        | 21.86       | 22.01          | 21.91        |                     |                     |
| 10                                                                    | QPSK       | 25      | 25        | 21.87       | 21.95          | 21.91        |                     |                     |
| 10                                                                    | QPSK       | 50      | 0         | 21.79       | 21.98          | 21.91        |                     |                     |
| 10                                                                    | 16QAM      | 1       | 0         | 22.22       | 22.33          | 22.18        | 22.8                |                     |
| 10                                                                    | 16QAM      | 1       | 25        | 22.05       | 22.07          | 22.05        |                     |                     |
| 10                                                                    | 16QAM      | 1       | 49        | 22.10       | 22.23          | 22.00        |                     |                     |
| 10                                                                    | 16QAM      | 25      | 0         | 20.77       | 21.00          | 20.84        |                     |                     |
| 10                                                                    | 16QAM      | 25      | 12        | 20.73       | 21.04          | 21.00        | 21.8                |                     |
| 10                                                                    | 16QAM      | 25      | 25        | 20.84       | 20.71          | 20.82        |                     |                     |
| 10                                                                    | 16QAM      | 50      | 0         | 20.78       | 20.89          | 20.78        |                     |                     |
| 10                                                                    | 64QAM      | 1       | 0         | 20.78       | 21.15          | 20.86        |                     |                     |
| 10                                                                    | 64QAM      | 1       | 25        | 20.86       | 21.13          | 21.00        | 21.8                |                     |
| 10                                                                    | 64QAM      | 1       | 49        | 20.91       | 20.89          | 20.80        |                     |                     |
| 10                                                                    | 64QAM      | 25      | 0         | 19.86       | 20.02          | 19.85        |                     |                     |
| 10                                                                    | 64QAM      | 25      | 12        | 19.81       | 19.82          | 19.90        |                     |                     |
| 10                                                                    | 64QAM      | 25      | 25        | 19.72       | 19.87          | 19.85        | 20.8                |                     |
| 10                                                                    | 64QAM      | 50      | 0         | 19.72       | 19.74          | 19.78        |                     |                     |
| Channel                                                               |            |         |           | 23035       | 23095          | 23155        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                       |            |         |           | 701.5       | 707.5          | 713.5        |                     |                     |
| 5                                                                     | QPSK       | 1       | 0         | 22.99       | 23.07          | 23.01        | 23.8                |                     |
| 5                                                                     | QPSK       | 1       | 12        | 22.91       | 23.01          | 22.93        |                     |                     |
| 5                                                                     | QPSK       | 1       | 24        | 22.93       | 22.83          | 22.87        |                     |                     |
| 5                                                                     | QPSK       | 12      | 0         | 21.82       | 22.02          | 21.96        |                     |                     |
| 5                                                                     | QPSK       | 12      | 7         | 21.79       | 21.98          | 21.92        | 22.8                |                     |
| 5                                                                     | QPSK       | 12      | 13        | 21.79       | 21.74          | 21.83        |                     |                     |
| 5                                                                     | QPSK       | 25      | 0         | 21.70       | 21.79          | 21.84        |                     |                     |
| 5                                                                     | 16QAM      | 1       | 0         | 22.06       | 22.27          | 22.22        |                     |                     |
| 5                                                                     | 16QAM      | 1       | 12        | 22.16       | 22.23          | 22.23        | 22.8                |                     |
| 5                                                                     | 16QAM      | 1       | 24        | 22.14       | 22.14          | 22.07        |                     |                     |
| 5                                                                     | 16QAM      | 12      | 0         | 20.79       | 21.06          | 20.87        |                     |                     |
| 5                                                                     | 16QAM      | 12      | 7         | 20.82       | 20.89          | 20.88        |                     |                     |
| 5                                                                     | 16QAM      | 12      | 13        | 20.81       | 20.79          | 20.81        | 21.8                |                     |
| 5                                                                     | 16QAM      | 25      | 0         | 20.82       | 20.81          | 20.80        |                     |                     |
| 5                                                                     | 64QAM      | 1       | 0         | 20.85       | 21.06          | 21.00        |                     |                     |
| 5                                                                     | 64QAM      | 1       | 12        | 20.80       | 21.08          | 20.97        |                     |                     |
| 5                                                                     | 64QAM      | 1       | 24        | 20.86       | 21.07          | 20.82        | 21.8                |                     |
| 5                                                                     | 64QAM      | 12      | 0         | 19.89       | 20.04          | 19.99        |                     |                     |
| 5                                                                     | 64QAM      | 12      | 7         | 19.83       | 19.86          | 19.83        |                     |                     |
| 5                                                                     | 64QAM      | 12      | 13        | 19.77       | 19.78          | 19.67        |                     |                     |
| 5                                                                     | 64QAM      | 25      | 0         | 19.65       | 19.83          | 19.82        | 20.8                |                     |
| Channel                                                               |            |         |           | 23025       | 23095          | 23165        |                     | Tune-up limit (dBm) |
| Frequency (MHz)                                                       |            |         |           | 700.5       | 707.5          | 714.5        |                     |                     |
| 3                                                                     | QPSK       | 1       | 0         | 23.02       | 23.09          | 23.05        |                     | 23.8                |
| 3                                                                     | QPSK       | 1       | 8         | 22.97       | 23.05          | 23.00        |                     |                     |
| 3                                                                     | QPSK       | 1       | 14        | 22.75       | 22.90          | 22.73        |                     |                     |
| 3                                                                     | QPSK       | 8       | 0         | 22.01       | 22.06          | 21.95        |                     |                     |
| 3                                                                     | QPSK       | 8       | 4         | 21.88       | 21.87          | 21.79        | 22.8                |                     |
| 3                                                                     | QPSK       | 8       | 7         | 21.88       | 21.82          | 21.74        |                     |                     |
| 3                                                                     | QPSK       | 15      | 0         | 21.79       | 21.85          | 21.82        |                     |                     |
| 3                                                                     | 16QAM      | 1       | 0         | 22.22       | 22.21          | 22.26        |                     |                     |
| 3                                                                     | 16QAM      | 1       | 8         | 22.03       | 22.06          | 22.05        | 22.8                |                     |
| 3                                                                     | 16QAM      | 1       | 14        | 22.05       | 22.24          | 22.14        |                     |                     |
| 3                                                                     | 16QAM      | 8       | 0         | 20.75       | 21.07          | 20.95        |                     |                     |
| 3                                                                     | 16QAM      | 8       | 4         | 20.89       | 20.83          | 20.96        |                     |                     |
| 3                                                                     | 16QAM      | 8       | 7         | 20.83       | 20.84          | 20.71        | 21.8                |                     |
| 3                                                                     | 16QAM      | 15      | 0         | 20.69       | 20.73          | 20.71        |                     |                     |
| 3                                                                     | 64QAM      | 1       | 0         | 20.97       | 21.02          | 20.92        |                     |                     |
| 3                                                                     | 64QAM      | 1       | 8         | 20.89       | 21.13          | 20.90        |                     |                     |
| 3                                                                     | 64QAM      | 1       | 14        | 20.83       | 20.90          | 21.02        | 20.8                |                     |
| 3                                                                     | 64QAM      | 8       | 0         | 19.76       | 19.91          | 19.85        |                     |                     |
| 3                                                                     | 64QAM      | 8       | 4         | 19.65       | 19.93          | 19.75        |                     |                     |
| 3                                                                     | 64QAM      | 8       | 7         | 19.72       | 19.79          | 19.68        |                     |                     |
| 3                                                                     | 64QAM      | 15      | 0         | 19.84       | 19.90          | 19.93        |                     |                     |
| Channel                                                               |            |         |           | 23017       | 23095          | 23173        | Tune-up limit (dBm) |                     |
| Frequency (MHz)                                                       |            |         |           | 699.7       | 707.5          | 715.3        |                     |                     |
| 1.4                                                                   | QPSK       | 1       | 0         | 23.03       | 23.08          | 22.99        | 23.8                |                     |
| 1.4                                                                   | QPSK       | 1       | 3         | 22.89       | 22.98          | 22.89        |                     |                     |
| 1.4                                                                   | QPSK       | 1       | 5         | 22.81       | 22.87          | 22.76        |                     |                     |
| 1.4                                                                   | QPSK       | 3       | 0         | 21.86       | 22.00          | 21.96        |                     |                     |
| 1.4                                                                   | QPSK       | 3       | 1         | 21.80       | 22.05          | 21.90        | 22.8                |                     |
| 1.4                                                                   | QPSK       | 3       | 3         | 21.80       | 21.88          | 21.91        |                     |                     |
| 1.4                                                                   | QPSK       | 6       | 0         | 21.80       | 21.99          | 21.88        |                     |                     |
| 1.4                                                                   | 16QAM      | 1       | 0         | 22.07       | 22.24          | 22.17        |                     |                     |
| 1.4                                                                   | 16QAM      | 1       | 3         | 22.08       | 22.03          | 22.08        | 22.8                |                     |
| 1.4                                                                   | 16QAM      | 1       | 5         | 21.90       | 22.15          | 22.03        |                     |                     |
| 1.4                                                                   | 16QAM      | 3       | 0         | 20.91       | 21.04          | 21.01        |                     |                     |
| 1.4                                                                   | 16QAM      | 3       | 1         | 20.90       | 20.90          | 20.92        |                     |                     |
| 1.4                                                                   | 16QAM      | 3       | 3         | 20.85       | 20.84          | 20.87        | 21.8                |                     |
| 1.4                                                                   | 16QAM      | 6       | 0         | 20.78       | 20.92          | 20.75        |                     |                     |
| 1.4                                                                   | 64QAM      | 1       | 0         | 20.98       | 20.91          | 21.00        |                     |                     |
| 1.4                                                                   | 64QAM      | 1       | 3         | 20.72       | 21.03          | 20.98        |                     |                     |
| 1.4                                                                   | 64QAM      | 1       | 5         | 20.72       | 20.92          | 20.98        | 21.8                |                     |
| 1.4                                                                   | 64QAM      | 3       | 0         | 19.89       | 20.06          | 19.88        |                     |                     |
| 1.4                                                                   | 64QAM      | 3       | 1         | 19.91       | 19.83          | 19.81        |                     |                     |
| 1.4                                                                   | 64QAM      | 3       | 3         | 19.83       | 19.82          | 19.84        |                     |                     |
| 1.4                                                                   | 64QAM      | 6       | 0         | 19.74       | 19.94          | 19.69        | 20.8                |                     |

| Band 13(700MHz Band) (dBm)<br>Part 27F |            |         |           |             |                |              |                     |
|----------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                               | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                |            |         |           | 23230       |                |              |                     |
| Frequency (MHz)                        |            |         |           | 782         |                |              | 23.8                |
| 10                                     | QPSK       | 1       | 0         |             | 23.03          |              |                     |
| 10                                     | QPSK       | 1       | 25        |             | 22.95          |              |                     |
| 10                                     | QPSK       | 1       | 49        |             | 22.88          |              | 22.8                |
| 10                                     | QPSK       | 25      | 0         |             | 21.96          |              |                     |
| 10                                     | QPSK       | 25      | 12        |             | 21.84          |              |                     |
| 10                                     | QPSK       | 25      | 25        |             | 21.88          |              | 22.8                |
| 10                                     | QPSK       | 50      | 0         |             | 21.74          |              |                     |
| 10                                     | 16QAM      | 1       | 0         |             | 22.11          |              |                     |
| 10                                     | 16QAM      | 1       | 25        |             | 22.03          |              | 22.8                |
| 10                                     | 16QAM      | 1       | 49        |             | 21.98          |              |                     |
| 10                                     | 16QAM      | 25      | 0         |             | 20.94          |              |                     |
| 10                                     | 16QAM      | 25      | 12        |             | 20.90          |              | 21.8                |
| 10                                     | 16QAM      | 25      | 25        |             | 20.80          |              |                     |
| 10                                     | 16QAM      | 50      | 0         |             | 20.99          |              |                     |
| 10                                     | 64QAM      | 1       | 0         |             | 20.95          |              | 21.8                |
| 10                                     | 64QAM      | 1       | 25        |             | 20.87          |              |                     |
| 10                                     | 64QAM      | 1       | 49        |             | 20.96          |              |                     |
| 10                                     | 64QAM      | 25      | 0         |             | 19.92          |              | 20.8                |
| 10                                     | 64QAM      | 25      | 12        |             | 19.75          |              |                     |
| 10                                     | 64QAM      | 25      | 25        |             | 19.84          |              |                     |
| 10                                     | 64QAM      | 50      | 0         |             | 19.78          |              |                     |
| Channel                                |            |         |           | 23205       | 23230          | 23255        | Tune-up limit (dBm) |
| Frequency (MHz)                        |            |         |           | 779.5       | 782            | 784.5        |                     |
| 5                                      | QPSK       | 1       | 0         | 22.94       | 22.99          | 22.92        | 23.8                |
| 5                                      | QPSK       | 1       | 12        | 22.89       | 22.96          | 22.88        |                     |
| 5                                      | QPSK       | 1       | 24        | 22.73       | 22.84          | 22.86        |                     |
| 5                                      | QPSK       | 12      | 0         | 21.83       | 22.08          | 21.96        | 22.8                |
| 5                                      | QPSK       | 12      | 7         | 21.83       | 22.01          | 21.95        |                     |
| 5                                      | QPSK       | 12      | 13        | 21.77       | 21.85          | 21.79        |                     |
| 5                                      | QPSK       | 25      | 0         | 21.81       | 21.77          | 21.83        | 22.8                |
| 5                                      | 16QAM      | 1       | 0         | 22.22       | 22.15          | 22.07        |                     |
| 5                                      | 16QAM      | 1       | 12        | 22.22       | 22.15          | 22.23        |                     |
| 5                                      | 16QAM      | 1       | 24        | 22.14       | 22.19          | 22.03        | 21.8                |
| 5                                      | 16QAM      | 12      | 0         | 20.88       | 20.90          | 21.00        |                     |
| 5                                      | 16QAM      | 12      | 7         | 20.85       | 21.02          | 20.84        |                     |
| 5                                      | 16QAM      | 12      | 13        | 20.84       | 20.78          | 20.87        | 21.8                |
| 5                                      | 16QAM      | 25      | 0         | 20.67       | 20.79          | 20.74        |                     |
| 5                                      | 64QAM      | 1       | 0         | 20.77       | 20.93          | 21.02        |                     |
| 5                                      | 64QAM      | 1       | 12        | 20.71       | 21.05          | 21.02        | 21.8                |
| 5                                      | 64QAM      | 1       | 24        | 20.79       | 20.91          | 20.92        |                     |
| 5                                      | 64QAM      | 12      | 0         | 19.88       | 19.91          | 19.95        |                     |
| 5                                      | 64QAM      | 12      | 7         | 19.79       | 19.87          | 19.85        | 20.8                |
| 5                                      | 64QAM      | 12      | 13        | 19.75       | 19.70          | 19.80        |                     |
| 5                                      | 64QAM      | 25      | 0         | 19.72       | 19.93          | 19.87        |                     |

| Band 48 (3.5G Band) (dBm) |            |         |           |                      |                    |                    |                     |              |                     |  |
|---------------------------|------------|---------|-----------|----------------------|--------------------|--------------------|---------------------|--------------|---------------------|--|
| BW [MHz]                  | Modulation | RB Size | RB Offset | Power Low Ch. / Freq | Middle-Low Channel | Middle-Low Channel | Middle-High Channel | High Channel | Tune-up limit (dBm) |  |
| Channel                   |            |         |           | 55340                | 55830              | 55990              | 56150               | 56640        |                     |  |
| Frequency (MHz)           |            |         |           | 3560                 | 3609               | 3625               | 3641                | 3690         |                     |  |
| 20                        | QPSK       | 1       | 0         | 22.11                | 22.06              | 21.96              | 21.95               | 22.21        | 22.8                |  |
| 20                        | QPSK       | 1       | 49        | 22.07                | 21.96              | 21.80              | 21.86               | 22.15        |                     |  |
| 20                        | QPSK       | 1       | 99        | 22.00                | 21.94              | 21.90              | 21.79               | 22.02        |                     |  |
| 20                        | QPSK       | 50      | 0         | 21.08                | 20.92              | 21.02              | 20.88               | 21.17        |                     |  |
| 20                        | QPSK       | 50      | 24        | 21.06                | 20.97              | 20.77              | 20.81               | 21.17        | 21.8                |  |
| 20                        | QPSK       | 50      | 50        | 20.98                | 20.90              | 20.87              | 20.77               | 21.14        |                     |  |
| 20                        | QPSK       | 100     | 0         | 21.06                | 20.86              | 20.91              | 20.89               | 21.26        |                     |  |
| 20                        | 16QAM      | 1       | 0         | 21.29                | 21.19              | 21.17              | 21.03               | 21.31        |                     |  |
| 20                        | 16QAM      | 1       | 49        | 21.28                | 21.13              | 21.12              | 21.09               | 21.30        | 21.8                |  |
| 20                        | 16QAM      | 1       | 99        | 21.21                | 20.97              | 21.09              | 21.12               | 21.27        |                     |  |
| 20                        | 16QAM      | 50      | 0         | 19.96                | 19.80              | 20.04              | 19.98               | 20.15        |                     |  |
| 20                        | 16QAM      | 50      | 24        | 19.98                | 19.89              | 19.94              | 19.89               | 20.11        |                     |  |
| 20                        | 16QAM      | 50      | 50        | 19.92                | 19.87              | 19.78              | 19.89               | 20.07        | 20.8                |  |
| 20                        | 16QAM      | 100     | 0         | 20.05                | 19.85              | 19.77              | 19.75               | 20.09        |                     |  |
| 20                        | 64QAM      | 1       | 0         | 19.99                | 19.96              | 19.86              | 19.93               | 20.18        |                     |  |
| 20                        | 64QAM      | 1       | 49        | 20.04                | 19.81              | 19.88              | 19.92               | 20.08        |                     |  |
| 20                        | 64QAM      | 1       | 99        | 20.07                | 19.85              | 19.85              | 19.88               | 20.15        | 20.8                |  |
| 20                        | 64QAM      | 50      | 0         | 18.99                | 18.83              | 18.88              | 18.85               | 19.05        |                     |  |
| 20                        | 64QAM      | 50      | 24        | 18.99                | 18.79              | 18.79              | 18.75               | 19.01        |                     |  |
| 20                        | 64QAM      | 50      | 50        | 18.90                | 18.76              | 18.80              | 18.72               | 19.03        |                     |  |
| 20                        | 64QAM      | 100     | 0         | 18.79                | 18.73              | 18.83              | 18.81               | 19.00        | 19.8                |  |
| Channel                   |            |         |           | 55315                | 55820              | 55990              | 56160               | 56665        |                     |  |
| Frequency (MHz)           |            |         |           | 3557.5               | 3608               | 3625               | 3642                | 3692.5       |                     |  |
| 15                        | QPSK       | 1       | 0         | 22.01                | 21.93              | 21.81              | 21.88               | 22.18        | 22.8                |  |
| 15                        | QPSK       | 1       | 37        | 22.02                | 21.98              | 21.75              | 21.76               | 22.15        |                     |  |
| 15                        | QPSK       | 1       | 74        | 21.90                | 21.86              | 21.76              | 21.75               | 22.02        |                     |  |
| 15                        | QPSK       | 36      | 0         | 21.11                | 21.04              | 21.07              | 20.87               | 21.14        |                     |  |
| 15                        | QPSK       | 36      | 20        | 21.05                | 20.94              | 20.87              | 20.79               | 21.13        | 21.8                |  |
| 15                        | QPSK       | 36      | 39        | 20.91                | 20.82              | 20.80              | 20.75               | 21.07        |                     |  |
| 15                        | QPSK       | 75      | 0         | 21.02                | 20.83              | 20.93              | 20.80               | 21.17        |                     |  |
| 15                        | 16QAM      | 1       | 0         | 21.15                | 21.09              | 21.05              | 21.14               | 21.22        |                     |  |
| 15                        | 16QAM      | 1       | 37        | 21.09                | 21.04              | 21.04              | 20.98               | 21.16        | 21.8                |  |
| 15                        | 16QAM      | 1       | 74        | 21.10                | 21.03              | 21.05              | 21.06               | 21.09        |                     |  |
| 15                        | 16QAM      | 36      | 0         | 20.06                | 20.00              | 19.80              | 19.91               | 20.16        |                     |  |
| 15                        | 16QAM      | 36      | 20        | 19.96                | 19.96              | 19.94              | 19.80               | 20.19        |                     |  |
| 15                        | 16QAM      | 36      | 39        | 19.81                | 19.89              | 19.81              | 19.82               | 19.97        | 20.8                |  |
| 15                        | 16QAM      | 75      | 0         | 20.03                | 19.91              | 19.80              | 19.90               | 20.05        |                     |  |
| 15                        | 64QAM      | 1       | 0         | 19.95                | 19.91              | 20.10              | 19.88               | 20.17        |                     |  |
| 15                        | 64QAM      | 1       | 37        | 20.04                | 19.89              | 19.84              | 19.79               | 20.16        |                     |  |
| 15                        | 64QAM      | 1       | 74        | 20.08                | 19.84              | 19.79              | 19.81               | 20.14        | 20.8                |  |
| 15                        | 64QAM      | 36      | 0         | 18.93                | 18.90              | 18.86              | 18.82               | 19.00        |                     |  |
| 15                        | 64QAM      | 36      | 20        | 18.89                | 18.76              | 18.95              | 18.74               | 19.03        |                     |  |
| 15                        | 64QAM      | 36      | 39        | 18.95                | 18.70              | 18.88              | 18.76               | 18.90        |                     |  |
| 15                        | 64QAM      | 75      | 0         | 18.88                | 18.75              | 18.81              | 18.80               | 18.92        | 19.8                |  |
| Channel                   |            |         |           | 55290                | 55815              | 55990              | 56165               | 56690        |                     |  |
| Frequency (MHz)           |            |         |           | 3555                 | 3607.5             | 3625               | 3642.5              | 3695         |                     |  |
| 10                        | QPSK       | 1       | 0         | 21.97                | 22.03              | 22.00              | 21.92               | 22.17        | 22.8                |  |
| 10                        | QPSK       | 1       | 25        | 21.92                | 21.98              | 21.74              | 21.83               | 22.05        |                     |  |
| 10                        | QPSK       | 1       | 49        | 21.89                | 21.82              | 21.79              | 21.81               | 22.02        |                     |  |
| 10                        | QPSK       | 25      | 0         | 21.05                | 21.09              | 20.95              | 20.82               | 21.12        |                     |  |
| 10                        | QPSK       | 25      | 12        | 21.03                | 20.77              | 20.82              | 20.81               | 21.11        | 21.8                |  |
| 10                        | QPSK       | 25      | 25        | 20.93                | 20.94              | 20.79              | 20.76               | 21.01        |                     |  |
| 10                        | QPSK       | 50      | 0         | 20.91                | 20.86              | 20.87              | 20.84               | 21.09        |                     |  |
| 10                        | 16QAM      | 1       | 0         | 21.21                | 21.19              | 21.17              | 21.08               | 21.29        |                     |  |
| 10                        | 16QAM      | 1       | 25        | 21.14                | 21.05              | 21.16              | 21.07               | 21.25        | 21.8                |  |
| 10                        | 16QAM      | 1       | 49        | 21.10                | 20.94              | 21.11              | 21.03               | 21.17        |                     |  |
| 10                        | 16QAM      | 25      | 0         | 20.04                | 19.78              | 19.83              | 19.99               | 20.11        |                     |  |
| 10                        | 16QAM      | 25      | 12        | 20.03                | 19.74              | 19.73              | 19.93               | 20.12        |                     |  |
| 10                        | 16QAM      | 25      | 25        | 19.82                | 19.76              | 19.79              | 19.76               | 20.01        | 20.8                |  |
| 10                        | 16QAM      | 50      | 0         | 20.03                | 19.83              | 19.76              | 19.90               | 20.05        |                     |  |
| 10                        | 64QAM      | 1       | 0         | 20.10                | 19.94              | 20.01              | 19.92               | 20.08        |                     |  |
| 10                        | 64QAM      | 1       | 25        | 20.09                | 19.80              | 19.91              | 19.98               | 20.06        |                     |  |
| 10                        | 64QAM      | 1       | 49        | 20.03                | 19.70              | 19.82              | 19.87               | 20.02        | 20.8                |  |
| 10                        | 64QAM      | 25      | 0         | 19.02                | 18.78              | 18.89              | 18.70               | 19.06        |                     |  |
| 10                        | 64QAM      | 25      | 12        | 18.89                | 18.72              | 18.91              | 18.76               | 18.93        |                     |  |
| 10                        | 64QAM      | 25      | 25        | 18.74                | 18.75              | 18.85              | 18.84               | 19.07        |                     |  |
| 10                        | 64QAM      | 50      | 0         | 18.78                | 18.79              | 18.91              | 18.86               | 18.84        | 19.8                |  |
| Channel                   |            |         |           | 55265                | 55810              | 55990              | 56170               | 56175        |                     |  |
| Frequency (MHz)           |            |         |           | 3552.5               | 3607               | 3625               | 3643                | 3697.5       |                     |  |
| 5                         | QPSK       | 1       | 0         | 22.05                | 21.90              | 22.02              | 21.94               | 22.15        | 22.8                |  |
| 5                         | QPSK       | 1       | 12        | 22.04                | 21.96              | 21.75              | 21.72               | 22.13        |                     |  |
| 5                         | QPSK       | 1       | 24        | 22.00                | 21.88              | 21.77              | 21.78               | 22.09        |                     |  |
| 5                         | QPSK       | 12      | 0         | 21.05                | 21.02              | 20.82              | 20.79               | 21.12        |                     |  |
| 5                         | QPSK       | 12      | 7         | 21.01                | 20.98              | 20.94              | 20.80               | 21.11        | 21.8                |  |
| 5                         | QPSK       | 12      | 13        | 20.85                | 20.90              | 20.79              | 20.84               | 21.08        |                     |  |
| 5                         | QPSK       | 25      | 0         | 21.04                | 20.86              | 20.80              | 20.85               | 21.06        |                     |  |
| 5                         | 16QAM      | 1       | 0         | 21.16                | 21.13              | 21.08              | 21.06               | 21.17        |                     |  |
| 5                         | 16QAM      | 1       | 12        | 21.14                | 21.11              | 21.08              | 21.08               | 21.09        | 21.8                |  |
| 5                         | 16QAM      | 1       | 24        | 21.05                | 21.06              | 21.01              | 21.02               | 21.12        |                     |  |
| 5                         | 16QAM      | 12      | 0         | 20.04                | 19.79              | 19.94              | 19.91               | 20.06        |                     |  |
| 5                         | 16QAM      | 12      | 7         | 19.92                | 19.96              | 19.73              | 19.99               | 20.05        |                     |  |
| 5                         | 16QAM      | 12      | 13        | 19.96                | 19.77              | 19.71              | 19.80               | 20.02        | 20.8                |  |
| 5                         | 16QAM      | 25      | 0         | 19.91                | 19.72              | 19.83              | 19.89               | 20.01        |                     |  |
| 5                         | 64QAM      | 1       | 0         | 20.09                | 19.98              | 20.01              | 19.98               | 20.19        |                     |  |
| 5                         | 64QAM      | 1       | 12        | 20.04                | 19.88              | 19.96              | 19.85               | 20.14        |                     |  |
| 5                         | 64QAM      | 1       | 24        | 19.96                | 19.86              | 19.95              | 19.79               | 20.13        | 20.8                |  |
| 5                         | 64QAM      | 12      | 0         | 18.93                | 18.80              | 18.79              | 18.86               | 19.14        |                     |  |
| 5                         | 64QAM      | 12      | 7         | 18.87                | 18.85              | 18.91              | 18.79               | 19.05        |                     |  |
| 5                         | 64QAM      | 12      | 13        | 18.82                | 18.76              | 18.80              | 18.77               | 18.99        |                     |  |
| 5                         | 64QAM      | 25      | 0         | 18.98                | 18.89              | 18.80              | 18.81               | 19.09        | 19.8                |  |

| n5 (PC3)        |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 166800      | 167300         | 167800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 834         | 836.5          | 839          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 21.61       | 21.67          | 21.67        | 22.50               |
| 20              |                      | 1      | 53       | 21.53       | 21.51          | 21.55        |                     |
| 20              |                      | 1      | 104      | 21.27       | 21.21          | 21.29        |                     |
| 20              |                      | 50     | 1        | 21.72       | 21.71          | 21.72        | 22.50               |
| 20              |                      | 50     | 25       | 21.62       | 21.66          | 21.59        |                     |
| 20              |                      | 50     | 50       | 21.62       | 21.51          | 21.49        |                     |
| 20              |                      | 100    | 0        | 21.70       | 21.62          | 21.54        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 21.77       | 21.82          | 21.81        | 22.50               |
| 20              |                      | 1      | 53       | 21.60       | 21.60          | 21.68        |                     |
| 20              |                      | 1      | 104      | 21.35       | 21.24          | 21.32        |                     |
| 20              |                      | 50     | 1        | 21.71       | 21.73          | 21.64        | 22.50               |
| 20              |                      | 50     | 25       | 21.65       | 21.65          | 21.56        |                     |
| 20              |                      | 50     | 50       | 21.50       | 21.54          | 21.31        |                     |
| 20              |                      | 100    | 0        | 21.69       | 21.67          | 21.51        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 21.72       | 21.76          | 21.75        | 22.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 20.14       | 20.33          | 20.36        | 21.00               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 17.98       | 18.07          | 18.00        | 19.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 21.21       | 21.31          | 21.11        | 22.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 20.80       | 20.82          | 20.77        | 21.50               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 19.27       | 19.42          | 19.32        | 20.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 16.01       | 16.11          | 16.10        | 17.00               |
| Channel         |                      |        |          | 166300      | 167300         | 168300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 831.5       | 836.5          | 841.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 21.75       | 21.79          | 21.57        | 22.50               |
| Channel         |                      |        |          | 165800      | 167300         | 168800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 829         | 836.5          | 844          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 21.53       | 21.35          | 21.48        | 22.00               |
| Channel         |                      |        |          | 165300      | 167300         | 169300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 826.5       | 836.5          | 846.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 21.59       | 21.52          | 21.28        | 22.00               |

| n48 (PC2)       |                      |        |          |             |                    |                |                     |              |                     |
|-----------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 638000      | 639834             | 641666         | 643500              | 645332       |                     |
| Frequency (MHz) |                      |        |          | 3570        | 3597.51            | 3624.99        | 3652.5              | 3679.98      |                     |
| 40              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 19.92       | 19.63              | 18.81          | 18.62               | 20.48        | 22                  |
| 40              |                      | 1      | 53       | 20.69       | 19.19              | 17.82          | 20.01               | 21.20        |                     |
| 40              |                      | 1      | 104      | 19.58       | 20.35              | 19.41          | 21.01               | 21.25        |                     |
| 40              |                      | 50     | 1        | 19.41       | 19.01              | 17.81          | 18.83               | 20.36        | 22                  |
| 40              |                      | 50     | 25       | 19.83       | 19.31              | 18.24          | 19.95               | 21.18        |                     |
| 40              |                      | 50     | 50       | 19.14       | 18.31              | 17.98          | 19.81               | 20.43        |                     |
| 40              |                      | 100    | 0        | 19.25       | 18.78              | 17.83          | 19.41               | 20.69        |                     |
| 40              | DFT-s-OFDM QPSK      | 1      | 1        | 21.55       | 21.61              | 21.73          | 21.63               | 21.67        | 22.5                |
| 40              |                      | 1      | 53       | 19.83       | 19.18              | 17.83          | 20.04               | 21.22        |                     |
| 40              |                      | 1      | 104      | 20.58       | 18.33              | 19.41          | 21.04               | 21.70        |                     |
| 40              |                      | 50     | 1        | 20.72       | 20.66              | 20.83          | 20.53               | 20.67        | 21.5                |
| 40              |                      | 50     | 25       | 19.87       | 19.30              | 20.11          | 19.92               | 20.58        |                     |
| 40              |                      | 50     | 50       | 19.56       | 20.26              | 20.45          | 20.38               | 20.50        |                     |
| 40              |                      | 100    | 0        | 20.55       | 20.30              | 20.35          | 19.78               | 20.19        |                     |
| 40              | DFT-s-OFDM 16QAM     | 1      | 1        | 18.81       | 18.49              | 18.66          | 18.53               | 19.36        | 20.00               |
| 40              | DFT-s-OFDM 64QAM     | 1      | 1        | 17.40       | 17.06              | 17.26          | 17.10               | 17.33        | 18.00               |
| 40              | DFT-s-OFDM 256QAM    | 1      | 1        | 15.25       | 14.98              | 14.14          | 13.93               | 15.76        | 16.50               |
| 40              | CP-OFDM QPSK         | 1      | 1        | 18.44       | 18.13              | 17.30          | 17.15               | 18.97        | 19.50               |
| 40              | CP-OFDM 16QAM        | 1      | 1        | 17.89       | 17.60              | 16.86          | 16.69               | 18.54        | 19.50               |
| 40              | CP-OFDM 64QAM        | 1      | 1        | 16.02       | 15.69              | 14.88          | 14.69               | 16.57        | 17.50               |
| 40              | CP-OFDM 256QAM       | 1      | 1        | 13.25       | 12.99              | 12.05          | 11.94               | 13.75        | 14.50               |
| Channel         |                      |        |          | 637334      | 639500             | 641666         | 643832              | 646000       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 3560.01     | 3592.5             | 3624.99        | 3657.48             | 3690         |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 19.75       | 19.39              | 18.14          | 19.67               | 21.29        | 22.00               |

| n77(3450-3550MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 22.32          |                     |              | 23                  |
| 100                     |                      | 1      | 136      |             |                    | 21.67          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 21.45          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 21.72          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 22.01          |                     |              | 23                  |
| 100                     |                      | 135    | 136      |             |                    | 20.99          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 21.45          |                     |              |                     |
| 100                     |                      |        |          |             |                    |                |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 1      | 1        |             |                    | 22.43          |                     |              | 23                  |
| 100                     |                      | 1      | 136      |             |                    | 21.95          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 21.39          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 22.01          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 21.99          |                     |              | 22.5                |
| 100                     |                      | 135    | 136      |             |                    | 21.46          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 21.92          |                     |              |                     |
| 100                     |                      |        |          |             |                    |                |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 21.33          |                     |              | 22.00               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 19.97          |                     |              | 20.50               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 17.78          |                     |              | 18.50               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 20.92          |                     |              | 21.50               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 20.41          |                     |              | 21.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 18.53          |                     |              | 19.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 15.79          |                     |              | 16.50               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 22.33       | 22.34              | 22.32          | 22.18               | 22.09        | 23.00               |
| Channel                 |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.53       | 22.35              | 22.12          | 21.98               | 22.04        | 23.00               |
| Channel                 |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 22.39       | 22.33              | 22.36          | 22.32               | 22.19        | 23.00               |
| Channel                 |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 22.34       | 22.35              | 22.30          | 22.31               | 21.95        | 23.00               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 22.31       | 22.34              | 22.25          | 22.09               | 21.69        | 23.00               |

| n77(3700-3980MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       |                     |
| Frequency (MHz)         |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 19.08       | 20.68              | 20.80          | 20.69               | 19.75        | 22.50               |
| 100                     |                      | 1      | 136      | 20.77       | 20.91              | 20.68          | 19.71               | 20.65        |                     |
| 100                     |                      | 1      | 271      | 20.57       | 20.59              | 19.68          | 19.56               | 19.45        |                     |
| 100                     |                      | 135    | 1        | 20.02       | 20.55              | 20.30          | 19.54               | 19.76        | 21.50               |
| 100                     |                      | 135    | 67       | 20.87       | 20.92              | 20.70          | 19.73               | 18.71        |                     |
| 100                     |                      | 135    | 136      | 20.02       | 20.26              | 19.38          | 18.50               | 18.09        |                     |
| 100                     |                      | 270    | 0        | 20.01       | 20.49              | 20.17          | 19.26               | 19.68        |                     |
| 100                     | DFT-s-OFDM QPSK      | 1      | 1        | 21.52       | 21.65              | 21.67          | 21.57               | 21.62        | 22.50               |
| 100                     |                      | 1      | 136      | 21.13       | 20.89              | 20.71          | 19.72               | 18.52        |                     |
| 100                     |                      | 1      | 271      | 20.58       | 20.55              | 19.70          | 18.54               | 18.41        |                     |
| 100                     |                      | 135    | 1        | 20.54       | 20.63              | 20.87          | 20.75               | 20.79        | 21.50               |
| 100                     |                      | 135    | 67       | 20.25       | 19.68              | 20.66          | 19.75               | 18.69        |                     |
| 100                     |                      | 135    | 136      | 19.54       | 19.75              | 18.88          | 18.03               | 18.22        |                     |
| 100                     |                      | 270    | 0        | 20.44       | 20.01              | 19.69          | 18.76               | 18.34        |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        | 19.93       | 20.56              | 19.43          | 19.58               | 18.66        | 20.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        | 19.80       | 19.31              | 18.34          | 18.40               | 17.35        | 19.00               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        | 14.37       | 16.94              | 16.15          | 16.01               | 15.05        | 17.00               |
| 100                     | CP-OFDM QPSK         | 1      | 1        | 17.57       | 20.15              | 19.32          | 19.21               | 18.25        | 20.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        | 17.07       | 17.22              | 18.89          | 18.74               | 17.77        | 19.50               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        | 15.17       | 17.84              | 16.89          | 16.85               | 15.85        | 17.50               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        | 13.39       | 15.00              | 14.06          | 14.04               | 13.08        | 15.00               |
| Channel                 |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.05       | 21.52              | 20.91          | 20.34               | 19.22        | 22.00               |
| Channel                 |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.09       | 21.34              | 20.86          | 19.85               | 18.57        | 22.00               |
| Channel                 |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.50       | 21.50              | 21.07          | 20.13               | 17.94        | 22.00               |
| Channel                 |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.42       | 21.29              | 20.95          | 19.79               | 17.98        | 22.00               |
| Channel                 |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.34       | 21.25              | 20.99          | 19.64               | 18.36        | 22.00               |

| n78(3450-3550MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)         |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 21.99          |                     |              | 23.00               |
| 100                     |                      | 1      | 136      |             |                    | 20.84          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 20.15          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 20.85          |                     |              |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 135    | 67       |             |                    | 21.05          |                     |              | 22.00               |
| 100                     |                      | 135    | 136      |             |                    | 19.74          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 20.45          |                     |              |                     |
| 100                     |                      | 1      | 1        |             |                    | 22.02          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 1      | 136      |             |                    | 20.89          |                     |              | 23.00               |
| 100                     |                      | 1      | 271      |             |                    | 20.12          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 21.03          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 20.88          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 135    | 136      |             |                    | 19.28          |                     |              | 22.00               |
| 100                     |                      | 270    | 0        |             |                    | 19.93          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 20.82          |                     |              | 21.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 19.50          |                     |              | 20.50               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 17.37          |                     |              | 18.00               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 20.29          |                     |              | 21.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 19.83          |                     |              | 20.50               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 18.19          |                     |              | 19.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 15.30          |                     |              | 16.00               |
| Channel                 |                      |        |          | 633000      | 633166             | 633334         | 633500              | 633666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3495        | 3497.49            | 3500.01        | 3502.5              | 3504.99      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.98       | 21.94              | 21.81          | 21.70               | 21.66        | 22.50               |
| Channel                 |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3490.02     | 3450               | 3500.01        | 3504.99             | 3510         |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.98       | 21.90              | 21.75          | 21.62               | 21.38        | 22.50               |
| Channel                 |                      |        |          | 632334      | 632634             | 633334         | 633832              | 634332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.99       | 21.85              | 21.63          | 21.37               | 21.15        | 22.50               |
| Channel                 |                      |        |          | 632000      | 632666             | 633334         | 634000              | 634666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3480        | 3489.99            | 3500.01        | 3510                | 3519.99      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.94       | 21.73              | 21.48          | 21.16               | 21.12        | 22.00               |
| Channel                 |                      |        |          | 631668      | 632500             | 633334         | 634166              | 635000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3512.49             | 3525         |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.93       | 21.64              | 21.26          | 21.08               | 20.99        | 22.00               |
| Channel                 |                      |        |          | 631334      | 636672             | 633334         | 634334              | 635332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3515.01             | 3529.98      |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.99       | 21.10              | 21.43          | 21.30               | 21.04        | 22.00               |
| Channel                 |                      |        |          | 631000      | 632166             | 633334         | 634500              | 635666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3465        | 3482.49            | 3500.01        | 3517.5              | 3534.99      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.96       | 21.68              | 21.32          | 21.09               | 20.63        | 22.00               |
| Channel                 |                      |        |          | 630668      | 632000             | 633334         | 634668              | 636000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3460.02     | 3480               | 3500.01        | 3520.02             | 3540         |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 21.90       | 21.59              | 21.30          | 20.89               | 20.40        | 22.00               |

| n78(3700-3800MHz) (PC2) |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                 |                      |        |          |             |                    | 650000         |                     |              | 22.00               |
| Frequency (MHz)         |                      |        |          |             |                    | 3750           |                     |              |                     |
| 100                     | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 20.01          |                     |              | 22.00               |
| 100                     |                      | 1      | 136      |             |                    | 21.21          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 21.10          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 20.60          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 21.18          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 20.38          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 20.50          |                     |              |                     |
| 100                     | DFT-s-OFDM QPSK      | 1      | 1        |             |                    | 21.23          |                     |              | 22.00               |
| 100                     |                      | 1      | 136      |             |                    | 20.39          |                     |              |                     |
| 100                     |                      | 1      | 271      |             |                    | 20.59          |                     |              |                     |
| 100                     |                      | 135    | 1        |             |                    | 21.11          |                     |              |                     |
| 100                     |                      | 135    | 67       |             |                    | 20.99          |                     |              |                     |
| 100                     |                      | 135    | 136      |             |                    | 20.87          |                     |              |                     |
| 100                     |                      | 270    | 0        |             |                    | 20.91          |                     |              |                     |
| 100                     | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 18.88          |                     |              | 19.50               |
| 100                     | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 17.57          |                     |              | 18.50               |
| 100                     | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 15.28          |                     |              | 16.00               |
| 100                     | CP-OFDM QPSK         | 1      | 1        |             |                    | 18.48          |                     |              | 19.00               |
| 100                     | CP-OFDM 16QAM        | 1      | 1        |             |                    | 18.12          |                     |              | 19.00               |
| 100                     | CP-OFDM 64QAM        | 1      | 1        |             |                    | 16.19          |                     |              | 17.00               |
| 100                     | CP-OFDM 256QAM       | 1      | 1        |             |                    | 13.31          |                     |              | 14.00               |
| Channel                 |                      |        |          | 649668      | 649834             | 650000         | 650166              | 650332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3745.02     | 3747.51            | 3750           | 3752.49             | 3754.98      |                     |
| 90                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.97       | 20.01              | 20.15          | 20.23               | 20.42        | 21.00               |
| Channel                 |                      |        |          | 649334      | 649666             | 650000         | 650334              | 650666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3740.01     | 3744.99            | 3750           | 3755.01             | 3759.99      |                     |
| 80                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.02       | 20.24              | 20.45          | 20.64               | 20.93        | 21.50               |
| Channel                 |                      |        |          | 649000      | 649500             | 650000         | 650500              | 651000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3735        | 3742.5             | 3750           | 3757.5              | 3765         |                     |
| 70                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.03       | 20.36              | 20.68          | 21.05               | 21.18        | 22.00               |
| Channel                 |                      |        |          | 648668      | 649334             | 650000         | 650666              | 651332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3730.02     | 3740.01            | 3750           | 3759.99             | 3769.98      |                     |
| 60                      | DFT-s-OFDM QPSK      | 1      | 1        | 19.92       | 20.39              | 20.93          | 21.12               | 21.08        | 22.00               |
| Channel                 |                      |        |          | 648334      | 649166             | 650000         | 650834              | 651666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3725.01     | 3737.49            | 3750           | 3762.51             | 3774.99      |                     |
| 50                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.09       | 20.65              | 21.17          | 21.16               | 21.18        | 22.00               |
| Channel                 |                      |        |          | 648000      | 649000             | 650000         | 651000              | 652000       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3720        | 3735               | 3750           | 3765                | 3780         |                     |
| 40                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.30       | 21.07              | 21.13          | 21.13               | 21.39        | 22.00               |
| Channel                 |                      |        |          | 647668      | 648834             | 650000         | 651166              | 652332       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3715.02     | 3732.51            | 3750           | 3767.49             | 3784.98      |                     |
| 30                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.18       | 21.06              | 21.17          | 21.09               | 21.01        | 22.00               |
| Channel                 |                      |        |          | 647334      | 648666             | 650000         | 651334              | 652666       | Tune-up limit (dBm) |
| Frequency (MHz)         |                      |        |          | 3710.01     | 3729.99            | 3750           | 3770.01             | 3789.99      |                     |
| 20                      | DFT-s-OFDM QPSK      | 1      | 1        | 20.16       | 21.10              | 21.16          | 21.16               | 21.04        | 22.00               |

| CA_5B                              |                    |             |            |         |           |         |           |               |                      |                     |                    |
|------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:10MHz+10MHz(50RB+50RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                        | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                    |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 20450                              | 20450              | 20549       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 21.33               | 22.30              |
| 20525                              | 20476              | 20575       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 21.36               | 22.30              |
| 20600                              | 20501              | 20600       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 21.25               | 22.30              |
| 20450                              | 20450              | 20549       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.58               | 21.30              |
| 20525                              | 20476              | 20575       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.53               | 21.30              |
| 20600                              | 20501              | 20600       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.51               | 21.30              |
| 20450                              | 20450              | 20549       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.48               | 20.30              |
| 20525                              | 20476              | 20575       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.53               | 20.30              |
| 20600                              | 20501              | 20600       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.50               | 20.30              |
| 20450                              | 20450              | 20549       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 16.71               | 17.30              |
| 20525                              | 20476              | 20575       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 16.75               | 17.30              |
| 20600                              | 20501              | 20600       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 16.69               | 17.30              |
| 20450                              | 20450              | 20549       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 20.35               | 21.30              |
| 20525                              | 20476              | 20575       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 20.36               | 21.30              |
| 20600                              | 20501              | 20600       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 20.31               | 21.30              |

| CA_48C                               |                    |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 55340                                | 55340              | 55538       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 21.80               | 22.80              |
| 55990                                | 55891              | 56089       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 21.65               | 22.80              |
| 56640                                | 56442              | 56640       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 21.88               | 22.80              |
| 55340                                | 55340              | 55538       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.13               | 21.80              |
| 55990                                | 55891              | 56089       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.02               | 21.80              |
| 56640                                | 56442              | 56640       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 21.28               | 21.80              |
| 55340                                | 55340              | 55538       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.25               | 20.80              |
| 55990                                | 55891              | 56089       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.15               | 20.80              |
| 56640                                | 56442              | 56640       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 20.21               | 20.80              |
| 55340                                | 55340              | 55538       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.18               | 17.80              |
| 55990                                | 55891              | 56089       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.05               | 17.80              |
| 56640                                | 56442              | 56640       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 17.15               | 17.80              |
| 55340                                | 55340              | 55538       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 20.76               | 21.80              |
| 55990                                | 55891              | 56089       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 20.65               | 21.80              |
| 56640                                | 56442              | 56640       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 20.70               | 21.80              |

### 5GHz WLAN ANT 8

| 5.8GHz WLAN<br>ANT 8 | Mode                | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Power Setting | Duty Cycle % |
|----------------------|---------------------|---------|--------------------|------------------------|------------------|---------------|--------------|
|                      | 802.11a 6Mbps       | CH 149  | 5745               | 17.16                  | 18.00            | 16.50         | 98.26        |
|                      |                     | CH 157  | 5785               | 17.09                  | 18.00            |               |              |
|                      |                     | CH 165  | 5825               | 17.22                  | 18.00            |               |              |
|                      | 802.11n-HT20 MCS0   | CH 149  | 5745               | 16.46                  | 17.50            | 16.00         | 98.13        |
|                      |                     | CH 157  | 5785               | 16.44                  | 17.50            |               |              |
|                      |                     | CH 165  | 5825               | 16.53                  | 17.50            |               |              |
|                      | 802.11n-HT40 MCS0   | CH 151  | 5755               | 17.30                  | 18.00            | 16.00         | 96.47        |
|                      |                     | CH 159  | 5795               | 17.03                  | 18.00            |               |              |
|                      | 802.11ac-VHT20 MCS0 | CH 149  | 5745               | 16.50                  | 17.50            | 16.00         | 98.13        |
|                      |                     | CH 157  | 5785               | 16.42                  | 17.50            |               |              |
|                      |                     | CH 165  | 5825               | 16.54                  | 17.50            |               |              |
|                      | 802.11ac-VHT40 MCS0 | CH 151  | 5755               | 17.31                  | 18.00            | 16.00         | 96.30        |
|                      |                     | CH 159  | 5795               | 17.03                  | 18.00            |               |              |
|                      | 802.11ac-VHT80 MCS0 | CH 155  | 5775               | 17.06                  | 18.00            | 16.00         | 92.68        |

### Reduced Power Level 2 for ANT 1 & ANT3 & ANT 4 & ANT 6 & ANT 8

| Band 4 (AWS Band) (dBm)<br>Part 27L (only on channel required)_Ant 4 |            |         |    |           |             |                |                     |                     |  |
|----------------------------------------------------------------------|------------|---------|----|-----------|-------------|----------------|---------------------|---------------------|--|
| BW [MHz]                                                             | Modulation | RB Size |    | RB Offset | Low Channel | Middle Channel | High Channel        | Tune-up limit (dBm) |  |
| Channel                                                              |            |         |    | 20050     | 20175       | 20300          |                     |                     |  |
| Frequency (MHz)                                                      |            |         |    |           | 1720        | 1732.5         | 1745                | 20.8                |  |
| 20                                                                   | QPSK       | 1       | 0  |           | 19.79       | 19.86          | 19.81               |                     |  |
| 20                                                                   | QPSK       | 1       | 49 |           | 19.77       | 19.75          | 19.75               |                     |  |
| 20                                                                   | QPSK       | 1       | 99 |           | 19.69       | 19.80          | 19.71               |                     |  |
| 20                                                                   | QPSK       | 50      | 0  |           | 18.81       | 18.90          | 18.84               | 19.8                |  |
| 20                                                                   | QPSK       | 50      | 24 |           | 18.87       | 18.70          | 18.69               |                     |  |
| 20                                                                   | QPSK       | 50      | 50 |           | 18.73       | 18.76          | 18.63               |                     |  |
| 20                                                                   | QPSK       | 100     | 0  |           | 18.69       | 18.72          | 18.78               |                     |  |
| 20                                                                   | 16QAM      | 1       | 0  |           | 18.95       | 19.10          | 18.99               | 19.8                |  |
| 20                                                                   | 16QAM      | 1       | 49 |           | 18.96       | 19.03          | 18.88               |                     |  |
| 20                                                                   | 16QAM      | 1       | 99 |           | 18.88       | 18.99          | 18.95               |                     |  |
| 20                                                                   | 16QAM      | 50      | 0  |           | 17.87       | 17.90          | 17.70               |                     |  |
| 20                                                                   | 16QAM      | 50      | 24 |           | 17.74       | 17.68          | 17.76               | 18.8                |  |
| 20                                                                   | 16QAM      | 50      | 50 |           | 17.63       | 17.70          | 17.74               |                     |  |
| 20                                                                   | 16QAM      | 100     | 0  |           | 17.55       | 17.82          | 17.64               |                     |  |
| 20                                                                   | 64QAM      | 1       | 0  |           | 17.86       | 18.01          | 17.87               |                     |  |
| 20                                                                   | 64QAM      | 1       | 49 |           | 17.73       | 17.74          | 17.90               | 18.8                |  |
| 20                                                                   | 64QAM      | 1       | 99 |           | 17.75       | 17.74          | 17.87               |                     |  |
| 20                                                                   | 64QAM      | 50      | 0  |           | 16.75       | 16.84          | 16.82               |                     |  |
| 20                                                                   | 64QAM      | 50      | 24 |           | 16.69       | 16.83          | 16.61               |                     |  |
| 20                                                                   | 64QAM      | 50      | 50 |           | 16.66       | 16.64          | 16.65               | 17.8                |  |
| 20                                                                   | 64QAM      | 100     | 0  |           | 16.65       | 16.79          | 16.70               |                     |  |
| Channel                                                              |            |         |    | 20025     | 20175       | 20325          | Tune-up limit (dBm) |                     |  |
| Frequency (MHz)                                                      |            |         |    | 1717.5    | 1732.5      | 1747.5         |                     |                     |  |
| 15                                                                   | QPSK       | 1       | 0  |           | 19.81       | 19.83          | 19.75               | 20.8                |  |
| 15                                                                   | QPSK       | 1       | 37 |           | 19.79       | 19.79          | 19.71               |                     |  |
| 15                                                                   | QPSK       | 1       | 74 |           | 19.64       | 19.75          | 19.70               |                     |  |
| 15                                                                   | QPSK       | 36      | 0  |           | 18.85       | 18.88          | 18.70               | 19.8                |  |
| 15                                                                   | QPSK       | 36      | 20 |           | 18.67       | 18.87          | 18.64               |                     |  |
| 15                                                                   | QPSK       | 36      | 39 |           | 18.72       | 18.59          | 18.55               |                     |  |
| 15                                                                   | QPSK       | 75      | 0  |           | 18.74       | 18.73          | 18.76               | 19.8                |  |
| 15                                                                   | 16QAM      | 1       | 0  |           | 18.99       | 19.07          | 18.96               |                     |  |
| 15                                                                   | 16QAM      | 1       | 37 |           | 18.89       | 19.05          | 18.87               |                     |  |
| 15                                                                   | 16QAM      | 1       | 74 |           | 18.98       | 18.85          | 19.01               | 18.8                |  |
| 15                                                                   | 16QAM      | 36      | 0  |           | 17.86       | 17.91          | 17.70               |                     |  |
| 15                                                                   | 16QAM      | 36      | 20 |           | 17.65       | 17.70          | 17.65               |                     |  |
| 15                                                                   | 16QAM      | 36      | 39 |           | 17.53       | 17.77          | 17.72               | 18.8                |  |
| 15                                                                   | 16QAM      | 75      | 0  |           | 17.67       | 17.83          | 17.60               |                     |  |
| 15                                                                   | 64QAM      | 1       | 0  |           | 17.76       | 17.85          | 17.84               |                     |  |
| 15                                                                   | 64QAM      | 1       | 37 |           | 17.68       | 17.78          | 17.79               | 18.8                |  |
| 15                                                                   | 64QAM      | 1       | 74 |           | 17.67       | 17.75          | 17.68               |                     |  |
| 15                                                                   | 64QAM      | 36      | 0  |           | 16.73       | 16.83          | 16.73               |                     |  |
| 15                                                                   | 64QAM      | 36      | 20 |           | 16.53       | 16.78          | 16.59               | 17.8                |  |
| 15                                                                   | 64QAM      | 36      | 39 |           | 16.56       | 16.56          | 16.72               |                     |  |
| 15                                                                   | 64QAM      | 75      | 0  |           | 16.48       | 16.82          | 16.76               |                     |  |
| Channel                                                              |            |         |    | 20000     | 20175       | 20350          | Tune-up limit (dBm) |                     |  |
| Frequency (MHz)                                                      |            |         |    | 1715      | 1732.5      | 1750           |                     |                     |  |
| 10                                                                   | QPSK       | 1       | 0  |           | 19.77       | 19.81          | 19.74               | 20.8                |  |
| 10                                                                   | QPSK       | 1       | 25 |           | 19.74       | 19.65          | 19.61               |                     |  |
| 10                                                                   | QPSK       | 1       | 49 |           | 19.67       | 19.75          | 19.61               |                     |  |
| 10                                                                   | QPSK       | 25      | 0  |           | 18.85       | 18.90          | 18.61               | 19.8                |  |
| 10                                                                   | QPSK       | 25      | 12 |           | 18.82       | 18.78          | 18.68               |                     |  |
| 10                                                                   | QPSK       | 25      | 25 |           | 18.59       | 18.66          | 18.75               |                     |  |
| 10                                                                   | QPSK       | 50      | 0  |           | 18.76       | 18.79          | 18.75               | 19.8                |  |
| 10                                                                   | 16QAM      | 1       | 0  |           | 19.02       | 19.06          | 18.95               |                     |  |
| 10                                                                   | 16QAM      | 1       | 25 |           | 19.05       | 18.97          | 18.84               |                     |  |
| 10                                                                   | 16QAM      | 1       | 49 |           | 19.04       | 19.03          | 18.97               | 18.8                |  |
| 10                                                                   | 16QAM      | 25      | 0  |           | 17.73       | 17.89          | 17.83               |                     |  |
| 10                                                                   | 16QAM      | 25      | 12 |           | 17.74       | 17.66          | 17.66               |                     |  |
| 10                                                                   | 16QAM      | 25      | 25 |           | 17.62       | 17.65          | 17.78               | 18.8                |  |
| 10                                                                   | 16QAM      | 50      | 0  |           | 17.61       | 17.73          | 17.60               |                     |  |
| 10                                                                   | 64QAM      | 1       | 0  |           | 17.85       | 17.89          | 17.84               |                     |  |
| 10                                                                   | 64QAM      | 1       | 25 |           | 17.83       | 17.84          | 17.82               | 18.8                |  |
| 10                                                                   | 64QAM      | 1       | 49 |           | 17.66       | 17.81          | 17.85               |                     |  |
| 10                                                                   | 64QAM      | 25      | 0  |           | 16.79       | 16.83          | 16.79               |                     |  |
| 10                                                                   | 64QAM      | 25      | 12 |           | 16.71       | 16.75          | 16.59               | 17.8                |  |
| 10                                                                   | 64QAM      | 25      | 25 |           | 16.64       | 16.65          | 16.65               |                     |  |
| 10                                                                   | 64QAM      | 50      | 0  |           | 16.50       | 16.66          | 16.75               |                     |  |
| Channel                                                              |            |         |    | 19975     | 20175       | 20375          | Tune-up limit (dBm) |                     |  |
| Frequency (MHz)                                                      |            |         |    | 1712.5    | 1732.5      | 1752.5         |                     |                     |  |
| 5                                                                    | QPSK       | 1       | 0  |           | 19.76       | 19.80          | 19.73               | 20.8                |  |
| 5                                                                    | QPSK       | 1       | 12 |           | 19.74       | 19.75          | 19.67               |                     |  |
| 5                                                                    | QPSK       | 1       | 24 |           | 19.72       | 19.74          | 19.60               |                     |  |
| 5                                                                    | QPSK       | 12      | 0  |           | 18.84       | 18.99          | 18.73               | 19.8                |  |
| 5                                                                    | QPSK       | 12      | 7  |           | 18.64       | 18.74          | 18.64               |                     |  |
| 5                                                                    | QPSK       | 12      | 13 |           | 18.69       | 18.61          | 18.65               |                     |  |
| 5                                                                    | QPSK       | 25      | 0  |           | 18.79       | 18.78          | 18.64               | 19.8                |  |
| 5                                                                    | 16QAM      | 1       | 0  |           | 19.03       | 19.08          | 18.95               |                     |  |
| 5                                                                    | 16QAM      | 1       | 12 |           | 19.07       | 18.98          | 19.07               |                     |  |
| 5                                                                    | 16QAM      | 1       | 24 |           | 18.85       | 18.93          | 18.99               | 18.8                |  |
| 5                                                                    | 16QAM      | 12      | 0  |           | 17.77       | 17.77          | 17.87               |                     |  |
| 5                                                                    | 16QAM      | 12      | 7  |           | 17.74       | 17.84          | 17.83               |                     |  |
| 5                                                                    | 16QAM      | 12      | 13 |           | 17.59       | 17.78          | 17.57               | 18.8                |  |
| 5                                                                    | 16QAM      | 25      | 0  |           | 17.56       | 17.71          | 17.74               |                     |  |
| 5                                                                    | 64QAM      | 1       | 0  |           | 17.78       | 17.86          | 17.80               |                     |  |
| 5                                                                    | 64QAM      | 1       | 12 |           | 17.77       | 17.91          | 17.74               | 18.8                |  |
| 5                                                                    | 64QAM      | 1       | 24 |           | 17.57       | 17.74          | 17.65               |                     |  |
| 5                                                                    | 64QAM      | 12      | 0  |           | 16.75       | 16.91          | 16.80               |                     |  |
| 5                                                                    | 64QAM      | 12      | 7  |           | 16.59       | 16.84          | 16.59               | 17.8                |  |
| 5                                                                    | 64QAM      | 12      | 13 |           | 16.54       | 16.80          | 16.60               |                     |  |
| 5                                                                    | 64QAM      | 25      | 0  |           | 16.55       | 16.60          | 16.63               |                     |  |
| Channel                                                              |            |         |    | 19965     | 20175       | 20385          | Tune-up limit (dBm) |                     |  |
| Frequency (MHz)                                                      |            |         |    | 1711.5    | 1732.5      | 1753.5         |                     |                     |  |
| 3                                                                    | QPSK       | 1       | 0  |           | 19.78       | 19.82          | 19.76               | 20.8                |  |
| 3                                                                    | QPSK       | 1       | 8  |           | 19.66       | 19.78          | 19.73               |                     |  |
| 3                                                                    | QPSK       | 1       | 14 |           | 19.67       | 19.66          | 19.70               |                     |  |
| 3                                                                    | QPSK       | 8       | 0  |           | 18.83       | 18.80          | 18.61               |                     |  |

| Band 5 (Celluar Band) (dBm)<br>Part 22H(only on channel required)_Ant 1 |            |         |           |             |                |              |                     |
|-------------------------------------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                                                | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                                                 |            |         |           | 20450       | 20525          | 20600        |                     |
| Frequency (MHz)                                                         |            |         |           | 829         | 836.5          | 844          |                     |
| 10                                                                      | QPSK       | 1       | 0         | 19.48       | 19.55          | 19.51        | 20.3                |
| 10                                                                      | QPSK       | 1       | 25        | 19.50       | 19.49          | 19.36        |                     |
| 10                                                                      | QPSK       | 1       | 49        | 19.43       | 19.41          | 19.35        |                     |
| 10                                                                      | QPSK       | 25      | 0         | 18.45       | 18.47          | 18.42        | 19.3                |
| 10                                                                      | QPSK       | 25      | 12        | 18.40       | 18.47          | 18.29        |                     |
| 10                                                                      | QPSK       | 25      | 25        | 18.36       | 18.36          | 18.28        |                     |
| 10                                                                      | QPSK       | 50      | 0         | 18.36       | 18.35          | 18.28        | 19.3                |
| 10                                                                      | 16QAM      | 1       | 0         | 18.67       | 18.77          | 18.67        |                     |
| 10                                                                      | 16QAM      | 1       | 25        | 18.70       | 18.72          | 18.68        |                     |
| 10                                                                      | 16QAM      | 1       | 49        | 18.66       | 18.69          | 18.74        | 18.3                |
| 10                                                                      | 16QAM      | 25      | 0         | 17.48       | 17.58          | 17.61        |                     |
| 10                                                                      | 16QAM      | 25      | 12        | 17.35       | 17.55          | 17.53        |                     |
| 10                                                                      | 16QAM      | 25      | 25        | 17.39       | 17.38          | 17.36        | 18.3                |
| 10                                                                      | 16QAM      | 50      | 0         | 17.42       | 17.49          | 17.41        |                     |
| 10                                                                      | 64QAM      | 1       | 0         | 17.44       | 17.65          | 17.48        |                     |
| 10                                                                      | 64QAM      | 1       | 25        | 17.31       | 17.54          | 17.44        | 18.3                |
| 10                                                                      | 64QAM      | 1       | 49        | 17.47       | 17.45          | 17.53        |                     |
| 10                                                                      | 64QAM      | 25      | 0         | 16.31       | 16.55          | 16.31        |                     |
| 10                                                                      | 64QAM      | 25      | 12        | 16.19       | 16.48          | 16.22        | 17.3                |
| 10                                                                      | 64QAM      | 25      | 25        | 16.21       | 16.46          | 16.20        |                     |
| 10                                                                      | 64QAM      | 50      | 0         | 16.12       | 16.29          | 16.39        |                     |
| Channel                                                                 |            |         |           | 20425       | 20525          | 20625        | Tune-up limit (dBm) |
| Frequency (MHz)                                                         |            |         |           | 826.5       | 836.5          | 846.5        |                     |
| 5                                                                       | QPSK       | 1       | 0         | 19.50       | 19.51          | 19.45        | 20.3                |
| 5                                                                       | QPSK       | 1       | 12        | 19.44       | 19.48          | 19.49        |                     |
| 5                                                                       | QPSK       | 1       | 24        | 19.38       | 19.35          | 19.40        |                     |
| 5                                                                       | QPSK       | 12      | 0         | 18.63       | 18.69          | 18.53        | 19.3                |
| 5                                                                       | QPSK       | 12      | 7         | 18.52       | 18.55          | 18.45        |                     |
| 5                                                                       | QPSK       | 12      | 13        | 18.31       | 18.46          | 18.33        |                     |
| 5                                                                       | QPSK       | 25      | 0         | 18.44       | 18.53          | 18.50        | 19.3                |
| 5                                                                       | 16QAM      | 1       | 0         | 18.66       | 18.75          | 18.75        |                     |
| 5                                                                       | 16QAM      | 1       | 12        | 18.80       | 18.63          | 18.71        |                     |
| 5                                                                       | 16QAM      | 1       | 24        | 18.52       | 18.70          | 18.67        | 18.3                |
| 5                                                                       | 16QAM      | 12      | 0         | 17.53       | 17.50          | 17.57        |                     |
| 5                                                                       | 16QAM      | 12      | 7         | 17.43       | 17.47          | 17.58        |                     |
| 5                                                                       | 16QAM      | 12      | 13        | 17.31       | 17.35          | 17.35        | 18.3                |
| 5                                                                       | 16QAM      | 25      | 0         | 17.29       | 17.30          | 17.38        |                     |
| 5                                                                       | 64QAM      | 1       | 0         | 17.44       | 17.49          | 17.60        |                     |
| 5                                                                       | 64QAM      | 1       | 12        | 17.38       | 17.46          | 17.38        | 18.3                |
| 5                                                                       | 64QAM      | 1       | 24        | 17.30       | 17.54          | 17.51        |                     |
| 5                                                                       | 64QAM      | 12      | 0         | 16.28       | 16.46          | 16.47        |                     |
| 5                                                                       | 64QAM      | 12      | 7         | 16.38       | 16.50          | 16.30        | 17.3                |
| 5                                                                       | 64QAM      | 12      | 13        | 16.15       | 16.29          | 16.31        |                     |
| 5                                                                       | 64QAM      | 25      | 0         | 16.16       | 16.29          | 16.33        |                     |
| Channel                                                                 |            |         |           | 20415       | 20525          | 20635        | Tune-up limit (dBm) |
| Frequency (MHz)                                                         |            |         |           | 825.5       | 836.5          | 847.5        |                     |
| 3                                                                       | QPSK       | 1       | 0         | 19.51       | 19.52          | 19.38        | 20.3                |
| 3                                                                       | QPSK       | 1       | 8         | 19.50       | 19.47          | 19.43        |                     |
| 3                                                                       | QPSK       | 1       | 14        | 19.47       | 19.35          | 19.28        |                     |
| 3                                                                       | QPSK       | 8       | 0         | 18.49       | 18.58          | 18.41        | 19.3                |
| 3                                                                       | QPSK       | 8       | 4         | 18.46       | 18.41          | 18.37        |                     |
| 3                                                                       | QPSK       | 8       | 7         | 18.32       | 18.37          | 18.30        |                     |
| 3                                                                       | QPSK       | 15      | 0         | 18.31       | 18.49          | 18.43        | 19.3                |
| 3                                                                       | 16QAM      | 1       | 0         | 18.75       | 18.83          | 18.65        |                     |
| 3                                                                       | 16QAM      | 1       | 8         | 18.69       | 18.72          | 18.54        |                     |
| 3                                                                       | 16QAM      | 1       | 14        | 18.50       | 18.75          | 18.59        | 18.3                |
| 3                                                                       | 16QAM      | 8       | 0         | 17.33       | 17.43          | 17.47        |                     |
| 3                                                                       | 16QAM      | 8       | 4         | 17.43       | 17.45          | 17.49        |                     |
| 3                                                                       | 16QAM      | 8       | 7         | 17.35       | 17.32          | 17.40        | 18.3                |
| 3                                                                       | 16QAM      | 15      | 0         | 17.34       | 17.31          | 17.37        |                     |
| 3                                                                       | 64QAM      | 1       | 0         | 17.39       | 17.54          | 17.59        |                     |
| 3                                                                       | 64QAM      | 1       | 8         | 17.31       | 17.56          | 17.54        | 18.3                |
| 3                                                                       | 64QAM      | 1       | 14        | 17.37       | 17.52          | 17.33        |                     |
| 3                                                                       | 64QAM      | 8       | 0         | 16.48       | 16.60          | 16.50        |                     |
| 3                                                                       | 64QAM      | 8       | 4         | 16.31       | 16.43          | 16.32        | 17.3                |
| 3                                                                       | 64QAM      | 8       | 7         | 16.37       | 16.44          | 16.34        |                     |
| 3                                                                       | 64QAM      | 15      | 0         | 16.22       | 16.49          | 16.34        |                     |
| Channel                                                                 |            |         |           | 20407       | 20525          | 20643        | Tune-up limit (dBm) |
| Frequency (MHz)                                                         |            |         |           | 824.7       | 836.5          | 848.3        |                     |
| 1.4                                                                     | QPSK       | 1       | 0         | 19.45       | 19.50          | 19.43        | 20.3                |
| 1.4                                                                     | QPSK       | 1       | 3         | 19.41       | 19.35          | 19.40        |                     |
| 1.4                                                                     | QPSK       | 1       | 5         | 19.39       | 19.42          | 19.31        |                     |
| 1.4                                                                     | QPSK       | 3       | 0         | 18.53       | 18.59          | 18.34        | 19.3                |
| 1.4                                                                     | QPSK       | 3       | 1         | 18.58       | 18.40          | 18.34        |                     |
| 1.4                                                                     | QPSK       | 3       | 3         | 18.32       | 18.51          | 18.31        |                     |
| 1.4                                                                     | QPSK       | 6       | 0         | 18.40       | 18.37          | 18.45        | 19.3                |
| 1.4                                                                     | 16QAM      | 1       | 0         | 18.66       | 18.87          | 18.75        |                     |
| 1.4                                                                     | 16QAM      | 1       | 3         | 18.84       | 18.71          | 18.54        |                     |
| 1.4                                                                     | 16QAM      | 1       | 5         | 18.59       | 18.65          | 18.59        | 19.3                |
| 1.4                                                                     | 16QAM      | 3       | 0         | 17.32       | 17.61          | 17.62        |                     |
| 1.4                                                                     | 16QAM      | 3       | 1         | 17.33       | 17.53          | 17.58        |                     |
| 1.4                                                                     | 16QAM      | 3       | 3         | 17.31       | 17.39          | 17.38        | 18.3                |
| 1.4                                                                     | 16QAM      | 6       | 0         | 17.41       | 17.47          | 17.33        |                     |
| 1.4                                                                     | 64QAM      | 1       | 0         | 17.59       | 17.67          | 17.57        |                     |
| 1.4                                                                     | 64QAM      | 1       | 3         | 17.44       | 17.63          | 17.43        | 18.3                |
| 1.4                                                                     | 64QAM      | 1       | 5         | 17.43       | 17.38          | 17.53        |                     |
| 1.4                                                                     | 64QAM      | 3       | 0         | 16.39       | 16.58          | 16.53        |                     |
| 1.4                                                                     | 64QAM      | 3       | 1         | 16.41       | 16.45          | 16.31        | 17.3                |
| 1.4                                                                     | 64QAM      | 3       | 3         | 16.35       | 16.50          | 16.33        |                     |
| 1.4                                                                     | 64QAM      | 6       | 0         | 16.35       | 16.52          | 16.43        |                     |

|                 |       |    |    |        |        |        |                        |
|-----------------|-------|----|----|--------|--------|--------|------------------------|
| 3               | QPSK  | 8  | 4  | 18.88  | 18.88  | 18.63  | 19.8                   |
| 3               | QPSK  | 8  | 7  | 18.74  | 18.66  | 18.59  |                        |
| 3               | QPSK  | 15 | 0  | 18.67  | 18.84  | 18.72  |                        |
| 3               | 16QAM | 1  | 0  | 19.05  | 19.07  | 19.03  | 19.8                   |
| 3               | 16QAM | 1  | 8  | 19.00  | 18.91  | 19.04  |                        |
| 3               | 16QAM | 1  | 14 | 18.96  | 19.01  | 18.97  |                        |
| 3               | 16QAM | 8  | 0  | 17.68  | 17.78  | 17.84  | 18.8                   |
| 3               | 16QAM | 8  | 4  | 17.71  | 17.76  | 17.82  |                        |
| 3               | 16QAM | 8  | 7  | 17.60  | 17.59  | 17.72  |                        |
| 3               | 16QAM | 15 | 0  | 17.57  | 17.74  | 17.68  | 18.8                   |
| 3               | 64QAM | 1  | 0  | 17.85  | 17.89  | 17.81  |                        |
| 3               | 64QAM | 1  | 8  | 17.63  | 17.63  | 17.61  |                        |
| 3               | 64QAM | 1  | 14 | 17.80  | 17.71  | 17.78  | 17.8                   |
| 3               | 64QAM | 8  | 0  | 16.79  | 16.86  | 16.68  |                        |
| 3               | 64QAM | 8  | 4  | 16.61  | 16.85  | 16.60  |                        |
| 3               | 64QAM | 8  | 7  | 16.55  | 16.59  | 16.69  | 17.8                   |
| 3               | 64QAM | 15 | 0  | 16.53  | 16.64  | 16.75  |                        |
| Channel         |       |    |    | 19957  | 20175  | 20393  | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1732.5 | 1754.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 19.73  | 19.80  | 19.72  |                        |
| 1.4             | QPSK  | 1  | 3  | 19.75  | 19.74  | 19.69  | 20.8                   |
| 1.4             | QPSK  | 1  | 5  | 19.67  | 19.68  | 19.64  |                        |
| 1.4             | QPSK  | 3  | 0  | 18.78  | 18.98  | 18.75  |                        |
| 1.4             | QPSK  | 3  | 1  | 18.88  | 18.80  | 18.74  | 19.8                   |
| 1.4             | QPSK  | 3  | 3  | 18.75  | 18.79  | 18.70  |                        |
| 1.4             | QPSK  | 6  | 0  | 18.64  | 18.68  | 18.64  |                        |
| 1.4             | 16QAM | 1  | 0  | 19.03  | 19.07  | 19.04  | 19.8                   |
| 1.4             | 16QAM | 1  | 3  | 19.08  | 18.99  | 18.83  |                        |
| 1.4             | 16QAM | 1  | 5  | 19.02  | 19.04  | 18.87  |                        |
| 1.4             | 16QAM | 3  | 0  | 17.64  | 17.74  | 17.85  | 18.8                   |
| 1.4             | 16QAM | 3  | 1  | 17.62  | 17.64  | 17.74  |                        |
| 1.4             | 16QAM | 3  | 3  | 17.59  | 17.64  | 17.69  |                        |
| 1.4             | 16QAM | 6  | 0  | 17.73  | 17.60  | 17.72  | 18.8                   |
| 1.4             | 64QAM | 1  | 0  | 17.82  | 17.97  | 17.90  |                        |
| 1.4             | 64QAM | 1  | 3  | 17.71  | 17.97  | 17.80  |                        |
| 1.4             | 64QAM | 1  | 5  | 17.62  | 17.90  | 17.66  | 18.8                   |
| 1.4             | 64QAM | 3  | 0  | 16.67  | 16.69  | 16.72  |                        |
| 1.4             | 64QAM | 3  | 1  | 16.71  | 16.72  | 16.56  |                        |
| 1.4             | 64QAM | 3  | 3  | 16.55  | 16.79  | 16.53  | 17.8                   |
| 1.4             | 64QAM | 6  | 0  | 16.56  | 16.59  | 16.63  |                        |

| Band 13(700MHz Band) (dBm)<br>Part 27F_Ant 1 |            |         |           |             |                |              |                     |
|----------------------------------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]                                     | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel                                      |            |         |           | 23230       |                |              |                     |
| Frequency (MHz)                              |            |         |           | 782         |                |              |                     |
| 10                                           | QPSK       | 1       | 0         |             | 20.53          |              | 21.3                |
| 10                                           | QPSK       | 1       | 25        |             | 20.45          |              |                     |
| 10                                           | QPSK       | 1       | 49        |             | 20.38          |              |                     |
| 10                                           | QPSK       | 25      | 0         |             | 19.46          |              | 20.3                |
| 10                                           | QPSK       | 25      | 12        |             | 19.34          |              |                     |
| 10                                           | QPSK       | 25      | 25        |             | 19.38          |              |                     |
| 10                                           | QPSK       | 50      | 0         |             | 19.24          |              | 20.3                |
| 10                                           | 16QAM      | 1       | 0         |             | 19.61          |              |                     |
| 10                                           | 16QAM      | 1       | 25        |             | 19.53          |              |                     |
| 10                                           | 16QAM      | 1       | 49        |             | 19.48          |              | 20.3                |
| 10                                           | 16QAM      | 25      | 0         |             | 18.44          |              |                     |
| 10                                           | 16QAM      | 25      | 12        |             | 18.40          |              |                     |
| 10                                           | 16QAM      | 25      | 25        |             | 18.30          |              | 19.3                |
| 10                                           | 16QAM      | 50      | 0         |             | 18.49          |              |                     |
| 10                                           | 64QAM      | 1       | 0         |             | 18.45          |              |                     |
| 10                                           | 64QAM      | 1       | 25        |             | 18.37          |              | 19.3                |
| 10                                           | 64QAM      | 1       | 49        |             | 18.46          |              |                     |
| 10                                           | 64QAM      | 25      | 0         |             | 17.42          |              |                     |
| 10                                           | 64QAM      | 25      | 12        |             | 17.25          |              | 18.3                |
| 10                                           | 64QAM      | 25      | 25        |             | 17.34          |              |                     |
| 10                                           | 64QAM      | 50      | 0         |             | 17.28          |              |                     |
| Channel                                      |            |         |           | 23205       | 23230          | 23255        | Tune-up limit (dBm) |
| Frequency (MHz)                              |            |         |           | 779.5       | 782            | 784.5        |                     |
| 5                                            | QPSK       | 1       | 0         | 20.44       | 20.49          | 20.42        | 21.3                |
| 5                                            | QPSK       | 1       | 12        | 20.39       | 20.46          | 20.38        |                     |
| 5                                            | QPSK       | 1       | 24        | 20.23       | 20.34          | 20.36        |                     |
| 5                                            | QPSK       | 12      | 0         | 19.33       | 19.58          | 19.46        | 20.3                |
| 5                                            | QPSK       | 12      | 7         | 19.33       | 19.51          | 19.45        |                     |
| 5                                            | QPSK       | 12      | 13        | 19.27       | 19.35          | 19.29        |                     |
| 5                                            | QPSK       | 25      | 0         | 19.31       | 19.27          | 19.33        | 20.3                |
| 5                                            | 16QAM      | 1       | 0         | 19.72       | 19.65          | 19.57        |                     |
| 5                                            | 16QAM      | 1       | 12        | 19.72       | 19.65          | 19.73        |                     |
| 5                                            | 16QAM      | 1       | 24        | 19.64       | 19.69          | 19.53        | 19.3                |
| 5                                            | 16QAM      | 12      | 0         | 18.38       | 18.40          | 18.50        |                     |
| 5                                            | 16QAM      | 12      | 7         | 18.35       | 18.52          | 18.34        |                     |
| 5                                            | 16QAM      | 12      | 13        | 18.34       | 18.28          | 18.37        | 19.3                |
| 5                                            | 16QAM      | 25      | 0         | 18.17       | 18.29          | 18.24        |                     |
| 5                                            | 64QAM      | 1       | 0         | 18.27       | 18.43          | 18.52        |                     |
| 5                                            | 64QAM      | 1       | 12        | 18.21       | 18.55          | 18.52        | 19.3                |
| 5                                            | 64QAM      | 1       | 24        | 18.29       | 18.41          | 18.42        |                     |
| 5                                            | 64QAM      | 12      | 0         | 17.38       | 17.41          | 17.45        |                     |
| 5                                            | 64QAM      | 12      | 7         | 17.29       | 17.37          | 17.35        | 18.3                |
| 5                                            | 64QAM      | 12      | 13        | 17.25       | 17.20          | 17.30        |                     |
| 5                                            | 64QAM      | 25      | 0         | 17.22       | 17.43          | 17.37        |                     |

| Band 66 (dBm)_Ant 4 |            |         |           |             |                |              |                     |
|---------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel             |            |         |           | 132072      | 132322         | 132572       | 20.8                |
| Frequency (MHz)     |            |         |           | 1720        | 1745           | 1770         |                     |
| 20                  | QPSK       | 1       | 0         | 19.85       | 19.97          | 19.93        | 19.8                |
| 20                  | QPSK       | 1       | 49        | 19.79       | 19.91          | 19.86        |                     |
| 20                  | QPSK       | 1       | 99        | 19.68       | 19.89          | 19.74        | 19.8                |
| 20                  | QPSK       | 50      | 0         | 18.83       | 18.92          | 18.87        |                     |
| 20                  | QPSK       | 50      | 24        | 18.83       | 18.91          | 18.82        | 19.8                |
| 20                  | QPSK       | 50      | 50        | 18.85       | 18.75          | 18.77        |                     |
| 20                  | QPSK       | 100     | 0         | 18.75       | 18.82          | 18.83        | 19.8                |
| 20                  | 16QAM      | 1       | 0         | 18.98       | 19.07          | 19.06        |                     |
| 20                  | 16QAM      | 1       | 49        | 19.02       | 18.95          | 18.89        | 18.8                |
| 20                  | 16QAM      | 1       | 99        | 18.87       | 18.96          | 19.03        |                     |
| 20                  | 16QAM      | 50      | 0         | 17.88       | 17.95          | 17.90        | 18.8                |
| 20                  | 16QAM      | 50      | 24        | 17.70       | 17.87          | 17.95        |                     |
| 20                  | 16QAM      | 50      | 50        | 17.71       | 17.77          | 17.73        | 18.8                |
| 20                  | 16QAM      | 100     | 0         | 17.70       | 17.73          | 17.75        |                     |
| 20                  | 64QAM      | 1       | 0         | 17.81       | 17.92          | 17.85        | 18.8                |
| 20                  | 64QAM      | 1       | 49        | 17.75       | 17.89          | 17.92        |                     |
| 20                  | 64QAM      | 1       | 99        | 17.67       | 17.88          | 17.82        | 17.8                |
| 20                  | 64QAM      | 50      | 0         | 16.72       | 16.86          | 16.82        |                     |
| 20                  | 64QAM      | 50      | 24        | 16.57       | 16.78          | 16.69        | 17.8                |
| 20                  | 64QAM      | 50      | 50        | 16.71       | 16.82          | 16.59        |                     |
| 20                  | 64QAM      | 100     | 0         | 16.59       | 16.82          | 16.84        | 21.3                |
| Channel             |            |         |           | 132047      | 132322         | 132597       |                     |
| Frequency (MHz)     |            |         |           | 1717.5      | 1745           | 1772.5       | 20.8                |
| 15                  | QPSK       | 1       | 0         | 19.81       | 19.94          | 19.90        |                     |
| 15                  | QPSK       | 1       | 37        | 19.72       | 19.83          | 19.68        | 19.8                |
| 15                  | QPSK       | 1       | 74        | 19.71       | 19.66          | 19.63        |                     |
| 15                  | QPSK       | 36      | 0         | 18.78       | 18.96          | 18.87        | 19.8                |
| 15                  | QPSK       | 36      | 20        | 18.80       | 18.78          | 18.70        |                     |
| 15                  | QPSK       | 36      | 39        | 18.70       | 18.86          | 18.73        | 19.8                |
| 15                  | QPSK       | 75      | 0         | 18.74       | 18.73          | 18.75        |                     |
| 15                  | 16QAM      | 1       | 0         | 19.01       | 19.09          | 19.05        | 19.8                |
| 15                  | 16QAM      | 1       | 37        | 19.03       | 19.00          | 18.91        |                     |
| 15                  | 16QAM      | 1       | 74        | 18.97       | 18.96          | 19.06        | 18.8                |
| 15                  | 16QAM      | 36      | 0         | 17.83       | 17.93          | 17.95        |                     |
| 15                  | 16QAM      | 36      | 20        | 17.78       | 17.86          | 17.78        | 18.8                |
| 15                  | 16QAM      | 36      | 39        | 17.73       | 17.81          | 17.85        |                     |
| 15                  | 16QAM      | 75      | 0         | 17.66       | 17.78          | 17.82        | 18.8                |
| 15                  | 64QAM      | 1       | 0         | 17.84       | 17.97          | 17.90        |                     |
| 15                  | 64QAM      | 1       | 37        | 17.67       | 17.91          | 17.80        | 17.8                |
| 15                  | 64QAM      | 1       | 74        | 17.73       | 17.84          | 17.82        |                     |
| 15                  | 64QAM      | 36      | 0         | 16.84       | 16.90          | 16.85        | 17.8                |
| 15                  | 64QAM      | 36      | 20        | 16.63       | 16.67          | 16.57        |                     |
| 15                  | 64QAM      | 36      | 39        | 16.72       | 16.61          | 16.74        | 17.8                |
| 15                  | 64QAM      | 75      | 0         | 16.68       | 16.79          | 16.59        |                     |
| Channel             |            |         |           | 132022      | 132322         | 132622       | 20.8                |
| Frequency (MHz)     |            |         |           | 1715        | 1745           | 1775         |                     |
| 10                  | QPSK       | 1       | 0         | 19.84       | 19.90          | 19.86        | 19.8                |
| 10                  | QPSK       | 1       | 25        | 19.83       | 19.86          | 19.72        |                     |
| 10                  | QPSK       | 1       | 49        | 19.73       | 19.85          | 19.61        | 19.8                |
| 10                  | QPSK       | 25      | 0         | 18.79       | 18.93          | 18.90        |                     |
| 10                  | QPSK       | 25      | 12        | 18.86       | 18.83          | 18.71        | 19.8                |
| 10                  | QPSK       | 25      | 25        | 18.63       | 18.72          | 18.80        |                     |
| 10                  | QPSK       | 50      | 0         | 18.75       | 18.77          | 18.83        | 19.8                |
| 10                  | 16QAM      | 1       | 0         | 19.02       | 19.10          | 19.09        |                     |
| 10                  | 16QAM      | 1       | 25        | 18.92       | 19.03          | 18.96        | 18.8                |
| 10                  | 16QAM      | 1       | 49        | 18.94       | 19.04          | 19.07        |                     |
| 10                  | 16QAM      | 25      | 0         | 17.78       | 17.96          | 17.92        | 18.8                |
| 10                  | 16QAM      | 25      | 12        | 17.71       | 17.88          | 17.95        |                     |
| 10                  | 16QAM      | 25      | 25        | 18.69       | 17.66          | 17.71        | 18.8                |
| 10                  | 16QAM      | 50      | 0         | 17.84       | 17.70          | 17.80        |                     |
| 10                  | 64QAM      | 1       | 0         | 17.79       | 17.87          | 17.89        | 17.8                |
| 10                  | 64QAM      | 1       | 25        | 17.87       | 17.90          | 17.79        |                     |
| 10                  | 64QAM      | 1       | 49        | 17.71       | 17.97          | 17.69        | 17.8                |
| 10                  | 64QAM      | 25      | 0         | 16.79       | 16.87          | 16.84        |                     |
| 10                  | 64QAM      | 25      | 12        | 16.72       | 16.79          | 16.63        | 17.8                |
| 10                  | 64QAM      | 25      | 25        | 16.62       | 16.68          | 16.81        |                     |
| 10                  | 64QAM      | 50      | 0         | 16.66       | 16.73          | 16.76        | 21.3                |
| Channel             |            |         |           | 131997      | 132322         | 132647       |                     |
| Frequency (MHz)     |            |         |           | 1712.5      | 1745           | 1777.5       | 20.8                |
| 5                   | QPSK       | 1       | 0         | 19.79       | 19.91          | 19.85        |                     |
| 5                   | QPSK       | 1       | 12        | 19.73       | 19.90          | 19.75        | 19.8                |
| 5                   | QPSK       | 1       | 24        | 19.79       | 19.80          | 19.63        |                     |
| 5                   | QPSK       | 12      | 0         | 18.90       | 18.94          | 18.90        | 19.8                |
| 5                   | QPSK       | 12      | 7         | 18.84       | 18.93          | 18.69        |                     |
| 5                   | QPSK       | 12      | 13        | 18.72       | 18.74          | 18.71        | 19.8                |
| 5                   | QPSK       | 25      | 0         | 18.83       | 18.88          | 18.66        |                     |
| 5                   | 16QAM      | 1       | 0         | 19.08       | 19.10          | 19.07        | 18.8                |
| 5                   | 16QAM      | 1       | 12        | 18.96       | 19.03          | 19.02        |                     |
| 5                   | 16QAM      | 1       | 24        | 19.03       | 19.05          | 18.96        | 18.8                |
| 5                   | 16QAM      | 12      | 0         | 17.85       | 17.81          | 17.79        |                     |
| 5                   | 16QAM      | 12      | 7         | 17.82       | 17.91          | 17.71        | 18.8                |
| 5                   | 16QAM      | 12      | 13        | 17.75       | 17.74          | 17.65        |                     |
| 5                   | 16QAM      | 25      | 0         | 17.66       | 17.88          | 17.63        | 18.8                |
| 5                   | 64QAM      | 1       | 0         | 17.96       | 17.91          | 17.86        |                     |
| 5                   | 64QAM      | 1       | 12        | 17.92       | 17.84          | 17.80        | 17.8                |
| 5                   | 64QAM      | 1       | 24        | 17.79       | 17.79          | 17.73        |                     |
| 5                   | 64QAM      | 12      | 0         | 16.61       | 16.84          | 16.77        | 17.8                |
| 5                   | 64QAM      | 12      | 7         | 16.78       | 16.67          | 16.56        |                     |
| 5                   | 64QAM      | 12      | 13        | 16.84       | 16.70          | 16.57        | 17.8                |
| 5                   | 64QAM      | 25      | 0         | 16.59       | 16.80          | 16.80        |                     |
| Channel             |            |         |           | 131987      | 132322         | 132657       | 20.8                |
| Frequency (MHz)     |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3                   | QPSK       | 1       | 0         | 19.83       | 19.92          | 19.87        | 20.8                |
| 3                   | QPSK       | 1       | 8         | 19.86       | 19.85          | 19.81        |                     |
| 3                   | QPSK       | 1       | 14        | 19.76       | 19.66          | 19.64        | 20.8                |
| 3                   | QPSK       | 8       | 0         | 18.90       | 18.92          | 18.77        |                     |

|                 |       |    |    |        |        |        |                     |
|-----------------|-------|----|----|--------|--------|--------|---------------------|
| 3               | QPSK  | 8  | 4  | 18.71  | 18.78  | 18.79  | 19.8                |
| 3               | QPSK  | 8  | 7  | 18.64  | 18.73  | 18.65  |                     |
| 3               | QPSK  | 15 | 0  | 18.88  | 18.87  | 18.70  |                     |
| 3               | 16QAM | 1  | 0  | 19.05  | 19.10  | 18.98  | 19.8                |
| 3               | 16QAM | 1  | 8  | 18.99  | 19.08  | 18.93  |                     |
| 3               | 16QAM | 1  | 14 | 18.86  | 18.99  | 18.98  |                     |
| 3               | 16QAM | 8  | 0  | 17.82  | 17.78  | 17.87  | 18.8                |
| 3               | 16QAM | 8  | 4  | 17.87  | 17.92  | 17.80  |                     |
| 3               | 16QAM | 8  | 7  | 17.67  | 17.60  | 17.82  |                     |
| 3               | 16QAM | 15 | 0  | 17.82  | 17.65  | 17.66  | 18.8                |
| 3               | 64QAM | 1  | 0  | 17.92  | 18.06  | 17.92  |                     |
| 3               | 64QAM | 1  | 8  | 17.82  | 17.93  | 17.72  |                     |
| 3               | 64QAM | 1  | 14 | 17.77  | 17.97  | 17.72  | 17.8                |
| 3               | 64QAM | 8  | 0  | 16.68  | 16.99  | 16.80  |                     |
| 3               | 64QAM | 8  | 4  | 16.63  | 16.90  | 16.65  |                     |
| 3               | 64QAM | 8  | 7  | 16.66  | 16.75  | 16.67  | 17.8                |
| 3               | 64QAM | 15 | 0  | 16.64  | 16.64  | 16.65  |                     |
| Channel         |       |    |    | 131979 | 132322 | 132665 | Tune-up limit (dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                     |
| 1.4             | QPSK  | 1  | 0  | 19.84  | 19.89  | 19.81  | 20.8                |
| 1.4             | QPSK  | 1  | 3  | 19.87  | 19.82  | 19.67  |                     |
| 1.4             | QPSK  | 1  | 5  | 19.71  | 19.77  | 19.62  |                     |
| 1.4             | QPSK  | 3  | 0  | 18.86  | 18.86  | 18.89  |                     |
| 1.4             | QPSK  | 3  | 1  | 18.81  | 18.85  | 18.81  |                     |
| 1.4             | QPSK  | 3  | 3  | 18.79  | 18.77  | 18.80  |                     |
| 1.4             | QPSK  | 6  | 0  | 18.77  | 18.70  | 18.65  | 19.8                |
| 1.4             | 16QAM | 1  | 0  | 19.00  | 19.08  | 19.02  |                     |
| 1.4             | 16QAM | 1  | 3  | 19.06  | 19.07  | 19.01  |                     |
| 1.4             | 16QAM | 1  | 5  | 19.00  | 18.93  | 19.05  | 19.8                |
| 1.4             | 16QAM | 3  | 0  | 17.78  | 17.89  | 17.84  |                     |
| 1.4             | 16QAM | 3  | 1  | 17.76  | 17.92  | 17.96  |                     |
| 1.4             | 16QAM | 3  | 3  | 17.79  | 17.86  | 17.81  | 18.8                |
| 1.4             | 16QAM | 6  | 0  | 17.84  | 17.83  | 17.67  |                     |
| 1.4             | 64QAM | 1  | 0  | 17.72  | 17.89  | 17.77  |                     |
| 1.4             | 64QAM | 1  | 3  | 17.84  | 17.86  | 17.72  | 18.8                |
| 1.4             | 64QAM | 1  | 5  | 17.72  | 17.89  | 17.84  |                     |
| 1.4             | 64QAM | 3  | 0  | 16.82  | 16.86  | 16.74  |                     |
| 1.4             | 64QAM | 3  | 1  | 16.60  | 16.90  | 16.54  | 17.8                |
| 1.4             | 64QAM | 3  | 3  | 16.55  | 16.82  | 16.59  |                     |
| 1.4             | 64QAM | 6  | 0  | 16.59  | 16.64  | 16.77  |                     |

| Band 66 (dBm)_ANT 3 |            |         |           |             |                |              |                     |
|---------------------|------------|---------|-----------|-------------|----------------|--------------|---------------------|
| BW [MHz]            | Modulation | RB Size | RB Offset | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel             |            |         |           | 132072      | 132322         | 132572       |                     |
| Frequency (MHz)     |            |         |           | 1720        | 1745           | 1770         |                     |
| 20                  | QPSK       | 1       | 0         | 21.85       | 21.97          | 21.93        | 22.8                |
| 20                  | QPSK       | 1       | 49        | 21.79       | 21.91          | 21.86        |                     |
| 20                  | QPSK       | 1       | 99        | 21.68       | 21.89          | 21.74        |                     |
| 20                  | QPSK       | 50      | 0         | 20.83       | 20.92          | 20.87        | 21.8                |
| 20                  | QPSK       | 50      | 24        | 20.83       | 20.91          | 20.82        |                     |
| 20                  | QPSK       | 50      | 50        | 20.85       | 20.75          | 20.77        |                     |
| 20                  | QPSK       | 100     | 0         | 20.75       | 20.82          | 20.83        | 21.8                |
| 20                  | 16QAM      | 1       | 0         | 20.98       | 21.07          | 21.06        |                     |
| 20                  | 16QAM      | 1       | 49        | 21.02       | 20.95          | 20.89        |                     |
| 20                  | 16QAM      | 1       | 99        | 20.87       | 20.96          | 21.03        | 20.8                |
| 20                  | 16QAM      | 50      | 0         | 19.88       | 19.95          | 19.90        |                     |
| 20                  | 16QAM      | 50      | 24        | 19.70       | 19.87          | 19.95        |                     |
| 20                  | 16QAM      | 50      | 50        | 19.71       | 19.77          | 19.73        | 20.8                |
| 20                  | 16QAM      | 100     | 0         | 19.70       | 19.73          | 19.75        |                     |
| 20                  | 64QAM      | 1       | 0         | 19.81       | 19.92          | 19.85        |                     |
| 20                  | 64QAM      | 1       | 49        | 19.75       | 19.89          | 19.92        | 20.8                |
| 20                  | 64QAM      | 1       | 99        | 19.67       | 19.88          | 19.82        |                     |
| 20                  | 64QAM      | 50      | 0         | 18.72       | 18.86          | 18.82        |                     |
| 20                  | 64QAM      | 50      | 24        | 18.57       | 18.78          | 18.69        | 19.8                |
| 20                  | 64QAM      | 50      | 50        | 18.71       | 18.82          | 18.59        |                     |
| 20                  | 64QAM      | 100     | 0         | 18.59       | 18.82          | 18.84        |                     |
| Channel             |            |         |           | 132047      | 132322         | 132597       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1717.5      | 1745           | 1772.5       |                     |
| 15                  | QPSK       | 1       | 0         | 21.81       | 21.94          | 21.90        | 22.8                |
| 15                  | QPSK       | 1       | 37        | 21.72       | 21.83          | 21.68        |                     |
| 15                  | QPSK       | 1       | 74        | 21.71       | 21.66          | 21.63        |                     |
| 15                  | QPSK       | 36      | 0         | 20.78       | 20.96          | 20.87        | 21.8                |
| 15                  | QPSK       | 36      | 20        | 20.80       | 20.78          | 20.70        |                     |
| 15                  | QPSK       | 36      | 39        | 20.70       | 20.86          | 20.73        |                     |
| 15                  | QPSK       | 75      | 0         | 20.74       | 20.73          | 20.75        | 21.8                |
| 15                  | 16QAM      | 1       | 0         | 21.01       | 21.09          | 21.05        |                     |
| 15                  | 16QAM      | 1       | 37        | 21.03       | 21.00          | 20.91        |                     |
| 15                  | 16QAM      | 1       | 74        | 20.97       | 20.96          | 21.06        | 20.8                |
| 15                  | 16QAM      | 36      | 0         | 19.83       | 19.93          | 19.95        |                     |
| 15                  | 16QAM      | 36      | 20        | 19.78       | 19.86          | 19.78        |                     |
| 15                  | 16QAM      | 36      | 39        | 19.73       | 19.81          | 19.85        | 20.8                |
| 15                  | 16QAM      | 75      | 0         | 19.66       | 19.78          | 19.82        |                     |
| 15                  | 64QAM      | 1       | 0         | 19.84       | 19.97          | 19.90        |                     |
| 15                  | 64QAM      | 1       | 37        | 19.67       | 19.91          | 19.80        | 20.8                |
| 15                  | 64QAM      | 1       | 74        | 19.73       | 19.84          | 19.82        |                     |
| 15                  | 64QAM      | 36      | 0         | 18.84       | 18.90          | 18.85        |                     |
| 15                  | 64QAM      | 36      | 20        | 18.63       | 18.67          | 18.57        | 19.8                |
| 15                  | 64QAM      | 36      | 39        | 18.72       | 18.61          | 18.74        |                     |
| 15                  | 64QAM      | 75      | 0         | 18.68       | 18.79          | 18.59        |                     |
| Channel             |            |         |           | 132022      | 132322         | 132622       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1715        | 1745           | 1775         |                     |
| 10                  | QPSK       | 1       | 0         | 21.84       | 21.90          | 21.86        | 22.8                |
| 10                  | QPSK       | 1       | 25        | 21.83       | 21.86          | 21.72        |                     |
| 10                  | QPSK       | 1       | 49        | 21.73       | 21.85          | 21.61        |                     |
| 10                  | QPSK       | 25      | 0         | 20.79       | 20.93          | 20.90        | 21.8                |
| 10                  | QPSK       | 25      | 12        | 20.86       | 20.83          | 20.71        |                     |
| 10                  | QPSK       | 25      | 25        | 20.63       | 20.72          | 20.80        |                     |
| 10                  | QPSK       | 50      | 0         | 20.75       | 20.77          | 20.83        | 21.8                |
| 10                  | 16QAM      | 1       | 0         | 21.02       | 21.10          | 21.09        |                     |
| 10                  | 16QAM      | 1       | 25        | 20.92       | 21.03          | 20.96        |                     |
| 10                  | 16QAM      | 1       | 49        | 20.94       | 21.04          | 21.07        | 20.8                |
| 10                  | 16QAM      | 25      | 0         | 19.78       | 19.96          | 19.92        |                     |
| 10                  | 16QAM      | 25      | 12        | 19.71       | 19.88          | 19.95        |                     |
| 10                  | 16QAM      | 25      | 25        | 20.69       | 19.66          | 19.71        | 20.8                |
| 10                  | 16QAM      | 50      | 0         | 19.84       | 19.70          | 19.80        |                     |
| 10                  | 64QAM      | 1       | 0         | 19.79       | 19.87          | 19.89        |                     |
| 10                  | 64QAM      | 1       | 25        | 19.87       | 19.90          | 19.79        | 20.8                |
| 10                  | 64QAM      | 1       | 49        | 19.71       | 19.97          | 19.69        |                     |
| 10                  | 64QAM      | 25      | 0         | 18.79       | 18.87          | 18.84        |                     |
| 10                  | 64QAM      | 25      | 12        | 18.72       | 18.79          | 18.63        | 19.8                |
| 10                  | 64QAM      | 25      | 25        | 18.62       | 18.68          | 18.81        |                     |
| 10                  | 64QAM      | 50      | 0         | 18.66       | 18.73          | 18.76        |                     |
| Channel             |            |         |           | 131997      | 132322         | 132647       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1712.5      | 1745           | 1777.5       |                     |
| 5                   | QPSK       | 1       | 0         | 21.79       | 21.91          | 21.85        | 22.8                |
| 5                   | QPSK       | 1       | 12        | 21.73       | 21.90          | 21.75        |                     |
| 5                   | QPSK       | 1       | 24        | 21.79       | 21.80          | 21.63        |                     |
| 5                   | QPSK       | 12      | 0         | 20.90       | 20.94          | 20.90        | 21.8                |
| 5                   | QPSK       | 12      | 7         | 20.84       | 20.93          | 20.69        |                     |
| 5                   | QPSK       | 12      | 13        | 20.72       | 20.74          | 20.71        |                     |
| 5                   | QPSK       | 25      | 0         | 20.83       | 20.88          | 20.66        | 21.8                |
| 5                   | 16QAM      | 1       | 0         | 21.08       | 21.10          | 21.07        |                     |
| 5                   | 16QAM      | 1       | 12        | 20.96       | 21.03          | 21.02        |                     |
| 5                   | 16QAM      | 1       | 24        | 21.03       | 21.05          | 20.96        | 20.8                |
| 5                   | 16QAM      | 12      | 0         | 19.85       | 19.81          | 19.79        |                     |
| 5                   | 16QAM      | 12      | 7         | 19.82       | 19.91          | 19.71        |                     |
| 5                   | 16QAM      | 12      | 13        | 19.75       | 19.74          | 19.65        | 20.8                |
| 5                   | 16QAM      | 25      | 0         | 19.66       | 19.88          | 19.63        |                     |
| 5                   | 64QAM      | 1       | 0         | 19.96       | 19.91          | 19.86        |                     |
| 5                   | 64QAM      | 1       | 12        | 19.92       | 19.84          | 19.80        | 20.8                |
| 5                   | 64QAM      | 1       | 24        | 19.79       | 19.79          | 19.73        |                     |
| 5                   | 64QAM      | 12      | 0         | 18.61       | 18.84          | 18.77        |                     |
| 5                   | 64QAM      | 12      | 7         | 18.78       | 18.67          | 18.56        | 19.8                |
| 5                   | 64QAM      | 12      | 13        | 18.64       | 18.70          | 18.57        |                     |
| 5                   | 64QAM      | 25      | 0         | 18.59       | 18.80          | 18.80        |                     |
| Channel             |            |         |           | 131987      | 132322         | 132657       | Tune-up limit (dBm) |
| Frequency (MHz)     |            |         |           | 1711.5      | 1745           | 1778.5       |                     |
| 3                   | QPSK       | 1       | 0         | 21.83       | 21.92          | 21.87        | 22.8                |
| 3                   | QPSK       | 1       | 8         | 21.86       | 21.85          | 21.81        |                     |
| 3                   | QPSK       | 1       | 14        | 21.76       | 21.66          | 21.64        |                     |
| 3                   | QPSK       | 8       | 0         | 20.90       | 20.92          | 20.77        | 21.8                |
| 3                   | QPSK       | 8       | 4         | 20.71       | 20.78          | 20.79        |                     |
| 3                   | QPSK       | 8       | 7         | 20.64       | 20.73          | 20.65        |                     |

|                 |       |    |    |        |        |        |                        |
|-----------------|-------|----|----|--------|--------|--------|------------------------|
| 3               | QPSK  | 15 | 0  | 20.88  | 20.87  | 20.70  | 21.8                   |
| 3               | 16QAM | 1  | 0  | 21.05  | 21.10  | 20.98  |                        |
| 3               | 16QAM | 1  | 8  | 20.99  | 21.08  | 20.93  |                        |
| 3               | 16QAM | 1  | 14 | 20.86  | 20.99  | 20.98  | 20.8                   |
| 3               | 16QAM | 8  | 0  | 19.82  | 19.78  | 19.87  |                        |
| 3               | 16QAM | 8  | 4  | 19.87  | 19.92  | 19.80  |                        |
| 3               | 16QAM | 8  | 7  | 19.67  | 19.60  | 19.82  | 20.8                   |
| 3               | 16QAM | 15 | 0  | 19.82  | 19.65  | 19.66  |                        |
| 3               | 64QAM | 1  | 0  | 19.92  | 20.06  | 19.92  |                        |
| 3               | 64QAM | 1  | 8  | 19.82  | 19.93  | 19.72  | 19.8                   |
| 3               | 64QAM | 1  | 14 | 19.77  | 19.97  | 19.72  |                        |
| 3               | 64QAM | 8  | 0  | 18.68  | 18.99  | 18.80  |                        |
| 3               | 64QAM | 8  | 4  | 18.63  | 18.90  | 18.65  | 19.8                   |
| 3               | 64QAM | 8  | 7  | 18.66  | 18.75  | 18.67  |                        |
| 3               | 64QAM | 15 | 0  | 18.64  | 18.64  | 18.65  |                        |
| Channel         |       |    |    | 131979 | 132322 | 132665 | Tune-up limit<br>(dBm) |
| Frequency (MHz) |       |    |    | 1710.7 | 1745   | 1779.3 |                        |
| 1.4             | QPSK  | 1  | 0  | 21.84  | 21.89  | 21.81  | 22.8                   |
| 1.4             | QPSK  | 1  | 3  | 21.87  | 21.82  | 21.67  |                        |
| 1.4             | QPSK  | 1  | 5  | 21.71  | 21.77  | 21.62  |                        |
| 1.4             | QPSK  | 3  | 0  | 20.86  | 20.86  | 20.89  |                        |
| 1.4             | QPSK  | 3  | 1  | 20.81  | 20.85  | 20.81  |                        |
| 1.4             | QPSK  | 3  | 3  | 20.79  | 20.77  | 20.80  | 21.8                   |
| 1.4             | QPSK  | 6  | 0  | 20.77  | 20.70  | 20.65  |                        |
| 1.4             | 16QAM | 1  | 0  | 21.00  | 21.08  | 21.02  | 21.8                   |
| 1.4             | 16QAM | 1  | 3  | 21.06  | 21.07  | 21.01  |                        |
| 1.4             | 16QAM | 1  | 5  | 21.00  | 20.93  | 21.05  |                        |
| 1.4             | 16QAM | 3  | 0  | 19.78  | 19.89  | 19.84  |                        |
| 1.4             | 16QAM | 3  | 1  | 19.76  | 19.92  | 19.96  |                        |
| 1.4             | 16QAM | 3  | 3  | 19.79  | 19.86  | 19.81  | 20.8                   |
| 1.4             | 16QAM | 6  | 0  | 19.84  | 19.83  | 19.67  |                        |
| 1.4             | 64QAM | 1  | 0  | 19.72  | 19.89  | 19.77  | 20.8                   |
| 1.4             | 64QAM | 1  | 3  | 19.84  | 19.86  | 19.72  |                        |
| 1.4             | 64QAM | 1  | 5  | 19.72  | 19.89  | 19.84  |                        |
| 1.4             | 64QAM | 3  | 0  | 18.82  | 18.86  | 18.74  |                        |
| 1.4             | 64QAM | 3  | 1  | 18.60  | 18.90  | 18.54  |                        |
| 1.4             | 64QAM | 3  | 3  | 18.55  | 18.82  | 18.59  | 19.8                   |
| 1.4             | 64QAM | 6  | 0  | 18.59  | 18.64  | 18.77  |                        |

| Band 48 (3.5G Band) (dBm) |            |         |           |                       |                    |                    |                     |              |                     |  |
|---------------------------|------------|---------|-----------|-----------------------|--------------------|--------------------|---------------------|--------------|---------------------|--|
| BW [MHz]                  | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Middle-Low Channel | Middle-Low Channel | Middle-High Channel | High Channel | Tune-up limit (dBm) |  |
| Channel                   |            |         |           | 55340                 | 55830              | 55990              | 56150               | 56640        |                     |  |
| Frequency (MHz)           |            |         |           | 3560                  | 3609               | 3625               | 3641                | 3690         |                     |  |
| 20                        | QPSK       | 1       | 0         | 20.11                 | 20.06              | 19.96              | 19.95               | 20.21        | 20.8                |  |
| 20                        | QPSK       | 1       | 49        | 20.07                 | 19.96              | 19.80              | 19.86               | 20.15        |                     |  |
| 20                        | QPSK       | 1       | 99        | 20.00                 | 19.94              | 19.90              | 19.79               | 20.02        |                     |  |
| 20                        | QPSK       | 50      | 0         | 19.08                 | 18.92              | 19.02              | 18.88               | 19.17        | 19.8                |  |
| 20                        | QPSK       | 50      | 24        | 19.06                 | 18.97              | 18.77              | 18.81               | 19.17        |                     |  |
| 20                        | QPSK       | 50      | 50        | 18.98                 | 18.90              | 18.87              | 18.77               | 19.14        |                     |  |
| 20                        | QPSK       | 100     | 0         | 19.06                 | 18.86              | 18.91              | 18.89               | 19.26        | 19.8                |  |
| 20                        | 16QAM      | 1       | 0         | 19.29                 | 19.19              | 19.17              | 19.03               | 19.31        |                     |  |
| 20                        | 16QAM      | 1       | 49        | 19.28                 | 19.13              | 19.12              | 19.09               | 19.30        |                     |  |
| 20                        | 16QAM      | 1       | 99        | 19.21                 | 18.97              | 19.09              | 19.12               | 19.27        | 18.8                |  |
| 20                        | 16QAM      | 50      | 0         | 17.96                 | 17.80              | 18.04              | 17.98               | 18.15        |                     |  |
| 20                        | 16QAM      | 50      | 24        | 17.98                 | 17.89              | 17.94              | 17.89               | 18.11        |                     |  |
| 20                        | 16QAM      | 50      | 50        | 17.92                 | 17.87              | 17.78              | 17.89               | 18.07        | 18.8                |  |
| 20                        | 16QAM      | 100     | 0         | 18.05                 | 17.85              | 17.77              | 17.75               | 18.09        |                     |  |
| 20                        | 64QAM      | 1       | 0         | 17.99                 | 17.96              | 17.86              | 17.93               | 18.18        |                     |  |
| 20                        | 64QAM      | 1       | 49        | 18.04                 | 17.81              | 17.88              | 17.92               | 18.08        | 18.8                |  |
| 20                        | 64QAM      | 1       | 99        | 18.07                 | 17.85              | 17.85              | 17.88               | 18.15        |                     |  |
| 20                        | 64QAM      | 50      | 0         | 16.99                 | 16.83              | 16.88              | 16.85               | 17.05        |                     |  |
| 20                        | 64QAM      | 50      | 24        | 16.99                 | 16.79              | 16.79              | 16.75               | 17.01        | 17.8                |  |
| 20                        | 64QAM      | 50      | 50        | 16.90                 | 16.76              | 16.80              | 16.72               | 17.03        |                     |  |
| 20                        | 64QAM      | 100     | 0         | 16.79                 | 16.73              | 16.83              | 16.81               | 17.00        |                     |  |
| Channel                   |            |         |           | 55315                 | 55820              | 55990              | 56160               | 56665        | Tune-up limit (dBm) |  |
| Frequency (MHz)           |            |         |           | 3557.5                | 3608               | 3625               | 3642                | 3692.5       |                     |  |
| 15                        | QPSK       | 1       | 0         | 20.01                 | 19.93              | 19.81              | 19.88               | 20.18        | 20.8                |  |
| 15                        | QPSK       | 1       | 37        | 20.02                 | 19.98              | 19.75              | 19.76               | 20.15        |                     |  |
| 15                        | QPSK       | 1       | 74        | 19.90                 | 19.86              | 19.76              | 19.75               | 20.02        |                     |  |
| 15                        | QPSK       | 36      | 0         | 19.11                 | 19.04              | 19.07              | 18.87               | 19.14        | 19.8                |  |
| 15                        | QPSK       | 36      | 20        | 19.05                 | 18.94              | 18.87              | 18.79               | 19.13        |                     |  |
| 15                        | QPSK       | 36      | 39        | 18.91                 | 18.82              | 18.80              | 18.75               | 19.07        |                     |  |
| 15                        | QPSK       | 75      | 0         | 19.02                 | 18.83              | 18.93              | 18.80               | 19.17        | 19.8                |  |
| 15                        | 16QAM      | 1       | 0         | 19.15                 | 19.09              | 19.05              | 19.14               | 19.22        |                     |  |
| 15                        | 16QAM      | 1       | 37        | 19.09                 | 19.04              | 19.04              | 18.98               | 19.16        |                     |  |
| 15                        | 16QAM      | 1       | 74        | 19.10                 | 19.03              | 19.05              | 19.06               | 19.09        | 18.8                |  |
| 15                        | 16QAM      | 36      | 0         | 18.06                 | 18.00              | 17.80              | 17.91               | 18.16        |                     |  |
| 15                        | 16QAM      | 36      | 20        | 17.96                 | 17.96              | 17.94              | 17.80               | 18.19        |                     |  |
| 15                        | 16QAM      | 36      | 39        | 17.81                 | 17.89              | 17.81              | 17.82               | 17.97        | 18.8                |  |
| 15                        | 16QAM      | 75      | 0         | 18.03                 | 17.91              | 17.80              | 17.90               | 18.05        |                     |  |
| 15                        | 64QAM      | 1       | 0         | 17.95                 | 17.91              | 18.10              | 17.88               | 18.17        |                     |  |
| 15                        | 64QAM      | 1       | 37        | 18.04                 | 17.89              | 17.84              | 17.79               | 18.16        | 18.8                |  |
| 15                        | 64QAM      | 1       | 74        | 18.08                 | 17.84              | 17.79              | 17.81               | 18.14        |                     |  |
| 15                        | 64QAM      | 36      | 0         | 16.93                 | 16.90              | 16.86              | 16.82               | 17.00        |                     |  |
| 15                        | 64QAM      | 36      | 20        | 16.89                 | 16.76              | 16.95              | 16.74               | 17.03        | 17.8                |  |
| 15                        | 64QAM      | 36      | 39        | 16.95                 | 16.70              | 16.68              | 16.76               | 16.90        |                     |  |
| 15                        | 64QAM      | 75      | 0         | 16.88                 | 16.75              | 16.81              | 16.80               | 16.92        |                     |  |
| Channel                   |            |         |           | 55290                 | 55815              | 55990              | 56165               | 56690        | Tune-up limit (dBm) |  |
| Frequency (MHz)           |            |         |           | 3555                  | 3607.5             | 3625               | 3642.5              | 3695         |                     |  |
| 10                        | QPSK       | 1       | 0         | 19.97                 | 20.03              | 20.00              | 19.92               | 20.17        | 20.8                |  |
| 10                        | QPSK       | 1       | 25        | 19.92                 | 19.98              | 19.74              | 19.83               | 20.05        |                     |  |
| 10                        | QPSK       | 1       | 49        | 19.89                 | 19.82              | 19.79              | 19.81               | 20.02        |                     |  |
| 10                        | QPSK       | 25      | 0         | 19.05                 | 19.09              | 18.95              | 18.82               | 19.12        | 19.8                |  |
| 10                        | QPSK       | 25      | 12        | 19.03                 | 18.77              | 18.82              | 18.81               | 19.11        |                     |  |
| 10                        | QPSK       | 25      | 25        | 18.93                 | 18.94              | 18.79              | 18.76               | 19.01        |                     |  |
| 10                        | QPSK       | 50      | 0         | 18.91                 | 18.86              | 18.87              | 18.84               | 19.09        | 19.8                |  |
| 10                        | 16QAM      | 1       | 0         | 19.21                 | 19.19              | 19.17              | 19.08               | 19.29        |                     |  |
| 10                        | 16QAM      | 1       | 25        | 19.14                 | 19.05              | 19.16              | 19.07               | 19.25        |                     |  |
| 10                        | 16QAM      | 1       | 49        | 19.10                 | 18.94              | 19.11              | 19.03               | 19.17        | 18.8                |  |
| 10                        | 16QAM      | 25      | 0         | 18.04                 | 17.78              | 17.83              | 17.99               | 18.11        |                     |  |
| 10                        | 16QAM      | 25      | 12        | 18.03                 | 17.74              | 17.73              | 17.93               | 18.12        |                     |  |
| 10                        | 16QAM      | 25      | 25        | 17.82                 | 17.76              | 17.79              | 17.76               | 18.01        | 18.8                |  |
| 10                        | 16QAM      | 50      | 0         | 18.03                 | 17.83              | 17.76              | 17.90               | 18.05        |                     |  |
| 10                        | 64QAM      | 1       | 0         | 18.10                 | 17.94              | 18.01              | 17.92               | 18.08        |                     |  |
| 10                        | 64QAM      | 1       | 25        | 18.09                 | 17.80              | 17.91              | 17.98               | 18.06        | 18.8                |  |
| 10                        | 64QAM      | 1       | 49        | 18.03                 | 17.70              | 17.82              | 17.87               | 18.02        |                     |  |
| 10                        | 64QAM      | 25      | 0         | 17.02                 | 16.78              | 16.89              | 16.70               | 17.06        |                     |  |
| 10                        | 64QAM      | 25      | 12        | 16.89                 | 16.72              | 16.91              | 16.76               | 16.93        | 17.8                |  |
| 10                        | 64QAM      | 25      | 25        | 16.74                 | 16.75              | 16.85              | 16.84               | 17.07        |                     |  |
| 10                        | 64QAM      | 50      | 0         | 16.78                 | 16.79              | 16.91              | 16.86               | 16.84        |                     |  |
| Channel                   |            |         |           | 55265                 | 55810              | 55990              | 56170               | 56175        | Tune-up limit (dBm) |  |
| Frequency (MHz)           |            |         |           | 3552.5                | 3607               | 3625               | 3643                | 3697.5       |                     |  |
| 5                         | QPSK       | 1       | 0         | 20.05                 | 19.90              | 20.02              | 19.94               | 20.15        | 20.8                |  |
| 5                         | QPSK       | 1       | 12        | 20.04                 | 19.96              | 19.75              | 19.72               | 20.13        |                     |  |
| 5                         | QPSK       | 1       | 24        | 20.00                 | 19.88              | 19.77              | 19.78               | 20.09        |                     |  |
| 5                         | QPSK       | 12      | 0         | 19.05                 | 19.02              | 18.92              | 18.79               | 19.12        | 19.8                |  |
| 5                         | QPSK       | 12      | 7         | 19.01                 | 18.98              | 18.94              | 18.80               | 19.11        |                     |  |
| 5                         | QPSK       | 12      | 13        | 18.85                 | 18.90              | 18.79              | 18.84               | 19.08        |                     |  |
| 5                         | QPSK       | 25      | 0         | 19.04                 | 18.86              | 18.80              | 18.85               | 19.06        | 19.8                |  |
| 5                         | 16QAM      | 1       | 0         | 19.16                 | 19.13              | 19.08              | 19.06               | 19.17        |                     |  |
| 5                         | 16QAM      | 1       | 12        | 19.14                 | 19.11              | 19.08              | 19.08               | 19.09        |                     |  |
| 5                         | 16QAM      | 1       | 24        | 19.05                 | 19.06              | 19.01              | 19.02               | 19.12        | 18.8                |  |
| 5                         | 16QAM      | 12      | 0         | 18.04                 | 17.79              | 17.94              | 17.91               | 18.06        |                     |  |
| 5                         | 16QAM      | 12      | 7         | 17.92                 | 17.96              | 17.73              | 17.99               | 18.05        |                     |  |
| 5                         | 16QAM      | 12      | 13        | 17.96                 | 17.77              | 17.71              | 17.80               | 18.02        | 18.8                |  |
| 5                         | 16QAM      | 25      | 0         | 17.91                 | 17.72              | 17.83              | 17.89               | 18.01        |                     |  |
| 5                         | 64QAM      | 1       | 0         | 18.09                 | 17.98              | 18.01              | 17.98               | 18.19        |                     |  |
| 5                         | 64QAM      | 1       | 12        | 18.04                 | 17.88              | 17.96              | 17.85               | 18.14        | 18.8                |  |
| 5                         | 64QAM      | 1       | 24        | 17.96                 | 17.86              | 17.95              | 17.79               | 18.13        |                     |  |
| 5                         | 64QAM      | 12      | 0         | 16.93                 | 16.80              | 16.79              | 16.86               | 17.14        |                     |  |
| 5                         | 64QAM      | 12      | 7         | 16.87                 | 16.85              | 16.91              | 16.79               | 17.05        | 17.8                |  |
| 5                         | 64QAM      | 12      | 13        | 16.82                 | 16.76              | 16.80              | 16.77               | 16.99        |                     |  |
| 5                         | 64QAM      | 25      | 0         | 16.98                 | 16.89              | 16.80              | 16.81               | 17.09        |                     |  |

| n2 (PC3)_ANT 4  |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 372000      | 376000         | 380000       | 20.00               |
| Frequency (MHz) |                      |        |          | 1860        | 1880           | 1900         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 18.87       | 18.83          | 18.53        | 20.00               |
| 20              |                      | 1      | 53       | 18.93       | 18.62          | 18.57        |                     |
| 20              |                      | 1      | 104      | 18.66       | 18.54          | 18.51        |                     |
| 20              |                      | 50     | 1        | 19.08       | 18.80          | 18.64        | 20.00               |
| 20              |                      | 50     | 25       | 19.02       | 18.80          | 18.63        |                     |
| 20              |                      | 50     | 50       | 18.98       | 18.77          | 18.67        |                     |
| 20              |                      | 100    | 0        | 18.98       | 18.80          | 18.61        | 20.00               |
| 20              |                      | 1      | 1        | 19.07       | 19.13          | 19.02        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 53       | 18.92       | 18.72          | 18.95        | 20.00               |
| 20              |                      | 1      | 104      | 18.76       | 18.67          | 18.63        |                     |
| 20              |                      | 50     | 1        | 19.05       | 19.08          | 19.07        |                     |
| 20              |                      | 50     | 25       | 19.03       | 18.69          | 18.68        | 20.00               |
| 20              |                      | 50     | 50       | 18.95       | 18.69          | 18.74        |                     |
| 20              |                      | 100    | 0        | 19.01       | 18.79          | 18.63        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 19.11       | 18.97          | 18.71        | 19.50               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 17.58       | 17.50          | 17.22        | 18.00               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 15.20       | 15.16          | 14.90        | 15.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 18.48       | 18.39          | 18.15        | 19.00               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 17.98       | 17.95          | 17.68        | 18.50               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 16.64       | 16.56          | 16.25        | 17.00               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 13.31       | 13.23          | 12.90        | 13.50               |
| Channel         |                      |        |          | 371500      | 376000         | 380500       | 20.00               |
| Frequency (MHz) |                      |        |          | 1857.5      | 1880           | 1902.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 19.09       | 18.83          | 18.59        | 19.50               |
| Channel         |                      |        |          | 371000      | 376000         | 381000       | 20.00               |
| Frequency (MHz) |                      |        |          | 1855        | 1880           | 1905         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 19.08       | 18.81          | 18.70        | 19.50               |
| Channel         |                      |        |          | 370500      | 376000         | 381500       | 20.00               |
| Frequency (MHz) |                      |        |          | 1852.5      | 1880           | 1907.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 19.06       | 18.63          | 18.59        | 19.50               |

## n5 (PC3)\_ANT 1

| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| Channel         |                      |        |          | 166800      | 167300         | 167800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 834         | 836.5          | 839          |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 18.11       | 18.17          | 18.17        | 19.00               |
| 20              |                      | 1      | 53       | 18.03       | 18.01          | 18.05        |                     |
| 20              |                      | 1      | 104      | 17.77       | 17.71          | 17.79        |                     |
| 20              |                      | 50     | 1        | 18.22       | 18.21          | 18.22        | 19.00               |
| 20              |                      | 50     | 25       | 18.12       | 18.16          | 18.09        |                     |
| 20              |                      | 50     | 50       | 18.12       | 18.01          | 17.99        |                     |
| 20              |                      | 100    | 0        | 18.20       | 18.12          | 18.04        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 18.27       | 18.32          | 18.31        | 19.00               |
| 20              |                      | 1      | 53       | 18.10       | 18.10          | 18.18        |                     |
| 20              |                      | 1      | 104      | 17.85       | 17.74          | 17.82        |                     |
| 20              |                      | 50     | 1        | 18.21       | 18.23          | 18.14        | 19.00               |
| 20              |                      | 50     | 25       | 18.15       | 18.15          | 18.06        |                     |
| 20              |                      | 50     | 50       | 18.00       | 18.04          | 17.81        |                     |
| 20              |                      | 100    | 0        | 18.19       | 18.17          | 18.01        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 18.22       | 18.26          | 18.25        | 18.00               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 16.64       | 16.83          | 16.86        | 16.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 14.48       | 14.57          | 14.50        | 14.50               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 17.71       | 17.81          | 17.61        | 17.50               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 17.30       | 17.32          | 17.27        | 17.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 15.77       | 15.92          | 15.82        | 15.50               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 12.51       | 12.61          | 12.60        | 12.50               |
| Channel         |                      |        |          | 166300      | 167300         | 168300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 831.5       | 836.5          | 841.5        |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 18.25       | 18.29          | 18.07        | 18.00               |
| Channel         |                      |        |          | 165800      | 167300         | 168800       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 829         | 836.5          | 844          |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 18.03       | 17.85          | 17.98        | 17.50               |
| Channel         |                      |        |          | 165300      | 167300         | 169300       | Tune-up limit (dBm) |
| Frequency (MHz) |                      |        |          | 826.5       | 836.5          | 846.5        |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 18.09       | 18.02          | 17.78        | 17.50               |

| n66 (PC3)_ANT 4 |                      |        |          |             |                |              |                     |
|-----------------|----------------------|--------|----------|-------------|----------------|--------------|---------------------|
| BW [MHz]        | Modulation           | RB num | RB start | Low Channel | Middle Channel | High Channel | Tune-up limit (dBm) |
| Channel         |                      |        |          | 344000      | 349000         | 354000       |                     |
| Frequency (MHz) |                      |        |          | 1720        | 1745           | 1770         |                     |
| 20              | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 18.31       | 18.15          | 18.07        | 19                  |
| 20              |                      | 1      | 53       | 18.23       | 18.10          | 18.01        |                     |
| 20              |                      | 1      | 104      | 18.13       | 18.16          | 18.03        |                     |
| 20              |                      | 50     | 1        | 18.38       | 18.21          | 18.16        | 19                  |
| 20              |                      | 50     | 25       | 18.37       | 18.16          | 18.11        |                     |
| 20              |                      | 50     | 50       | 18.29       | 18.17          | 18.10        |                     |
| 20              |                      | 100    | 0        | 18.33       | 18.18          | 18.15        |                     |
| 20              | DFT-s-OFDM QPSK      | 1      | 1        | 18.38       | 18.40          | 18.36        | 19                  |
| 20              |                      | 1      | 53       | 18.31       | 18.09          | 17.99        |                     |
| 20              |                      | 1      | 104      | 18.16       | 18.14          | 18.02        |                     |
| 20              |                      | 50     | 1        | 18.30       | 18.34          | 18.29        | 19                  |
| 20              |                      | 50     | 25       | 18.28       | 18.24          | 18.09        |                     |
| 20              |                      | 50     | 50       | 18.26       | 18.18          | 18.06        |                     |
| 20              |                      | 100    | 0        | 18.32       | 18.24          | 18.06        |                     |
| 20              | DFT-s-OFDM 16QAM     | 1      | 1        | 18.31       | 18.26          | 18.16        | 19.00               |
| 20              | DFT-s-OFDM 64QAM     | 1      | 1        | 16.96       | 16.74          | 16.67        | 17.50               |
| 20              | DFT-s-OFDM 256QAM    | 1      | 1        | 14.59       | 14.40          | 14.31        | 15.00               |
| 20              | CP-OFDM QPSK         | 1      | 1        | 17.97       | 17.79          | 17.69        | 18.50               |
| 20              | CP-OFDM 16QAM        | 1      | 1        | 17.51       | 17.20          | 17.17        | 18.00               |
| 20              | CP-OFDM 64QAM        | 1      | 1        | 16.06       | 15.85          | 15.78        | 16.50               |
| 20              | CP-OFDM 256QAM       | 1      | 1        | 12.59       | 12.42          | 12.29        | 13.00               |
| Channel         |                      |        |          | 343500      | 349000         | 354500       | Tune-up limit       |
| Frequency (MHz) |                      |        |          | 1717.5      | 1745           | 1772.5       |                     |
| 15              | DFT-s-OFDM QPSK      | 1      | 1        | 18.46       | 18.34          | 18.26        | 19.00               |
| Channel         |                      |        |          | 343000      | 349000         | 355000       | Tune-up limit       |
| Frequency (MHz) |                      |        |          | 1715        | 1745           | 1775         |                     |
| 10              | DFT-s-OFDM QPSK      | 1      | 1        | 18.28       | 18.15          | 18.07        | 19.00               |
| Channel         |                      |        |          | 342500      | 349000         | 355500       | Tune-up limit       |
| Frequency (MHz) |                      |        |          | 1712.5      | 1745           | 1777.5       |                     |
| 5               | DFT-s-OFDM QPSK      | 1      | 1        | 18.33       | 18.19          | 18.23        | 19.00               |

| n77(3450-3550MHz) (PC2)_ANT 6 |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                      | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                       |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)               |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                           | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 17.82          |                     |              | 18.5                |
| 100                           |                      | 1      | 136      |             |                    | 17.17          |                     |              |                     |
| 100                           |                      | 1      | 271      |             |                    | 16.95          |                     |              |                     |
| 100                           |                      | 135    | 1        |             |                    | 17.22          |                     |              |                     |
| 100                           | DFT-s-OFDM QPSK      | 135    | 67       |             |                    | 17.51          |                     |              | 18.5                |
| 100                           |                      | 135    | 136      |             |                    | 16.49          |                     |              |                     |
| 100                           |                      | 270    | 0        |             |                    | 16.95          |                     |              |                     |
| 100                           |                      | 1      | 1        |             |                    | 17.93          |                     |              |                     |
| 100                           | DFT-s-OFDM 16QAM     | 1      | 136      |             |                    | 17.45          |                     |              | 18.5                |
| 100                           |                      | 1      | 271      |             |                    | 16.89          |                     |              |                     |
| 100                           |                      | 135    | 1        |             |                    | 17.51          |                     |              |                     |
| 100                           |                      | 135    | 67       |             |                    | 17.49          |                     |              |                     |
| 100                           | DFT-s-OFDM 64QAM     | 135    | 136      |             |                    | 16.96          |                     |              | 18                  |
| 100                           |                      | 270    | 0        |             |                    | 17.42          |                     |              |                     |
| 100                           |                      | 1      | 1        |             |                    | 16.83          |                     |              |                     |
| 100                           |                      | 1      | 1        |             |                    | 15.47          |                     |              |                     |
| 100                           | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 13.28          |                     |              | 14.00               |
| 100                           | CP-OFDM QPSK         | 1      | 1        |             |                    | 16.42          |                     |              | 17.00               |
| 100                           | CP-OFDM 16QAM        | 1      | 1        |             |                    | 15.91          |                     |              | 16.50               |
| 100                           | CP-OFDM 64QAM        | 1      | 1        |             |                    | 14.03          |                     |              | 15.00               |
| 100                           | CP-OFDM 256QAM       | 1      | 1        |             |                    | 11.29          |                     |              | 12.00               |
| Channel                       |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3490.02     | 3495               | 3500.01        | 3504.99             | 3510         | (dBm)               |
| 80                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.83       | 17.84              | 17.82          | 17.68               | 17.59        | 18.50               |
| Channel                       |                      |        |          | 632000      | 632668             | 633334         | 634000              | 634666       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3480        | 3490.02            | 3500.01        | 3510                | 3519.99      | (dBm)               |
| 60                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.03       | 17.85              | 17.62          | 17.48               | 17.54        | 18.50               |
| Channel                       |                      |        |          | 631334      | 632334             | 633334         | 634332              | 635332       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3514.98             | 3529.98      | (dBm)               |
| 40                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.89       | 17.83              | 17.86          | 17.82               | 17.69        | 18.50               |
| Channel                       |                      |        |          | 631000      | 632168             | 633334         | 634500              | 635666       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3465        | 3482.52            | 3500.01        | 3517.5              | 3534.99      | (dBm)               |
| 30                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.84       | 17.85              | 17.80          | 17.81               | 17.45        | 18.50               |
| Channel                       |                      |        |          | 630668      | 632000             | 633334         | 634666              | 636000       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3460.02     | 3480               | 3500.01        | 3519.99             | 3540         | (dBm)               |
| 20                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.81       | 17.84              | 17.75          | 17.59               | 17.19        | 18.50               |

| n77(3700-3980MHz) (PC2)_ANT 6 |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                      | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                       |                      |        |          | 650000      | 653000             | 656000         | 659000              | 662000       | 18.00               |
| Frequency (MHz)               |                      |        |          | 3750        | 3795               | 3840           | 3885                | 3930         |                     |
| 100                           | DFT-s-OFDM PI/2 BPSK | 1      | 1        | 14.58       | 16.18              | 16.30          | 16.19               | 15.25        | 18.00               |
| 100                           |                      | 1      | 136      | 16.27       | 16.41              | 16.18          | 15.21               | 16.15        |                     |
| 100                           |                      | 1      | 271      | 16.07       | 16.09              | 15.18          | 15.06               | 14.95        |                     |
| 100                           |                      | 135    | 1        | 15.52       | 16.05              | 15.80          | 15.04               | 15.26        | 18.00               |
| 100                           |                      | 135    | 67       | 16.37       | 16.42              | 16.20          | 15.23               | 14.21        |                     |
| 100                           |                      | 135    | 136      | 15.52       | 15.76              | 14.88          | 14.00               | 13.59        |                     |
| 100                           |                      | 270    | 0        | 15.51       | 15.99              | 15.67          | 14.76               | 15.18        |                     |
| 100                           | DFT-s-OFDM QPSK      | 1      | 1        | 17.02       | 17.15              | 17.17          | 17.07               | 17.12        | 18.00               |
| 100                           |                      | 1      | 136      | 16.63       | 16.39              | 16.21          | 15.22               | 14.02        |                     |
| 100                           |                      | 1      | 271      | 16.08       | 16.05              | 15.20          | 14.04               | 13.91        |                     |
| 100                           |                      | 135    | 1        | 16.04       | 16.13              | 16.37          | 16.25               | 16.29        | 17.00               |
| 100                           |                      | 135    | 67       | 15.75       | 15.18              | 16.16          | 15.25               | 14.19        |                     |
| 100                           |                      | 135    | 136      | 15.04       | 15.25              | 14.38          | 13.53               | 13.72        |                     |
| 100                           |                      | 270    | 0        | 15.94       | 15.51              | 15.19          | 14.26               | 13.84        |                     |
| 100                           | DFT-s-OFDM 16QAM     | 1      | 1        | 15.43       | 16.06              | 14.93          | 15.08               | 14.16        | 16.00               |
| 100                           | DFT-s-OFDM 64QAM     | 1      | 1        | 15.30       | 14.81              | 13.84          | 13.90               | 12.85        | 14.50               |
| 100                           | DFT-s-OFDM 256QAM    | 1      | 1        | 9.87        | 12.44              | 11.65          | 11.51               | 10.55        | 12.50               |
| 100                           | CP-OFDM QPSK         | 1      | 1        | 13.07       | 15.65              | 14.82          | 14.71               | 13.75        | 15.50               |
| 100                           | CP-OFDM 16QAM        | 1      | 1        | 12.57       | 12.72              | 14.39          | 14.24               | 13.27        | 15.00               |
| 100                           | CP-OFDM 64QAM        | 1      | 1        | 10.67       | 13.34              | 12.39          | 12.35               | 11.35        | 13.00               |
| 100                           | CP-OFDM 256QAM       | 1      | 1        | 8.89        | 10.50              | 9.56           | 9.54                | 8.58         | 10.50               |
| Channel                       |                      |        |          | 649334      | 652668             | 656000         | 659332              | 662666       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3740.01     | 3790.02            | 3840           | 3889.98             | 3939.99      |                     |
| 80                            | DFT-s-OFDM QPSK      | 1      | 1        | 14.55       | 17.02              | 16.41          | 15.84               | 14.72        | 17.50               |
| Channel                       |                      |        |          | 648668      | 652334             | 656000         | 659666              | 663332       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3730.02     | 3785.01            | 3840           | 3894.99             | 3949.98      |                     |
| 60                            | DFT-s-OFDM QPSK      | 1      | 1        | 14.59       | 16.84              | 16.36          | 15.35               | 14.07        | 17.50               |
| Channel                       |                      |        |          | 648000      | 652000             | 656000         | 660000              | 664000       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3720        | 3780               | 3840           | 3900                | 3960         |                     |
| 40                            | DFT-s-OFDM QPSK      | 1      | 1        | 15.00       | 17.00              | 16.57          | 15.63               | 13.44        | 17.50               |
| Channel                       |                      |        |          | 647668      | 651834             | 656000         | 660166              | 664332       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3715.02     | 3777.51            | 3840           | 3902.49             | 3964.98      |                     |
| 30                            | DFT-s-OFDM QPSK      | 1      | 1        | 14.92       | 16.79              | 16.45          | 15.29               | 13.48        | 17.50               |
| Channel                       |                      |        |          | 647334      | 651668             | 656000         | 660332              | 664666       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3710.01     | 3775.02            | 3840           | 3904.98             | 3969.99      |                     |
| 20                            | DFT-s-OFDM QPSK      | 1      | 1        | 14.84       | 16.75              | 16.49          | 15.14               | 13.86        | 17.50               |

| n78(3450-3550MHz) (PC2)_ANT 6 |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                      | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                       |                      |        |          |             |                    | 633334         |                     |              |                     |
| Frequency (MHz)               |                      |        |          |             |                    | 3500.01        |                     |              |                     |
| 100                           | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 17.99          |                     |              | 19.00               |
| 100                           |                      | 1      | 136      |             |                    | 16.84          |                     |              |                     |
| 100                           |                      | 1      | 271      |             |                    | 16.15          |                     |              |                     |
| 100                           |                      | 135    | 1        |             |                    | 16.85          |                     |              |                     |
| 100                           |                      | 135    | 67       |             |                    | 17.05          |                     |              | 18.00               |
| 100                           |                      | 135    | 136      |             |                    | 15.74          |                     |              |                     |
| 100                           |                      | 270    | 0        |             |                    | 16.45          |                     |              |                     |
| 100                           |                      |        |          |             |                    |                |                     |              |                     |
| 100                           | DFT-s-OFDM QPSK      | 1      | 1        |             |                    | 18.02          |                     |              | 19.00               |
| 100                           |                      | 1      | 136      |             |                    | 16.89          |                     |              |                     |
| 100                           |                      | 1      | 271      |             |                    | 16.12          |                     |              |                     |
| 100                           |                      | 135    | 1        |             |                    | 17.03          |                     |              |                     |
| 100                           |                      | 135    | 67       |             |                    | 16.88          |                     |              | 18.00               |
| 100                           |                      | 135    | 136      |             |                    | 16.28          |                     |              |                     |
| 100                           |                      | 270    | 0        |             |                    | 16.93          |                     |              |                     |
| 100                           |                      |        |          |             |                    |                |                     |              |                     |
| 100                           | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 16.82          |                     |              | 17.50               |
| 100                           | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 15.50          |                     |              | 16.50               |
| 100                           | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 13.37          |                     |              | 14.00               |
| 100                           | CP-OFDM QPSK         | 1      | 1        |             |                    | 16.29          |                     |              | 17.00               |
| 100                           | CP-OFDM 16QAM        | 1      | 1        |             |                    | 15.83          |                     |              | 16.50               |
| 100                           | CP-OFDM 64QAM        | 1      | 1        |             |                    | 14.19          |                     |              | 15.00               |
| 100                           | CP-OFDM 256QAM       | 1      | 1        |             |                    | 11.30          |                     |              | 12.00               |
| Channel                       |                      |        |          | 633000      | 633166             | 633334         | 633500              | 633666       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3495        | 3497.49            | 3500.01        | 3502.5              | 3504.99      | (dBm)               |
| 90                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.98       | 17.94              | 17.81          | 17.70               | 17.66        | 19.50               |
| Channel                       |                      |        |          | 632668      | 633000             | 633334         | 633666              | 634000       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3490.02     | 3450               | 3500.01        | 3504.99             | 3510         | (dBm)               |
| 80                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.98       | 17.90              | 17.75          | 17.62               | 17.38        | 18.50               |
| Channel                       |                      |        |          | 632334      | 632634             | 633334         | 633832              | 634332       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3485.01     | 3492.51            | 3500.01        | 3507.48             | 3514.98      | (dBm)               |
| 70                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.99       | 17.85              | 17.63          | 17.37               | 17.15        | 18.50               |
| Channel                       |                      |        |          | 632000      | 632666             | 633334         | 634000              | 634666       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3480        | 3489.99            | 3500.01        | 3510                | 3519.99      | (dBm)               |
| 60                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.94       | 17.73              | 17.48          | 17.16               | 17.12        | 18.00               |
| Channel                       |                      |        |          | 631668      | 632500             | 633334         | 634166              | 635000       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3475.02     | 3487.5             | 3500.01        | 3512.49             | 3525         | (dBm)               |
| 50                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.93       | 17.64              | 17.26          | 17.08               | 16.99        | 18.00               |
| Channel                       |                      |        |          | 631334      | 636672             | 633334         | 634334              | 635332       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3470.01     | 3485.01            | 3500.01        | 3515.01             | 3529.98      | (dBm)               |
| 40                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.99       | 17.10              | 17.43          | 17.30               | 17.04        | 18.00               |
| Channel                       |                      |        |          | 631000      | 632166             | 633334         | 634500              | 635666       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3465        | 3482.49            | 3500.01        | 3517.5              | 3534.99      | (dBm)               |
| 30                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.96       | 17.68              | 17.32          | 17.09               | 16.63        | 18.00               |
| Channel                       |                      |        |          | 630668      | 632000             | 633334         | 634668              | 636000       | Tune-up limit       |
| Frequency (MHz)               |                      |        |          | 3460.02     | 3480               | 3500.01        | 3520.02             | 3540         | (dBm)               |
| 20                            | DFT-s-OFDM QPSK      | 1      | 1        | 17.90       | 17.59              | 17.30          | 16.89               | 16.40        | 18.00               |

| n78(3700-3800MHz) (PC2)_ANT 6 |                      |        |          |             |                    |                |                     |              |                     |
|-------------------------------|----------------------|--------|----------|-------------|--------------------|----------------|---------------------|--------------|---------------------|
| BW [MHz]                      | Modulation           | RB num | RB start | Low Channel | Low/Middle Channel | Middle Channel | Middle/High Channel | High Channel | Tune-up limit (dBm) |
| Channel                       |                      |        |          |             |                    | 650000         |                     |              | 18.00               |
| Frequency (MHz)               |                      |        |          |             |                    | 3750           |                     |              |                     |
| 100                           | DFT-s-OFDM PI/2 BPSK | 1      | 1        |             |                    | 16.01          |                     |              | 18.00               |
| 100                           |                      | 1      | 136      |             |                    | 17.21          |                     |              |                     |
| 100                           |                      | 1      | 271      |             |                    | 17.10          |                     |              |                     |
| 100                           |                      | 135    | 1        |             |                    | 16.60          |                     |              |                     |
| 100                           |                      | 135    | 67       |             |                    | 17.18          |                     |              |                     |
| 100                           |                      | 135    | 136      |             |                    | 16.38          |                     |              |                     |
| 100                           |                      | 270    | 0        |             |                    | 16.50          |                     |              |                     |
| 100                           | DFT-s-OFDM QPSK      | 1      | 1        |             |                    | 17.23          |                     |              | 18.00               |
| 100                           |                      | 1      | 136      |             |                    | 16.39          |                     |              |                     |
| 100                           |                      | 1      | 271      |             |                    | 16.59          |                     |              |                     |
| 100                           |                      | 135    | 1        |             |                    | 17.11          |                     |              |                     |
| 100                           |                      | 135    | 67       |             |                    | 16.99          |                     |              |                     |
| 100                           |                      | 135    | 136      |             |                    | 16.87          |                     |              |                     |
| 100                           |                      | 270    | 0        |             |                    | 16.91          |                     |              |                     |
| 100                           | DFT-s-OFDM 16QAM     | 1      | 1        |             |                    | 14.88          |                     |              | 15.50               |
| 100                           | DFT-s-OFDM 64QAM     | 1      | 1        |             |                    | 13.57          |                     |              | 14.50               |
| 100                           | DFT-s-OFDM 256QAM    | 1      | 1        |             |                    | 11.28          |                     |              | 12.00               |
| 100                           | CP-OFDM QPSK         | 1      | 1        |             |                    | 14.48          |                     |              | 15.00               |
| 100                           | CP-OFDM 16QAM        | 1      | 1        |             |                    | 14.12          |                     |              | 15.00               |
| 100                           | CP-OFDM 64QAM        | 1      | 1        |             |                    | 12.19          |                     |              | 13.00               |
| 100                           | CP-OFDM 256QAM       | 1      | 1        |             |                    | 9.31           |                     |              | 10.00               |
| Channel                       |                      |        |          | 649668      | 649834             | 650000         | 650166              | 650332       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3745.02     | 3747.51            | 3750           | 3752.49             | 3754.98      |                     |
| 90                            | DFT-s-OFDM QPSK      | 1      | 1        | 15.97       | 16.01              | 16.15          | 16.23               | 16.42        | 17.00               |
| Channel                       |                      |        |          | 649334      | 649666             | 650000         | 650334              | 650666       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3740.01     | 3744.99            | 3750           | 3755.01             | 3759.99      |                     |
| 80                            | DFT-s-OFDM QPSK      | 1      | 1        | 16.02       | 16.24              | 16.45          | 16.64               | 16.93        | 17.50               |
| Channel                       |                      |        |          | 649000      | 649500             | 650000         | 650500              | 651000       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3735        | 3742.5             | 3750           | 3757.5              | 3765         |                     |
| 70                            | DFT-s-OFDM QPSK      | 1      | 1        | 16.03       | 16.36              | 16.68          | 17.05               | 17.18        | 18.00               |
| Channel                       |                      |        |          | 648668      | 649334             | 650000         | 650666              | 651332       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3730.02     | 3740.01            | 3750           | 3759.99             | 3769.98      |                     |
| 60                            | DFT-s-OFDM QPSK      | 1      | 1        | 15.92       | 16.39              | 16.93          | 17.12               | 17.08        | 18.00               |
| Channel                       |                      |        |          | 648334      | 649166             | 650000         | 650834              | 651666       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3725.01     | 3737.49            | 3750           | 3762.51             | 3774.99      |                     |
| 50                            | DFT-s-OFDM QPSK      | 1      | 1        | 16.09       | 16.65              | 17.17          | 17.16               | 17.18        | 18.00               |
| Channel                       |                      |        |          | 648000      | 649000             | 650000         | 651000              | 652000       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3720        | 3735               | 3750           | 3765                | 3780         |                     |
| 40                            | DFT-s-OFDM QPSK      | 1      | 1        | 16.30       | 17.07              | 17.13          | 17.13               | 17.39        | 18.00               |
| Channel                       |                      |        |          | 647668      | 648834             | 650000         | 651166              | 652332       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3715.02     | 3732.51            | 3750           | 3767.49             | 3784.98      |                     |
| 30                            | DFT-s-OFDM QPSK      | 1      | 1        | 16.18       | 17.06              | 17.17          | 17.09               | 17.01        | 18.00               |
| Channel                       |                      |        |          | 647334      | 648666             | 650000         | 651334              | 652666       | Tune-up limit (dBm) |
| Frequency (MHz)               |                      |        |          | 3710.01     | 3729.99            | 3750           | 3770.01             | 3789.99      |                     |
| 20                            | DFT-s-OFDM QPSK      | 1      | 1        | 16.16       | 17.10              | 17.16          | 17.16               | 17.04        | 18.00               |

| CA_5B                              |                    |             |            |         |           |         |           |               |                      |                     |                    |
|------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:10MHz+10MHz(50RB+50RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                        | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                    |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 20450                              | 20450              | 20549       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.33               | 20.30              |
| 20525                              | 20476              | 20575       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.36               | 20.30              |
| 20600                              | 20501              | 20600       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.25               | 20.30              |
| 20450                              | 20450              | 20549       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.58               | 19.30              |
| 20525                              | 20476              | 20575       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.53               | 19.30              |
| 20600                              | 20501              | 20600       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.51               | 19.30              |
| 20450                              | 20450              | 20549       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.48               | 18.30              |
| 20525                              | 20476              | 20575       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.53               | 18.30              |
| 20600                              | 20501              | 20600       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.50               | 18.30              |
| 20450                              | 20450              | 20549       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.71               | 15.30              |
| 20525                              | 20476              | 20575       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.75               | 15.30              |
| 20600                              | 20501              | 20600       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.69               | 15.30              |
| 20450                              | 20450              | 20549       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 18.35               | 19.30              |
| 20525                              | 20476              | 20575       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 18.36               | 19.30              |
| 20600                              | 20501              | 20600       | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 18.31               | 19.30              |

| CA_48C                               |                    |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 55340                                | 55340              | 55538       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.80               | 20.80              |
| 55990                                | 55891              | 56089       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.65               | 20.80              |
| 56640                                | 56442              | 56640       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.88               | 20.80              |
| 55340                                | 55340              | 55538       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.13               | 19.80              |
| 55990                                | 55891              | 56089       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.02               | 19.80              |
| 56640                                | 56442              | 56640       | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.28               | 19.80              |
| 55340                                | 55340              | 55538       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.25               | 18.80              |
| 55990                                | 55891              | 56089       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.15               | 18.80              |
| 56640                                | 56442              | 56640       | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.21               | 18.80              |
| 55340                                | 55340              | 55538       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 15.18               | 15.80              |
| 55990                                | 55891              | 56089       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 15.05               | 15.80              |
| 56640                                | 56442              | 56640       | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 15.15               | 15.80              |
| 55340                                | 55340              | 55538       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 18.76               | 19.80              |
| 55990                                | 55891              | 56089       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 18.65               | 19.80              |
| 56640                                | 56442              | 56640       | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 18.70               | 19.80              |

| CA_66B                             |                    |             |            |         |           |         |           |               |                      |                     |                    |
|------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:10MHz+10MHz(50RB+50RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                        | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                    |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 132072                             | 132022             | 132121      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.68               | 20.80              |
| 132322                             | 132373             | 132472      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.75               | 20.80              |
| 132572                             | 132523             | 132622      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.71               | 20.80              |
| 132072                             | 132022             | 132121      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.89               | 19.80              |
| 132322                             | 132373             | 132472      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.12               | 19.80              |
| 132572                             | 132523             | 132622      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.14               | 19.80              |
| 132072                             | 132022             | 132121      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.92               | 18.80              |
| 132322                             | 132373             | 132472      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.94               | 18.80              |
| 132572                             | 132523             | 132622      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.12               | 18.80              |
| 132072                             | 132022             | 132121      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.79               | 15.80              |
| 132322                             | 132373             | 132472      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 15.01               | 15.80              |
| 132572                             | 132523             | 132622      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.95               | 15.80              |
| 132072                             | 132022             | 132121      | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 18.71               | 19.80              |
| 132322                             | 132373             | 132472      | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 18.88               | 19.80              |
| 132572                             | 132523             | 132622      | QPSK       | 25      | 0         | 0       | 0         | 1             | 0                    | 18.84               | 19.80              |

| CA_66C                               |                    |             |            |         |           |         |           |               |                      |                     |                    |
|--------------------------------------|--------------------|-------------|------------|---------|-----------|---------|-----------|---------------|----------------------|---------------------|--------------------|
| Combination:20MHz+20MHz(100RB+100RB) |                    |             |            |         |           |         |           |               |                      |                     |                    |
| PCC Channel                          | PCC Channel (3GPP) | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level(dB) | Measured Power(dBm) | Tune-up limit(dBm) |
|                                      |                    |             |            | RB Size | RB Offset | RB Size | RB Offset |               |                      |                     |                    |
| 132072                               | 132072             | 132270      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.66               | 20.80              |
| 132322                               | 132323             | 132521      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.74               | 20.80              |
| 132572                               | 132374             | 132572      | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                    | 19.70               | 20.80              |
| 132072                               | 132072             | 132270      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 19.00               | 19.80              |
| 132322                               | 132323             | 132521      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.95               | 19.80              |
| 132572                               | 132374             | 132572      | 16QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 18.96               | 19.80              |
| 132072                               | 132072             | 132270      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.77               | 18.80              |
| 132322                               | 132323             | 132521      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.94               | 18.80              |
| 132572                               | 132374             | 132572      | 64QAM      | 1       | 0         | 0       | 0         | 1             | 0                    | 17.88               | 18.80              |
| 132072                               | 132072             | 132270      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.53               | 15.80              |
| 132322                               | 132323             | 132521      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.86               | 15.80              |
| 132572                               | 132374             | 132572      | 256QAM     | 1       | 0         | 0       | 0         | 1             | 0                    | 14.79               | 15.80              |
| 132072                               | 132072             | 132270      | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 18.73               | 19.80              |
| 132322                               | 132323             | 132521      | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 18.83               | 19.80              |
| 132572                               | 132374             | 132572      | QPSK       | 50      | 0         | 0       | 0         | 1             | 0                    | 18.86               | 19.80              |

### 2.4GHz WLAN ANT 8

|                   | Mode              | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|-------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
| 2.4GHz WLAN ANT 8 | 802.11b 1Mbps     | CH 1    | 2412            | 17.25               | 18.00         | 16.50         | 98.77        |
|                   |                   | CH 6    | 2437            | 16.65               | 17.50         |               |              |
|                   |                   | CH 11   | 2462            | 17.31               | 18.00         |               |              |
|                   | 802.11g 6Mbps     | CH 1    | 2412            | 15.51               | 16.50         | 15.50         | 98.26        |
|                   |                   | CH 6    | 2437            | 15.30               | 16.50         |               |              |
|                   |                   | CH 11   | 2462            | 15.55               | 16.50         |               |              |
|                   | 802.11n-HT20 MCS0 | CH 1    | 2412            | 15.42               | 16.50         | 15.50         | 98.13        |
|                   |                   | CH 6    | 2437            | 15.08               | 16.00         |               |              |
|                   |                   | CH 11   | 2462            | 15.48               | 16.50         |               |              |
|                   | 802.11n-HT40 MCS0 | CH 3    | 2422            | 15.83               | 16.50         | 15.50         | 94.90        |
|                   |                   | CH 6    | 2437            | 15.79               | 16.50         |               |              |
|                   |                   | CH 9    | 2452            | 16.25               | 17.00         |               |              |

### 5GHz WLAN ANT 8

|                   | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
| 5.2GHz WLAN ANT 8 | 802.11a 6Mbps       | CH 36   | 5180            | 15.61               | 16.50         | 16.00         | 98.26        |
|                   |                     | CH 44   | 5220            | 15.64               | 16.50         |               |              |
|                   |                     | CH 48   | 5240            | 15.44               | 16.50         |               |              |
|                   | 802.11n-HT20 MCS0   | CH 36   | 5180            | 14.94               | 16.00         | 15.50         | 98.13        |
|                   |                     | CH 44   | 5220            | 15.04               | 16.00         |               |              |
|                   |                     | CH 48   | 5240            | 14.76               | 15.50         |               |              |
|                   | 802.11n-HT40 MCS0   | CH 38   | 5190            | 15.56               | 16.50         | 15.50         | 96.47        |
|                   |                     | CH 46   | 5230            | 15.44               | 16.50         |               |              |
|                   | 802.11ac-VHT20 MCS0 | CH 36   | 5180            | 14.90               | 16.00         | 15.50         | 98.13        |
|                   |                     | CH 44   | 5220            | 15.06               | 16.00         |               |              |
|                   |                     | CH 48   | 5240            | 14.78               | 15.50         |               |              |
|                   | 802.11ac-VHT40 MCS0 | CH 38   | 5190            | 15.57               | 16.50         | 15.50         | 96.30        |
|                   |                     | CH 46   | 5230            | 15.44               | 16.50         |               |              |
|                   | 802.11ac-VHT80 MCS0 | CH 42   | 5210            | 15.86               | 16.50         | 15.50         | 93.09        |

### 5GHz WLAN ANT 8

|                   | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Power Setting | Duty Cycle % |
|-------------------|---------------------|---------|-----------------|---------------------|---------------|---------------|--------------|
| 5.8GHz WLAN ANT 8 | 802.11a 6Mbps       | CH 149  | 5745            | 13.66               | 14.50         | 13.00         | 98.26        |
|                   |                     | CH 157  | 5785            | 13.59               | 14.50         |               |              |
|                   |                     | CH 165  | 5825            | 13.72               | 14.50         |               |              |
|                   | 802.11n-HT20 MCS0   | CH 149  | 5745            | 12.96               | 14.00         | 12.50         | 98.13        |
|                   |                     | CH 157  | 5785            | 12.94               | 14.00         |               |              |
|                   |                     | CH 165  | 5825            | 13.03               | 14.00         |               |              |
|                   | 802.11n-HT40 MCS0   | CH 151  | 5755            | 13.80               | 14.50         | 12.50         | 96.47        |
|                   |                     | CH 159  | 5795            | 13.53               | 14.50         |               |              |
|                   | 802.11ac-VHT20 MCS0 | CH 149  | 5745            | 13.00               | 14.00         | 12.50         | 98.13        |
|                   |                     | CH 157  | 5785            | 12.92               | 14.00         |               |              |
|                   |                     | CH 165  | 5825            | 13.04               | 14.00         |               |              |
|                   | 802.11ac-VHT40 MCS0 | CH 151  | 5755            | 13.81               | 14.50         | 12.50         | 96.30        |
|                   |                     | CH 159  | 5795            | 13.53               | 14.50         |               |              |
|                   | 802.11ac-VHT80 MCS0 | CH 155  | 5775            | 13.56               | 14.50         | 12.50         | 92.68        |