



**<FR1 n71 Main Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 134600                | 136100                   | 137600                 | 13.5                |
| Frequency (MHz) |            |         |           | 673                   | 680.5                    | 688                    |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 12.87                 | 12.85                    | 12.93                  |                     |
| 20              | PI/2 BPSK  | 1       | 53        | 13.07                 | 13.20                    | 13.05                  | 13.5                |
| 20              | PI/2 BPSK  | 1       | 104       | 12.96                 | 13.05                    | 12.96                  |                     |
| 20              | PI/2 BPSK  | 50      | 0         | 12.90                 | 13.01                    | 13.03                  |                     |
| 20              | PI/2 BPSK  | 50      | 28        | 12.96                 | 13.18                    | 13.13                  | 13.5                |
| 20              | PI/2 BPSK  | 50      | 56        | 12.78                 | 13.06                    | 12.95                  | 13.5                |
| 20              | PI/2 BPSK  | 100     | 0         | 12.91                 | 13.08                    | 13.06                  |                     |
| 20              | QPSK       | 1       | 1         | 12.82                 | 12.84                    | 12.91                  |                     |
| 20              | QPSK       | 1       | 53        | 12.94                 | 13.07                    | 13.03                  | 13.5                |
| 20              | QPSK       | 1       | 104       | 13.03                 | 12.98                    | 12.97                  |                     |
| 20              | QPSK       | 50      | 0         | 12.93                 | 13.04                    | 13.11                  |                     |
| 20              | QPSK       | 50      | 28        | 12.96                 | 13.08                    | 13.00                  | 13.5                |
| 20              | QPSK       | 50      | 56        | 12.82                 | 13.12                    | 12.92                  | 13.5                |
| 20              | QPSK       | 100     | 0         | 12.86                 | 13.06                    | 13.02                  |                     |
| 20              | 16QAM      | 1       | 1         | 12.77                 | 12.82                    | 12.87                  |                     |
| 20              | 64QAM      | 1       | 1         | 12.46                 | 12.50                    | 12.58                  | 13.5                |
| 20              | 256QAM     | 1       | 1         | 12.90                 | 12.95                    | 13.04                  | 13.5                |
| Channel         |            |         |           | 134100                | 136100                   | 138100                 | 13.5                |
| Frequency (MHz) |            |         |           | 670.5                 | 680.5                    | 690.5                  |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 12.81                 | 12.85                    | 12.89                  |                     |
| Channel         |            |         |           | 133600                | 136100                   | 138600                 | 13.5                |
| Frequency (MHz) |            |         |           | 668                   | 680.5                    | 693                    |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 12.79                 | 12.80                    | 12.83                  |                     |
| Channel         |            |         |           | 133100                | 136100                   | 139100                 | 13.5                |
| Frequency (MHz) |            |         |           | 665.5                 | 680.5                    | 695.5                  |                     |
| 5               | PI/2 BPSK  | 1       | 1         | 12.84                 | 12.77                    | 12.90                  |                     |



**<FR1 n38 Main Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 516000                | 519000                   | 522000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2580                  | 2595                     | 2610                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 23.56                 | 23.66                    | 23.61                  |                     |
| 20              | PI/2 BPSK  | 1       | 26        | 23.57                 | 23.65                    | 23.80                  | 23.5                |
| 20              | PI/2 BPSK  | 1       | 49        | 23.61                 | 23.66                    | 23.59                  |                     |
| 20              | PI/2 BPSK  | 25      | 0         | 23.04                 | 23.05                    | 23.24                  |                     |
| 20              | PI/2 BPSK  | 25      | 13        | 23.68                 | 23.77                    | 23.75                  | 23.5                |
| 20              | PI/2 BPSK  | 25      | 26        | 23.25                 | 23.13                    | 23.04                  |                     |
| 20              | PI/2 BPSK  | 50      | 0         | 23.21                 | 23.27                    | 23.14                  |                     |
| 20              | QPSK       | 1       | 1         | 23.62                 | 23.57                    | 23.58                  | 24.0                |
| 20              | QPSK       | 1       | 26        | 23.73                 | 23.76                    | 23.74                  |                     |
| 20              | QPSK       | 1       | 49        | 23.40                 | 23.59                    | 23.55                  |                     |
| 20              | QPSK       | 25      | 0         | 22.66                 | 22.77                    | 22.73                  | 24.0                |
| 20              | QPSK       | 25      | 13        | 23.76                 | 23.68                    | 23.74                  |                     |
| 20              | QPSK       | 25      | 26        | 22.65                 | 22.75                    | 22.60                  |                     |
| 20              | QPSK       | 50      | 0         | 22.66                 | 22.73                    | 22.60                  | 23.0                |
| 20              | 16QAM      | 1       | 1         | 22.35                 | 22.50                    | 22.40                  | 23.0                |
| 20              | 64QAM      | 1       | 1         | 20.73                 | 20.77                    | 20.73                  | 21.5                |
| 20              | 256QAM     | 1       | 1         | 19.13                 | 19.20                    | 19.22                  | 19.5                |
| Channel         |            |         |           | 515500                | 519000                   | 522500                 | 24.0                |
| Frequency (MHz) |            |         |           | 2577.5                | 2595                     | 2612.5                 |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 23.56                 | 23.64                    | 23.74                  |                     |
| Channel         |            |         |           | 515000                | 519000                   | 523000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2575                  | 2595                     | 2615                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 23.54                 | 23.69                    | 23.60                  |                     |
| Channel         |            |         |           | 514500                | 519000                   | 523500                 | 24.0                |
| Frequency (MHz) |            |         |           | 2572.5                | 2595                     | 2617.5                 |                     |
| 5               | PI/2 BPSK  | 1       | 1         | 23.51                 | 23.62                    | 23.52                  |                     |



**<FR1 n38 MIMO 2 Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 516000                | 519000                   | 522000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2580                  | 2595                     | 2610                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 22.68                 | 22.91                    | 22.83                  |                     |
| 20              | PI/2 BPSK  | 1       | 26        | 22.65                 | 23.00                    | 22.81                  | 23.5                |
| 20              | PI/2 BPSK  | 1       | 49        | 22.56                 | 22.69                    | 22.78                  |                     |
| 20              | PI/2 BPSK  | 25      | 0         | 22.75                 | 22.99                    | 22.94                  |                     |
| 20              | PI/2 BPSK  | 25      | 13        | 22.69                 | 22.80                    | 22.79                  | 24.0                |
| 20              | PI/2 BPSK  | 25      | 26        | 22.55                 | 22.89                    | 22.84                  |                     |
| 20              | PI/2 BPSK  | 50      | 0         | 22.77                 | 22.95                    | 22.76                  |                     |
| 20              | QPSK       | 1       | 1         | 22.49                 | 22.90                    | 22.89                  | 24.0                |
| 20              | QPSK       | 1       | 26        | 22.62                 | 22.85                    | 22.70                  |                     |
| 20              | QPSK       | 1       | 49        | 22.43                 | 22.61                    | 22.56                  |                     |
| 20              | QPSK       | 25      | 0         | 22.60                 | 22.77                    | 22.86                  | 24.0                |
| 20              | QPSK       | 25      | 13        | 22.76                 | 22.82                    | 22.98                  |                     |
| 20              | QPSK       | 25      | 26        | 22.65                 | 22.91                    | 22.83                  |                     |
| 20              | QPSK       | 50      | 0         | 22.67                 | 22.98                    | 22.81                  | 23.0                |
| 20              | 16QAM      | 1       | 1         | 22.54                 | 22.83                    | 22.80                  | 23.0                |
| 20              | 64QAM      | 1       | 1         | 20.81                 | 21.04                    | 21.11                  | 21.5                |
| 20              | 256QAM     | 1       | 1         | 19.10                 | 19.46                    | 19.24                  | 19.5                |
| Channel         |            |         |           | 515500                | 519000                   | 522500                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2577.5                | 2595                     | 2612.5                 |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.67                 | 22.93                    | 22.89                  | 24.0                |
| Channel         |            |         |           | 515000                | 519000                   | 523000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2575                  | 2595                     | 2615                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.75                 | 22.92                    | 22.79                  | 24.0                |
| Channel         |            |         |           | 514500                | 519000                   | 523500                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2572.5                | 2595                     | 2617.5                 |                     |
| 5               | PI/2 BPSK  | 1       | 1         | 22.58                 | 22.83                    | 22.75                  | 24.0                |



**<FR1 n38 Main Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 516000                | 519000                   | 522000                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2580                  | 2595                     | 2610                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.50                  | 8.39                     | 8.46                   |                     |
| 20              | PI/2 BPSK  | 1       | 26        | 8.53                  | 8.51                     | 8.67                   | 9.5                 |
| 20              | PI/2 BPSK  | 1       | 49        | 8.38                  | 8.11                     | 8.63                   |                     |
| 20              | PI/2 BPSK  | 25      | 0         | 8.54                  | 8.42                     | 8.60                   |                     |
| 20              | PI/2 BPSK  | 25      | 13        | 8.56                  | 8.47                     | 8.65                   | 9.5                 |
| 20              | PI/2 BPSK  | 25      | 26        | 8.46                  | 8.36                     | 8.64                   | 9.5                 |
| 20              | PI/2 BPSK  | 50      | 0         | 8.54                  | 8.45                     | 8.61                   |                     |
| 20              | QPSK       | 1       | 1         | 8.49                  | 8.36                     | 8.45                   |                     |
| 20              | QPSK       | 1       | 26        | 8.48                  | 8.11                     | 8.45                   | 9.5                 |
| 20              | QPSK       | 1       | 49        | 8.37                  | 8.45                     | 8.39                   |                     |
| 20              | QPSK       | 25      | 0         | 8.51                  | 8.41                     | 8.55                   |                     |
| 20              | QPSK       | 25      | 13        | 8.55                  | 8.36                     | 8.58                   | 9.5                 |
| 20              | QPSK       | 25      | 26        | 8.48                  | 8.46                     | 8.46                   |                     |
| 20              | QPSK       | 50      | 0         | 8.51                  | 8.44                     | 8.42                   |                     |
| 20              | 16QAM      | 1       | 1         | 8.43                  | 8.32                     | 8.49                   | 9.5                 |
| 20              | 64QAM      | 1       | 1         | 8.15                  | 8.05                     | 8.21                   | 9.5                 |
| 20              | 256QAM     | 1       | 1         | 8.45                  | 8.49                     | 8.43                   | 9.5                 |
| Channel         |            |         |           | 515500                | 519000                   | 522500                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2577.5                | 2595                     | 2612.5                 |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.40                  | 8.29                     | 8.40                   |                     |
| Channel         |            |         |           | 515000                | 519000                   | 523000                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2575                  | 2595                     | 2615                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.43                  | 8.38                     | 8.37                   |                     |
| Channel         |            |         |           | 514500                | 519000                   | 523500                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2572.5                | 2595                     | 2617.5                 |                     |
| 5               | PI/2 BPSK  | 1       | 1         | 8.42                  | 8.28                     | 8.34                   |                     |



**<FR1 n38 MIMO 2 Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 516000                | 519000                   | 522000                 | 10.0                |
| Frequency (MHz) |            |         |           | 2580                  | 2595                     | 2610                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.55                  | 8.90                     | 8.54                   |                     |
| 20              | PI/2 BPSK  | 1       | 26        | 8.57                  | 8.55                     | 8.66                   | 10.0                |
| 20              | PI/2 BPSK  | 1       | 49        | 8.60                  | 8.93                     | 8.69                   |                     |
| 20              | PI/2 BPSK  | 25      | 0         | 8.68                  | 8.89                     | 8.66                   |                     |
| 20              | PI/2 BPSK  | 25      | 13        | 8.64                  | 8.79                     | 8.71                   | 10.0                |
| 20              | PI/2 BPSK  | 25      | 26        | 8.71                  | 8.91                     | 8.77                   | 10.0                |
| 20              | PI/2 BPSK  | 50      | 0         | 8.69                  | 8.92                     | 8.73                   |                     |
| 20              | QPSK       | 1       | 1         | 8.63                  | 8.82                     | 8.49                   |                     |
| 20              | QPSK       | 1       | 26        | 8.61                  | 8.54                     | 8.67                   | 10.0                |
| 20              | QPSK       | 1       | 49        | 8.49                  | 8.89                     | 8.68                   |                     |
| 20              | QPSK       | 25      | 0         | 8.70                  | 8.88                     | 8.64                   |                     |
| 20              | QPSK       | 25      | 13        | 8.71                  | 8.82                     | 8.74                   | 10.0                |
| 20              | QPSK       | 25      | 26        | 8.63                  | 8.90                     | 8.76                   |                     |
| 20              | QPSK       | 50      | 0         | 8.71                  | 8.90                     | 8.74                   |                     |
| 20              | 16QAM      | 1       | 1         | 7.79                  | 8.08                     | 7.66                   | 9.5                 |
| 20              | 64QAM      | 1       | 1         | 7.50                  | 7.78                     | 7.50                   | 9.5                 |
| 20              | 256QAM     | 1       | 1         | 7.94                  | 8.22                     | 7.81                   | 9.5                 |
| Channel         |            |         |           | 515500                | 519000                   | 522500                 | 10.0                |
| Frequency (MHz) |            |         |           | 2577.5                | 2595                     | 2612.5                 |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.49                  | 8.35                     | 8.45                   |                     |
| Channel         |            |         |           | 515000                | 519000                   | 523000                 | 10.0                |
| Frequency (MHz) |            |         |           | 2575                  | 2595                     | 2615                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.47                  | 8.39                     | 8.37                   |                     |
| Channel         |            |         |           | 514500                | 519000                   | 523500                 | 10.0                |
| Frequency (MHz) |            |         |           | 2572.5                | 2595                     | 2617.5                 |                     |
| 5               | PI/2 BPSK  | 1       | 1         | 8.44                  | 8.36                     | 8.34                   |                     |



**<FR1 n41 Main Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 23.44                 | 22.18                    | 22.13                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 23.23                 | 22.21                    | 23.58                  | 23.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 22.56                 | 22.20                    | 22.85                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 22.56                 | 22.24                    | 23.33                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 23.19                 | 22.43                    | 23.53                  | 24.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 21.99                 | 22.19                    | 22.79                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 23.11                 | 22.84                    | 23.24                  |                     |
| 100             | QPSK       | 1       | 1         | 22.39                 | 22.44                    | 22.33                  | 24.0                |
| 100             | QPSK       | 1       | 137       | 23.00                 | 22.11                    | 22.78                  |                     |
| 100             | QPSK       | 1       | 271       | 22.58                 | 22.51                    | 22.52                  |                     |
| 100             | QPSK       | 135     | 0         | 22.13                 | 22.19                    | 22.11                  | 24.0                |
| 100             | QPSK       | 135     | 69        | 22.22                 | 22.43                    | 22.25                  |                     |
| 100             | QPSK       | 135     | 138       | 23.16                 | 23.14                    | 23.09                  |                     |
| 100             | QPSK       | 270     | 0         | 22.58                 | 22.74                    | 22.74                  | 23.0                |
| 100             | 16QAM      | 1       | 1         | 22.03                 | 21.98                    | 21.86                  | 23.0                |
| 100             | 64QAM      | 1       | 1         | 21.10                 | 21.22                    | 21.08                  | 21.5                |
| 100             | 256QAM     | 1       | 1         | 18.90                 | 18.66                    | 18.58                  | 19.5                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 24.0                |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 23.34                 | 22.53                    | 22.13                  |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 24.0                |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 23.51                 | 22.54                    | 22.20                  |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 23.47                 | 22.48                    | 22.06                  |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 24.0                |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 23.36                 | 22.56                    | 22.03                  |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 23.37                 | 22.43                    | 22.23                  |                     |



## &lt;FR1 n41 MIMO 2 Ant Default Power&gt;

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 22.30                 | 22.06                    | 22.18                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 22.89                 | 22.71                    | 22.86                  | 23.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 22.13                 | 22.03                    | 22.09                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 22.61                 | 22.89                    | 22.92                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 22.76                 | 23.09                    | 22.96                  | 23.5                |
| 100             | PI/2 BPSK  | 135     | 138       | 22.68                 | 22.81                    | 22.81                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 22.68                 | 22.86                    | 22.92                  |                     |
| 100             | QPSK       | 1       | 1         | 22.04                 | 22.09                    | 22.07                  | 24.0                |
| 100             | QPSK       | 1       | 137       | 22.54                 | 22.66                    | 22.75                  |                     |
| 100             | QPSK       | 1       | 271       | 22.05                 | 22.10                    | 22.10                  |                     |
| 100             | QPSK       | 135     | 0         | 22.73                 | 22.83                    | 22.86                  | 24.0                |
| 100             | QPSK       | 135     | 69        | 22.81                 | 22.91                    | 23.02                  |                     |
| 100             | QPSK       | 135     | 138       | 22.64                 | 22.71                    | 22.87                  |                     |
| 100             | QPSK       | 270     | 0         | 22.78                 | 22.79                    | 22.81                  | 23.0                |
| 100             | 16QAM      | 1       | 1         | 21.81                 | 22.03                    | 22.00                  | 23.0                |
| 100             | 64QAM      | 1       | 1         | 20.92                 | 20.81                    | 20.66                  | 21.5                |
| 100             | 256QAM     | 1       | 1         | 18.70                 | 18.87                    | 18.74                  | 19.5                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 24.0                |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 22.28                 | 22.15                    | 22.09                  |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 24.0                |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 22.37                 | 22.02                    | 22.10                  |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 22.40                 | 22.02                    | 22.10                  |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 24.0                |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.39                 | 22.01                    | 22.19                  |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 24.0                |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.23                 | 22.12                    | 22.28                  |                     |

**<FR1 n41 MIMO 1 Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 9.0                 |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 7.01                  | 7.09                     | 7.14                   |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 7.07                  | 7.51                     | 7.29                   | 9.0                 |
| 100             | PI/2 BPSK  | 1       | 271       | 7.87                  | 7.96                     | 8.25                   |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 7.06                  | 7.49                     | 7.84                   |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 7.20                  | 7.71                     | 7.76                   | 9.0                 |
| 100             | PI/2 BPSK  | 135     | 138       | 7.38                  | 8.05                     | 8.16                   | 9.0                 |
| 100             | PI/2 BPSK  | 270     | 0         | 7.24                  | 7.71                     | 7.79                   |                     |
| 100             | QPSK       | 1       | 1         | 7.95                  | 7.23                     | 7.13                   |                     |
| 100             | QPSK       | 1       | 137       | 7.20                  | 7.42                     | 8.20                   | 9.0                 |
| 100             | QPSK       | 1       | 271       | 7.01                  | 7.97                     | 7.25                   |                     |
| 100             | QPSK       | 135     | 0         | 7.47                  | 7.52                     | 7.86                   |                     |
| 100             | QPSK       | 135     | 69        | 7.28                  | 7.71                     | 8.20                   | 9.0                 |
| 100             | QPSK       | 135     | 138       | 7.02                  | 8.02                     | 7.84                   |                     |
| 100             | QPSK       | 270     | 0         | 7.32                  | 7.77                     | 7.81                   |                     |
| 100             | 16QAM      | 1       | 1         | 7.87                  | 7.18                     | 7.08                   | 9.0                 |
| 100             | 64QAM      | 1       | 1         | 7.65                  | 7.19                     | 7.13                   | 9.0                 |
| 100             | 256QAM     | 1       | 1         | 7.01                  | 7.32                     | 7.30                   | 9.0                 |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 9.0                 |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 7.04                  | 7.05                     | 7.13                   |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 9.0                 |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 7.00                  | 7.04                     | 7.04                   |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 9.0                 |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 7.02                  | 7.03                     | 7.13                   |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 9.0                 |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 7.05                  | 7.00                     | 7.04                   |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 9.0                 |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 7.06                  | 7.00                     | 7.04                   |                     |

**<FR1 n41 Aux Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 12.0                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 10.81                 | 10.55                    | 10.41                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 10.88                 | 10.86                    | 11.15                  | 12.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 10.45                 | 10.81                    | 10.52                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 10.82                 | 10.79                    | 10.86                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 10.91                 | 11.11                    | 11.24                  | 12.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 10.70                 | 11.03                    | 10.85                  | 12.0                |
| 100             | PI/2 BPSK  | 270     | 0         | 10.81                 | 10.92                    | 10.87                  |                     |
| 100             | QPSK       | 1       | 1         | 10.78                 | 10.44                    | 10.38                  |                     |
| 100             | QPSK       | 1       | 137       | 10.82                 | 10.75                    | 11.08                  | 12.0                |
| 100             | QPSK       | 1       | 271       | 10.40                 | 10.80                    | 10.53                  |                     |
| 100             | QPSK       | 135     | 0         | 10.81                 | 10.83                    | 10.94                  |                     |
| 100             | QPSK       | 135     | 69        | 10.86                 | 11.04                    | 11.23                  | 12.0                |
| 100             | QPSK       | 135     | 138       | 10.71                 | 11.07                    | 10.92                  |                     |
| 100             | QPSK       | 270     | 0         | 10.80                 | 10.95                    | 10.91                  |                     |
| 100             | 16QAM      | 1       | 1         | 10.76                 | 10.38                    | 10.40                  | 11.0                |
| 100             | 64QAM      | 1       | 1         | 10.45                 | 10.12                    | 10.15                  | 11.0                |
| 100             | 256QAM     | 1       | 1         | 10.90                 | 10.60                    | 10.57                  | 11.0                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 12.0                |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 10.76                 | 10.50                    | 10.34                  |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 12.0                |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 10.77                 | 10.47                    | 10.31                  |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 12.0                |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 10.72                 | 10.45                    | 10.36                  |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 12.0                |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 10.76                 | 10.55                    | 10.39                  |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 12.0                |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 10.72                 | 10.52                    | 10.38                  |                     |



**<FR1 n41 Main Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 9.02                  | 7.98                     | 7.87                   |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 7.84                  | 8.45                     | 8.32                   | 9.5                 |
| 100             | PI/2 BPSK  | 1       | 271       | 7.93                  | 9.36                     | 9.34                   |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 8.23                  | 8.37                     | 8.81                   |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 8.04                  | 8.75                     | 8.92                   | 9.5                 |
| 100             | PI/2 BPSK  | 135     | 138       | 7.90                  | 9.24                     | 9.20                   | 9.5                 |
| 100             | PI/2 BPSK  | 270     | 0         | 8.14                  | 8.78                     | 8.81                   |                     |
| 100             | QPSK       | 1       | 1         | 8.96                  | 7.93                     | 7.89                   |                     |
| 100             | QPSK       | 1       | 137       | 7.92                  | 8.40                     | 9.27                   | 9.5                 |
| 100             | QPSK       | 1       | 271       | 7.87                  | 9.29                     | 8.31                   |                     |
| 100             | QPSK       | 135     | 0         | 8.28                  | 8.38                     | 8.79                   |                     |
| 100             | QPSK       | 135     | 69        | 8.02                  | 8.76                     | 9.25                   | 9.5                 |
| 100             | QPSK       | 135     | 138       | 7.91                  | 9.16                     | 8.90                   |                     |
| 100             | QPSK       | 270     | 0         | 8.15                  | 8.80                     | 8.81                   |                     |
| 100             | 16QAM      | 1       | 1         | 8.93                  | 7.86                     | 7.86                   | 9.5                 |
| 100             | 64QAM      | 1       | 1         | 8.66                  | 7.61                     | 7.62                   | 9.5                 |
| 100             | 256QAM     | 1       | 1         | 9.14                  | 8.09                     | 8.03                   | 9.5                 |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.96                  | 7.92                     | 7.78                   |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 9.01                  | 7.92                     | 7.85                   |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.95                  | 7.88                     | 7.77                   |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.92                  | 7.93                     | 7.84                   |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 9.5                 |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.98                  | 7.89                     | 7.80                   |                     |

**<FR1 n41 MIMO 2 Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 10.0                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 8.29                  | 8.38                     | 8.48                   |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 8.81                  | 8.86                     | 8.83                   | 10.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 8.58                  | 8.52                     | 8.50                   |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 8.76                  | 8.84                     | 8.73                   | 10.0                |
| 100             | PI/2 BPSK  | 135     | 69        | 8.77                  | 8.98                     | 8.88                   | 10.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 8.73                  | 8.93                     | 8.61                   | 10.0                |
| 100             | PI/2 BPSK  | 270     | 0         | 8.74                  | 8.88                     | 8.68                   |                     |
| 100             | QPSK       | 1       | 1         | 8.41                  | 8.37                     | 8.43                   |                     |
| 100             | QPSK       | 1       | 137       | 8.66                  | 8.78                     | 8.80                   | 10.0                |
| 100             | QPSK       | 1       | 271       | 8.46                  | 8.49                     | 8.39                   |                     |
| 100             | QPSK       | 135     | 0         | 8.83                  | 8.84                     | 8.81                   |                     |
| 100             | QPSK       | 135     | 69        | 8.90                  | 8.97                     | 8.91                   | 10.0                |
| 100             | QPSK       | 135     | 138       | 8.69                  | 8.92                     | 8.65                   |                     |
| 100             | QPSK       | 270     | 0         | 8.78                  | 8.88                     | 8.66                   | 10.0                |
| 100             | 16QAM      | 1       | 1         | 8.42                  | 8.35                     | 8.43                   | 10.0                |
| 100             | 64QAM      | 1       | 1         | 8.15                  | 8.06                     | 8.15                   | 10.0                |
| 100             | 256QAM     | 1       | 1         | 8.50                  | 8.53                     | 8.57                   | 10.0                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 10.0                |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.22                  | 8.36                     | 8.39                   |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 10.0                |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 8.26                  | 8.37                     | 8.46                   |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 10.0                |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.27                  | 8.34                     | 8.41                   |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 10.0                |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.24                  | 8.37                     | 8.46                   |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 10.0                |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.19                  | 8.28                     | 8.42                   |                     |

**<FR1 n41 HPUE Main Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 25.0                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 24.51                 | 23.38                    | 23.15                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 24.24                 | 23.30                    | 24.62                  | 24.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 23.62                 | 23.78                    | 23.87                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 23.56                 | 23.22                    | 24.37                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 24.10                 | 23.40                    | 24.47                  | 24.5                |
| 100             | PI/2 BPSK  | 135     | 138       | 22.94                 | 24.15                    | 23.86                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 24.17                 | 23.80                    | 24.27                  |                     |
| 100             | QPSK       | 1       | 1         | 23.33                 | 23.41                    | 23.42                  | 25.0                |
| 100             | QPSK       | 1       | 137       | 23.99                 | 23.19                    | 23.75                  |                     |
| 100             | QPSK       | 1       | 271       | 23.49                 | 23.46                    | 23.51                  |                     |
| 100             | QPSK       | 135     | 0         | 23.04                 | 23.23                    | 23.01                  | 25.0                |
| 100             | QPSK       | 135     | 69        | 23.22                 | 23.43                    | 23.19                  |                     |
| 100             | QPSK       | 135     | 138       | 24.08                 | 24.14                    | 24.06                  |                     |
| 100             | QPSK       | 270     | 0         | 23.63                 | 23.79                    | 23.80                  | 24.0                |
| 100             | 16QAM      | 1       | 1         | 22.96                 | 22.95                    | 22.81                  | 24.0                |
| 100             | 64QAM      | 1       | 1         | 22.06                 | 22.23                    | 22.10                  | 22.5                |
| 100             | 256QAM     | 1       | 1         | 19.82                 | 19.61                    | 19.65                  | 20.5                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 25.0                |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 24.43                 | 23.40                    | 23.12                  |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 25.0                |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 24.53                 | 23.49                    | 23.13                  |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 25.0                |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 24.46                 | 23.53                    | 23.03                  |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 25.0                |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 24.44                 | 23.39                    | 23.03                  |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 25.0                |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 24.49                 | 23.57                    | 23.09                  |                     |

**<FR1 n41 HPUE MIMO 2 Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 27.0                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 25.34                 | 25.38                    | 25.35                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 26.06                 | 26.06                    | 25.96                  | 26.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 25.21                 | 25.29                    | 25.27                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 25.36                 | 25.44                    | 25.37                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 26.00                 | 26.08                    | 25.99                  | 26.5                |
| 100             | PI/2 BPSK  | 135     | 138       | 25.51                 | 25.61                    | 25.58                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 25.36                 | 25.42                    | 25.40                  |                     |
| 100             | QPSK       | 1       | 1         | 25.03                 | 25.08                    | 25.05                  | 27.0                |
| 100             | QPSK       | 1       | 137       | 25.81                 | 25.82                    | 25.82                  |                     |
| 100             | QPSK       | 1       | 271       | 25.11                 | 25.12                    | 25.04                  |                     |
| 100             | QPSK       | 135     | 0         | 25.19                 | 25.19                    | 25.14                  | 27.0                |
| 100             | QPSK       | 135     | 69        | 25.84                 | 25.93                    | 25.91                  |                     |
| 100             | QPSK       | 135     | 138       | 25.05                 | 25.09                    | 25.01                  |                     |
| 100             | QPSK       | 270     | 0         | 25.00                 | 25.02                    | 24.97                  | 26.0                |
| 100             | 16QAM      | 1       | 1         | 24.35                 | 24.39                    | 24.35                  | 26.0                |
| 100             | 64QAM      | 1       | 1         | 22.81                 | 22.85                    | 22.85                  | 24.5                |
| 100             | 256QAM     | 1       | 1         | 20.75                 | 20.79                    | 20.72                  | 22.5                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 25.28                 | 25.31                    | 25.38                  | 27.0                |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 25.44                 | 25.37                    | 25.28                  | 27.0                |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 25.37                 | 25.34                    | 25.40                  | 27.0                |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 25.27                 | 25.32                    | 25.32                  | 27.0                |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 25.34                 | 25.33                    | 25.40                  | 27.0                |



**<FR1 n41 HPUE Main Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 12.5                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 12.27                 | 11.03                    | 11.08                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 11.13                 | 11.77                    | 11.68                  | 12.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 11.18                 | 12.44                    | 11.52                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 11.45                 | 11.61                    | 12.08                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 11.28                 | 12.01                    | 12.45                  | 12.5                |
| 100             | PI/2 BPSK  | 135     | 138       | 11.33                 | 12.42                    | 12.19                  | 12.5                |
| 100             | PI/2 BPSK  | 270     | 0         | 11.37                 | 12.06                    | 12.00                  |                     |
| 100             | QPSK       | 1       | 1         | 12.24                 | 10.98                    | 11.03                  |                     |
| 100             | QPSK       | 1       | 137       | 11.08                 | 11.70                    | 11.66                  | 12.5                |
| 100             | QPSK       | 1       | 271       | 11.09                 | 12.38                    | 11.43                  |                     |
| 100             | QPSK       | 135     | 0         | 11.43                 | 11.57                    | 11.98                  |                     |
| 100             | QPSK       | 135     | 69        | 11.27                 | 11.99                    | 12.35                  | 12.5                |
| 100             | QPSK       | 135     | 138       | 11.32                 | 12.37                    | 12.10                  |                     |
| 100             | QPSK       | 270     | 0         | 11.32                 | 11.99                    | 12.00                  |                     |
| 100             | 16QAM      | 1       | 1         | 12.19                 | 10.97                    | 11.00                  | 12.5                |
| 100             | 64QAM      | 1       | 1         | 11.00                 | 11.68                    | 11.61                  | 12.5                |
| 100             | 256QAM     | 1       | 1         | 11.05                 | 11.29                    | 11.36                  | 12.5                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 12.5                |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 12.24                 | 10.96                    | 11.00                  |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 12.5                |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 12.19                 | 10.96                    | 11.05                  |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 12.5                |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 12.22                 | 11.03                    | 11.00                  |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 12.5                |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 12.19                 | 11.02                    | 11.07                  |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 12.5                |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 12.17                 | 11.01                    | 11.00                  |                     |

**<FR1 n41 HPUE MIMO 2 Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 509202                | 518598                   | 528000                 | 13.0                |
| Frequency (MHz) |            |         |           | 2546.01               | 2592.99                  | 2640                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 11.44                 | 11.62                    | 11.51                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 11.98                 | 11.98                    | 11.77                  | 13.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 11.67                 | 11.57                    | 11.37                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 11.83                 | 12.05                    | 11.87                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 12.00                 | 12.09                    | 11.89                  | 13.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 11.81                 | 12.04                    | 11.56                  | 13.0                |
| 100             | PI/2 BPSK  | 270     | 0         | 11.85                 | 12.04                    | 11.69                  |                     |
| 100             | QPSK       | 1       | 1         | 11.39                 | 11.52                    | 11.44                  |                     |
| 100             | QPSK       | 1       | 137       | 11.93                 | 11.65                    | 11.76                  | 13.0                |
| 100             | QPSK       | 1       | 271       | 11.65                 | 11.67                    | 11.37                  |                     |
| 100             | QPSK       | 135     | 0         | 11.77                 | 12.00                    | 11.83                  |                     |
| 100             | QPSK       | 135     | 69        | 12.00                 | 11.91                    | 11.86                  | 13.0                |
| 100             | QPSK       | 135     | 138       | 11.80                 | 11.87                    | 11.50                  |                     |
| 100             | QPSK       | 270     | 0         | 11.76                 | 11.89                    | 11.68                  |                     |
| 100             | 16QAM      | 1       | 1         | 11.29                 | 11.72                    | 11.39                  | 13.0                |
| 100             | 64QAM      | 1       | 1         | 11.90                 | 11.63                    | 11.73                  | 13.0                |
| 100             | 256QAM     | 1       | 1         | 11.62                 | 11.60                    | 11.42                  | 13.0                |
| Channel         |            |         |           | 507204                | 518598                   | 529998                 | 13.0                |
| Frequency (MHz) |            |         |           | 2536.02               | 2592.99                  | 2649.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 11.41                 | 11.58                    | 11.46                  |                     |
| Channel         |            |         |           | 504204                | 518598                   | 532998                 | 13.0                |
| Frequency (MHz) |            |         |           | 2521.02               | 2592.99                  | 2664.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 11.40                 | 11.56                    | 11.48                  |                     |
| Channel         |            |         |           | 503202                | 518598                   | 534000                 | 13.0                |
| Frequency (MHz) |            |         |           | 2516.01               | 2592.99                  | 2670                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 11.37                 | 11.53                    | 11.51                  |                     |
| Channel         |            |         |           | 500700                | 518598                   | 536496                 | 13.0                |
| Frequency (MHz) |            |         |           | 2503.5                | 2592.99                  | 2682.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 11.39                 | 11.53                    | 11.48                  |                     |
| Channel         |            |         |           | 500202                | 518598                   | 537000                 | 13.0                |
| Frequency (MHz) |            |         |           | 2501.01               | 2592.99                  | 2685                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 11.38                 | 11.53                    | 11.43                  |                     |



## &lt;FR1 n77 Main Ant Default Power&gt; (Part 270)

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 24.0                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 22.28                 | 22.43                    | 22.32                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 22.96                 | 23.07                    | 22.93                  | 23.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 22.37                 | 22.42                    | 22.34                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 22.84                 | 22.77                    | 22.83                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 22.91                 | 23.04                    | 22.89                  | 24.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 22.75                 | 22.93                    | 22.86                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 22.62                 | 22.78                    | 22.76                  |                     |
| 100             | QPSK       | 1       | 1         | 22.06                 | 22.17                    | 22.30                  | 24.0                |
| 100             | QPSK       | 1       | 137       | 22.80                 | 22.89                    | 22.79                  |                     |
| 100             | QPSK       | 1       | 271       | 22.31                 | 22.32                    | 22.23                  |                     |
| 100             | QPSK       | 135     | 0         | 22.61                 | 22.63                    | 22.51                  | 24.0                |
| 100             | QPSK       | 135     | 69        | 22.71                 | 22.68                    | 22.63                  |                     |
| 100             | QPSK       | 135     | 138       | 22.70                 | 22.71                    | 22.60                  |                     |
| 100             | QPSK       | 270     | 0         | 22.72                 | 22.77                    | 22.64                  | 23.0                |
| 100             | 16QAM      | 1       | 1         | 22.06                 | 22.10                    | 21.97                  | 23.0                |
| 100             | 64QAM      | 1       | 1         | 21.43                 | 21.44                    | 21.21                  | 21.5                |
| 100             | 256QAM     | 1       | 1         | 19.24                 | 19.30                    | 19.20                  | 19.5                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 24.0                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 22.38                 | 22.45                    | 22.28                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 24.0                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 22.20                 | 22.42                    | 22.25                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 24.0                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 22.34                 | 22.47                    | 22.39                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 24.0                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 22.19                 | 22.44                    | 22.22                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 24.0                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 22.29                 | 22.43                    | 22.28                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 24.0                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.36                 | 22.52                    | 22.29                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 24.0                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.30                 | 22.53                    | 22.24                  |                     |



**<FR1 n77 MIMO 2 Ant Default Power> (Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 24.0                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 22.68                 | 22.76                    | 22.98                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 23.41                 | 23.73                    | 23.80                  | 23.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 22.93                 | 23.19                    | 23.19                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 23.29                 | 23.45                    | 23.40                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 23.46                 | 23.60                    | 23.75                  | 24.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 23.01                 | 23.31                    | 23.29                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 23.16                 | 23.37                    | 23.49                  |                     |
| 100             | QPSK       | 1       | 1         | 22.64                 | 22.80                    | 22.78                  | 24.0                |
| 100             | QPSK       | 1       | 137       | 23.36                 | 23.54                    | 23.71                  |                     |
| 100             | QPSK       | 1       | 271       | 22.78                 | 23.03                    | 23.13                  |                     |
| 100             | QPSK       | 135     | 0         | 23.20                 | 23.40                    | 23.42                  | 24.0                |
| 100             | QPSK       | 135     | 69        | 23.54                 | 23.56                    | 23.65                  |                     |
| 100             | QPSK       | 135     | 138       | 23.45                 | 23.62                    | 23.54                  |                     |
| 100             | QPSK       | 270     | 0         | 22.26                 | 22.52                    | 22.72                  | 23.0                |
| 100             | 16QAM      | 1       | 1         | 22.56                 | 22.83                    | 22.65                  | 23.0                |
| 100             | 64QAM      | 1       | 1         | 20.92                 | 21.00                    | 20.99                  | 21.5                |
| 100             | 256QAM     | 1       | 1         | 18.62                 | 18.74                    | 18.93                  | 19.5                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 24.0                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 23.32                 | 23.51                    | 23.62                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 24.0                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 22.64                 | 22.86                    | 22.69                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 24.0                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 22.64                 | 22.80                    | 22.64                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 24.0                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 23.31                 | 23.50                    | 23.75                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 24.0                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 23.36                 | 23.48                    | 23.68                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 24.0                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.60                 | 22.79                    | 22.72                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 24.0                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.60                 | 22.77                    | 22.68                  |                     |

**<FR1 n77 MIMO 1 Ant Default Power> (Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 11.0                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 9.87                  | 10.54                    | 10.50                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 10.28                 | 10.93                    | 10.56                  | 11.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 10.24                 | 10.35                    | 10.14                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 10.14                 | 10.95                    | 10.59                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 10.31                 | 10.99                    | 10.65                  | 11.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 10.27                 | 10.74                    | 10.38                  | 11.0                |
| 100             | PI/2 BPSK  | 270     | 0         | 10.36                 | 10.91                    | 10.58                  |                     |
| 100             | QPSK       | 1       | 1         | 10.10                 | 10.53                    | 10.56                  |                     |
| 100             | QPSK       | 1       | 137       | 10.48                 | 10.89                    | 10.40                  | 11.0                |
| 100             | QPSK       | 1       | 271       | 10.40                 | 10.28                    | 10.05                  |                     |
| 100             | QPSK       | 135     | 0         | 10.46                 | 10.96                    | 10.63                  |                     |
| 100             | QPSK       | 135     | 69        | 10.65                 | 10.95                    | 10.50                  | 11.0                |
| 100             | QPSK       | 135     | 138       | 10.60                 | 10.72                    | 10.32                  |                     |
| 100             | QPSK       | 270     | 0         | 10.57                 | 10.93                    | 10.53                  |                     |
| 100             | 16QAM      | 1       | 1         | 10.01                 | 10.46                    | 10.47                  | 11.0                |
| 100             | 64QAM      | 1       | 1         | 9.75                  | 10.22                    | 10.23                  | 11.0                |
| 100             | 256QAM     | 1       | 1         | 10.24                 | 10.68                    | 10.69                  | 11.0                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 11.0                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 9.78                  | 10.52                    | 10.42                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 11.0                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 9.81                  | 10.54                    | 10.47                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 11.0                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 9.78                  | 10.48                    | 10.45                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 11.0                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 9.79                  | 10.45                    | 10.46                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 11.0                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 9.81                  | 10.50                    | 10.41                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 11.0                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 9.81                  | 10.45                    | 10.49                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 11.0                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 9.84                  | 10.52                    | 10.42                  |                     |



**<FR1 n77 Aux Ant Default Power> (Part 270)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 10.0                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 8.01                  | 8.22                     | 8.51                   |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 8.29                  | 8.56                     | 8.77                   | 10.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 8.25                  | 8.41                     | 8.54                   |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 8.26                  | 8.45                     | 8.79                   |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 8.30                  | 8.63                     | 8.91                   | 10.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 8.34                  | 8.53                     | 8.72                   | 10.0                |
| 100             | PI/2 BPSK  | 270     | 0         | 8.38                  | 8.55                     | 8.80                   |                     |
| 100             | QPSK       | 1       | 1         | 8.03                  | 8.20                     | 8.43                   |                     |
| 100             | QPSK       | 1       | 137       | 8.22                  | 8.47                     | 8.70                   | 10.0                |
| 100             | QPSK       | 1       | 271       | 8.21                  | 8.33                     | 8.47                   |                     |
| 100             | QPSK       | 135     | 0         | 8.25                  | 8.43                     | 8.77                   |                     |
| 100             | QPSK       | 135     | 69        | 8.33                  | 8.61                     | 8.89                   | 10.0                |
| 100             | QPSK       | 135     | 138       | 8.32                  | 8.51                     | 8.75                   |                     |
| 100             | QPSK       | 270     | 0         | 8.29                  | 8.45                     | 8.78                   |                     |
| 100             | 16QAM      | 1       | 1         | 7.89                  | 8.06                     | 8.34                   | 9.5                 |
| 100             | 64QAM      | 1       | 1         | 7.65                  | 7.82                     | 8.11                   | 9.5                 |
| 100             | 256QAM     | 1       | 1         | 8.05                  | 8.27                     | 8.56                   | 9.5                 |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 10.0                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.00                  | 8.21                     | 8.44                   |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 10.0                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 8.02                  | 8.12                     | 8.50                   |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 10.0                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 8.08                  | 8.20                     | 8.43                   |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 10.0                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.01                  | 8.16                     | 8.42                   |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 10.0                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.04                  | 8.22                     | 8.41                   |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 10.0                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.06                  | 8.17                     | 8.51                   |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 10.0                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.00                  | 8.15                     | 8.44                   |                     |

**<FR1 n77 Main Ant Reduced Power> (Part 270)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 10.0                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 8.66                  | 8.67                     | 8.64                   |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 9.00                  | 9.02                     | 8.81                   | 10.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 8.78                  | 8.65                     | 8.46                   |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 8.94                  | 8.96                     | 8.95                   |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 9.08                  | 9.11                     | 9.01                   | 10.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 8.85                  | 8.93                     | 8.93                   | 10.0                |
| 100             | PI/2 BPSK  | 270     | 0         | 8.93                  | 8.97                     | 8.91                   |                     |
| 100             | QPSK       | 1       | 1         | 8.57                  | 8.59                     | 8.54                   |                     |
| 100             | QPSK       | 1       | 137       | 8.91                  | 9.00                     | 8.98                   | 10.0                |
| 100             | QPSK       | 1       | 271       | 8.63                  | 8.63                     | 8.53                   |                     |
| 100             | QPSK       | 135     | 0         | 8.85                  | 8.88                     | 8.88                   |                     |
| 100             | QPSK       | 135     | 69        | 8.98                  | 8.98                     | 8.94                   | 10.0                |
| 100             | QPSK       | 135     | 138       | 8.81                  | 8.87                     | 8.82                   |                     |
| 100             | QPSK       | 270     | 0         | 8.88                  | 8.97                     | 8.97                   |                     |
| 100             | 16QAM      | 1       | 1         | 8.54                  | 8.56                     | 8.52                   | 10.0                |
| 100             | 64QAM      | 1       | 1         | 8.23                  | 8.30                     | 8.29                   | 10.0                |
| 100             | 256QAM     | 1       | 1         | 8.69                  | 8.73                     | 8.64                   | 10.0                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 10.0                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.62                  | 8.60                     | 8.56                   |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 10.0                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 8.57                  | 8.66                     | 8.62                   |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 10.0                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 8.59                  | 8.67                     | 8.63                   |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 10.0                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.65                  | 8.67                     | 8.57                   |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 10.0                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.65                  | 8.59                     | 8.62                   |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 10.0                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.58                  | 8.65                     | 8.54                   |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 10.0                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.57                  | 8.66                     | 8.56                   |                     |

**<FR1 n77 MIMO 2 Ant Reduced Power> (Part 270)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 12.5                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 10.68                 | 10.79                    | 11.02                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 11.21                 | 11.49                    | 11.10                  | 12.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 11.02                 | 11.07                    | 10.71                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 11.09                 | 11.35                    | 11.23                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 11.24                 | 11.40                    | 11.28                  | 12.5                |
| 100             | PI/2 BPSK  | 135     | 138       | 11.20                 | 11.38                    | 11.04                  | 12.5                |
| 100             | PI/2 BPSK  | 270     | 0         | 11.08                 | 11.35                    | 11.13                  |                     |
| 100             | QPSK       | 1       | 1         | 10.73                 | 10.76                    | 10.92                  |                     |
| 100             | QPSK       | 1       | 137       | 11.16                 | 11.45                    | 11.10                  | 12.5                |
| 100             | QPSK       | 1       | 271       | 10.89                 | 11.07                    | 10.68                  |                     |
| 100             | QPSK       | 135     | 0         | 11.05                 | 11.29                    | 11.20                  |                     |
| 100             | QPSK       | 135     | 69        | 11.23                 | 11.36                    | 11.18                  | 12.5                |
| 100             | QPSK       | 135     | 138       | 11.17                 | 11.34                    | 11.00                  |                     |
| 100             | QPSK       | 270     | 0         | 11.14                 | 11.44                    | 11.08                  |                     |
| 100             | 16QAM      | 1       | 1         | 10.59                 | 10.95                    | 10.90                  | 12.0                |
| 100             | 64QAM      | 1       | 1         | 10.35                 | 10.74                    | 10.64                  | 12.0                |
| 100             | 256QAM     | 1       | 1         | 10.91                 | 11.18                    | 11.14                  | 12.0                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 12.5                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 10.65                 | 10.76                    | 10.95                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 12.5                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 10.63                 | 10.74                    | 10.98                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 12.5                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 10.66                 | 10.78                    | 11.02                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 12.5                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 10.68                 | 10.75                    | 10.96                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 12.5                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 10.60                 | 10.75                    | 11.01                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 12.5                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 10.64                 | 10.74                    | 10.94                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 12.5                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 10.61                 | 10.75                    | 10.92                  |                     |

**<FR1 n77 HPUE Main Ant Default Power> (Part 270)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 26.5                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 24.56                 | 24.65                    | 24.56                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 24.53                 | 24.50                    | 24.58                  | 26.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 24.68                 | 24.72                    | 24.76                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 24.88                 | 24.89                    | 24.90                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 24.71                 | 25.00                    | 24.88                  | 26.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 24.77                 | 24.72                    | 24.79                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 24.67                 | 24.76                    | 24.65                  |                     |
| 100             | QPSK       | 1       | 1         | 24.80                 | 24.70                    | 24.65                  | 26.5                |
| 100             | QPSK       | 1       | 137       | 24.50                 | 24.51                    | 24.54                  |                     |
| 100             | QPSK       | 1       | 271       | 24.62                 | 24.51                    | 24.59                  |                     |
| 100             | QPSK       | 135     | 0         | 24.72                 | 24.96                    | 24.91                  | 26.5                |
| 100             | QPSK       | 135     | 69        | 24.73                 | 24.76                    | 24.77                  |                     |
| 100             | QPSK       | 135     | 138       | 24.75                 | 24.83                    | 24.87                  |                     |
| 100             | QPSK       | 270     | 0         | 24.90                 | 24.86                    | 24.97                  | 25.5                |
| 100             | 16QAM      | 1       | 1         | 24.40                 | 24.60                    | 24.70                  | 25.5                |
| 100             | 64QAM      | 1       | 1         | 22.71                 | 22.65                    | 22.58                  | 24.0                |
| 100             | 256QAM     | 1       | 1         | 21.33                 | 21.41                    | 21.36                  | 22.0                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 26.5                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 24.58                 | 24.55                    | 24.55                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 26.5                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 24.51                 | 24.65                    | 24.50                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 26.5                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 24.65                 | 24.61                    | 24.59                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 26.5                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 24.52                 | 24.65                    | 24.57                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 26.5                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 24.53                 | 24.68                    | 24.56                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 26.5                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 24.55                 | 24.58                    | 24.50                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 26.5                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 24.59                 | 24.68                    | 24.52                  |                     |

**<FR1 n77 HPUE MIMO 2 Ant Default Power> (Part 270)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 27.0                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 25.21                 | 25.35                    | 25.39                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 25.72                 | 26.21                    | 26.22                  | 26.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 25.41                 | 25.49                    | 25.69                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 25.71                 | 25.91                    | 25.79                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 25.07                 | 26.20                    | 25.80                  | 26.5                |
| 100             | PI/2 BPSK  | 135     | 138       | 25.45                 | 25.72                    | 25.62                  |                     |
| 100             | PI/2 BPSK  | 270     | 0         | 25.52                 | 25.84                    | 25.96                  |                     |
| 100             | QPSK       | 1       | 1         | 25.14                 | 25.25                    | 25.23                  | 27.0                |
| 100             | QPSK       | 1       | 137       | 25.83                 | 25.98                    | 26.16                  |                     |
| 100             | QPSK       | 1       | 271       | 25.15                 | 25.52                    | 25.55                  |                     |
| 100             | QPSK       | 135     | 0         | 25.62                 | 25.79                    | 25.84                  | 27.0                |
| 100             | QPSK       | 135     | 69        | 26.04                 | 25.91                    | 26.09                  |                     |
| 100             | QPSK       | 135     | 138       | 25.75                 | 26.09                    | 25.96                  |                     |
| 100             | QPSK       | 270     | 0         | 24.66                 | 24.89                    | 25.21                  | 26.0                |
| 100             | 16QAM      | 1       | 1         | 24.89                 | 25.18                    | 25.13                  | 26.0                |
| 100             | 64QAM      | 1       | 1         | 23.30                 | 23.31                    | 23.39                  | 24.5                |
| 100             | 256QAM     | 1       | 1         | 21.04                 | 21.06                    | 21.41                  | 22.5                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 27.0                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 25.16                 | 25.23                    | 25.21                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 27.0                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 25.00                 | 25.13                    | 25.13                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 27.0                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 25.21                 | 25.27                    | 25.14                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 27.0                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 25.15                 | 25.21                    | 25.16                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 27.0                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 25.24                 | 25.32                    | 25.22                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 27.0                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 25.09                 | 25.22                    | 25.24                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 27.0                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 25.21                 | 25.22                    | 25.16                  |                     |



**<FR1 n77 HPUE Main Ant Reduced Power> (Part 270)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 13.0                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 12.36                 | 12.45                    | 12.23                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 12.49                 | 12.50                    | 12.36                  | 13.0                |
| 100             | PI/2 BPSK  | 1       | 271       | 12.17                 | 12.33                    | 11.97                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 12.35                 | 12.44                    | 12.49                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 12.48                 | 12.42                    | 12.31                  | 13.0                |
| 100             | PI/2 BPSK  | 135     | 138       | 12.31                 | 12.41                    | 12.12                  | 13.0                |
| 100             | PI/2 BPSK  | 270     | 0         | 12.32                 | 12.46                    | 12.31                  |                     |
| 100             | QPSK       | 1       | 1         | 12.05                 | 11.98                    | 11.97                  |                     |
| 100             | QPSK       | 1       | 137       | 12.41                 | 12.38                    | 12.31                  | 13.0                |
| 100             | QPSK       | 1       | 271       | 12.13                 | 12.13                    | 11.91                  |                     |
| 100             | QPSK       | 135     | 0         | 12.33                 | 12.26                    | 12.35                  |                     |
| 100             | QPSK       | 135     | 69        | 12.46                 | 12.39                    | 12.36                  | 13.0                |
| 100             | QPSK       | 135     | 138       | 12.18                 | 12.38                    | 12.41                  |                     |
| 100             | QPSK       | 270     | 0         | 12.29                 | 12.41                    | 12.49                  |                     |
| 100             | 16QAM      | 1       | 1         | 11.91                 | 12.02                    | 12.00                  | 13.0                |
| 100             | 64QAM      | 1       | 1         | 11.74                 | 11.71                    | 11.62                  | 13.0                |
| 100             | 256QAM     | 1       | 1         | 12.19                 | 12.15                    | 12.10                  | 13.0                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 13.0                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 12.28                 | 12.44                    | 12.22                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 13.0                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 12.31                 | 12.37                    | 12.14                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 13.0                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 12.30                 | 12.43                    | 12.17                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 13.0                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 12.29                 | 12.44                    | 12.20                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 13.0                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 12.29                 | 12.38                    | 12.22                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 13.0                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 12.32                 | 12.40                    | 12.22                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 13.0                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 12.34                 | 12.41                    | 12.14                  |                     |

**<FR1 n77 HPUE MIMO 2 Ant Reduced Power> (Part 270)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           | 650000                | 656000                   | 662000                 | 15.5                |
| Frequency (MHz) |            |         |           | 3750                  | 3840                     | 3930                   |                     |
| 100             | PI/2 BPSK  | 1       | 1         | 14.33                 | 14.42                    | 14.51                  |                     |
| 100             | PI/2 BPSK  | 1       | 137       | 14.85                 | 14.95                    | 14.85                  | 15.5                |
| 100             | PI/2 BPSK  | 1       | 271       | 14.61                 | 14.59                    | 14.65                  |                     |
| 100             | PI/2 BPSK  | 135     | 0         | 14.91                 | 14.95                    | 14.87                  |                     |
| 100             | PI/2 BPSK  | 135     | 69        | 15.00                 | 15.10                    | 15.15                  | 15.5                |
| 100             | PI/2 BPSK  | 135     | 138       | 15.03                 | 14.97                    | 15.01                  | 15.5                |
| 100             | PI/2 BPSK  | 270     | 0         | 14.94                 | 14.95                    | 14.92                  |                     |
| 100             | QPSK       | 1       | 1         | 14.32                 | 14.40                    | 14.42                  |                     |
| 100             | QPSK       | 1       | 137       | 14.77                 | 14.96                    | 14.80                  | 15.5                |
| 100             | QPSK       | 1       | 271       | 14.51                 | 14.64                    | 14.59                  |                     |
| 100             | QPSK       | 135     | 0         | 14.88                 | 14.89                    | 14.77                  |                     |
| 100             | QPSK       | 135     | 69        | 14.91                 | 15.09                    | 15.08                  | 15.5                |
| 100             | QPSK       | 135     | 138       | 14.93                 | 14.99                    | 14.95                  |                     |
| 100             | QPSK       | 270     | 0         | 14.87                 | 14.86                    | 14.83                  |                     |
| 100             | 16QAM      | 1       | 1         | 14.29                 | 14.31                    | 14.35                  | 15.5                |
| 100             | 64QAM      | 1       | 1         | 14.72                 | 14.95                    | 14.72                  | 15.5                |
| 100             | 256QAM     | 1       | 1         | 14.43                 | 14.62                    | 14.54                  | 15.5                |
| Channel         |            |         |           | 649334                | 656000                   | 662666                 | 15.5                |
| Frequency (MHz) |            |         |           | 3740.01               | 3840                     | 3939.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 14.29                 | 14.38                    | 14.45                  |                     |
| Channel         |            |         |           | 648668                | 656000                   | 663332                 | 15.5                |
| Frequency (MHz) |            |         |           | 3730.02               | 3840                     | 3949.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 14.32                 | 14.35                    | 14.47                  |                     |
| Channel         |            |         |           | 648334                | 656000                   | 663666                 | 15.5                |
| Frequency (MHz) |            |         |           | 3725.01               | 3840                     | 3954.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 14.23                 | 14.32                    | 14.41                  |                     |
| Channel         |            |         |           | 648000                | 656000                   | 664000                 | 15.5                |
| Frequency (MHz) |            |         |           | 3720                  | 3840                     | 3960                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 14.26                 | 14.39                    | 14.44                  |                     |
| Channel         |            |         |           | 647334                | 656000                   | 664666                 | 15.5                |
| Frequency (MHz) |            |         |           | 3710.01               | 3840                     | 3969.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 14.24                 | 14.42                    | 14.45                  |                     |
| Channel         |            |         |           | 647168                | 656000                   | 664832                 | 15.5                |
| Frequency (MHz) |            |         |           | 3707.52               | 3840                     | 3972.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 14.30                 | 14.37                    | 14.47                  |                     |
| Channel         |            |         |           | 647000                | 656000                   | 665000                 | 15.5                |
| Frequency (MHz) |            |         |           | 3705                  | 3840                     | 3975                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 14.24                 | 14.37                    | 14.42                  |                     |

**<FR1 n77 Main Ant Default Power> (Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 22.56                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 23.20                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 23.00                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 23.05                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 23.33                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 23.27                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 23.27                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 22.44                    |                        | 24.0                |
| 100             | QPSK       | 1       | 137       |                       | 23.25                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 22.91                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 23.26                    |                        | 24.0                |
| 100             | QPSK       | 135     | 69        |                       | 23.32                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 23.20                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 22.32                    |                        | 23.0                |
| 100             | 16QAM      | 1       | 1         |                       | 22.55                    |                        | 23.0                |
| 100             | 64QAM      | 1       | 1         |                       | 21.36                    |                        | 21.5                |
| 100             | 256QAM     | 1       | 1         |                       | 19.42                    |                        | 19.5                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 22.63                 | 22.48                    | 22.43                  | 24.0                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 22.49                 | 22.49                    | 22.63                  | 24.0                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 22.61                 | 22.62                    | 22.44                  | 24.0                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 22.52                 | 22.51                    | 22.56                  | 24.0                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 22.46                 | 22.47                    | 22.62                  | 24.0                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.48                 | 22.48                    | 22.49                  | 24.0                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.53                 | 22.60                    | 22.62                  | 24.0                |



## &lt;FR1 n77 MIMO 2 Ant Default Power&gt;(Part 27Q)

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 22.91                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 23.86                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 23.10                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 23.42                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 23.78                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 23.32                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 23.47                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 22.84                    |                        | 24.0                |
| 100             | QPSK       | 1       | 137       |                       | 23.72                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 23.20                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 23.44                    |                        | 24.0                |
| 100             | QPSK       | 135     | 69        |                       | 23.65                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 23.55                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 22.62                    |                        | 23.0                |
| 100             | 16QAM      | 1       | 1         |                       | 22.68                    |                        | 23.0                |
| 100             | 64QAM      | 1       | 1         |                       | 20.95                    |                        | 21.5                |
| 100             | 256QAM     | 1       | 1         |                       | 18.50                    |                        | 19.5                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 22.92                 | 22.87                    | 22.94                  | 24.0                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 22.94                 | 22.92                    | 22.92                  | 24.0                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 22.95                 | 22.89                    | 22.94                  | 24.0                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 22.94                 | 22.85                    | 22.76                  | 24.0                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 22.92                 | 22.93                    | 22.81                  | 24.0                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.86                 | 22.96                    | 22.76                  | 24.0                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.86                 | 22.91                    | 22.92                  | 24.0                |



## &lt;FR1 n77 MIMO 1 Ant Default Power&gt; (Part 27Q)

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 9.87                     |                        | 11.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 10.19                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 10.13                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 10.15                    |                        | 11.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 10.27                    |                        | 11.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 10.21                    |                        | 11.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 10.19                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 9.84                     |                        | 11.0                |
| 100             | QPSK       | 1       | 137       |                       | 10.13                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 10.08                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 10.16                    |                        | 11.0                |
| 100             | QPSK       | 135     | 69        |                       | 10.25                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 10.21                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 10.18                    |                        | 11.0                |
| 100             | 16QAM      | 1       | 1         |                       | 9.77                     |                        | 11.0                |
| 100             | 64QAM      | 1       | 1         |                       | 9.54                     |                        | 11.0                |
| 100             | 256QAM     | 1       | 1         |                       | 10.06                    |                        | 11.0                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 9.84                  | 9.87                     | 9.83                   | 11.0                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 9.83                  | 9.79                     | 9.75                   | 11.0                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 9.79                  | 9.77                     | 9.81                   | 11.0                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 9.81                  | 9.84                     | 9.79                   | 11.0                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 9.77                  | 9.87                     | 9.79                   | 11.0                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 9.77                  | 9.78                     | 9.76                   | 11.0                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 9.81                  | 9.78                     | 9.82                   | 11.0                |

**<FR1 n77 Aux Ant Default Power> (Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        | 10.0                |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 8.57                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 8.75                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 8.63                     |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 8.77                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 8.84                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 8.72                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 8.78                     |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 8.58                     |                        | 10.0                |
| 100             | QPSK       | 1       | 137       |                       | 8.68                     |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 8.60                     |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 8.83                     |                        | 10.0                |
| 100             | QPSK       | 135     | 69        |                       | 8.82                     |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 8.73                     |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 8.77                     |                        | 10.0                |
| 100             | 16QAM      | 1       | 1         |                       | 8.49                     |                        | 9.5                 |
| 100             | 64QAM      | 1       | 1         |                       | 8.21                     |                        | 9.5                 |
| 100             | 256QAM     | 1       | 1         |                       | 8.70                     |                        | 9.5                 |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.20                  | 8.28                     | 8.22                   | 10.0                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 8.14                  | 8.26                     | 8.21                   | 10.0                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 8.17                  | 8.27                     | 8.20                   | 10.0                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.16                  | 8.26                     | 8.18                   | 10.0                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.18                  | 8.25                     | 8.15                   | 10.0                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.10                  | 8.26                     | 8.14                   | 10.0                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.19                  | 8.22                     | 8.18                   | 10.0                |



**<FR1 n77 Main Ant Reduced Power> (Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 8.96                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 9.38                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 9.33                     |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 9.30                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 9.47                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 9.39                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 9.41                     |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 8.95                     |                        | 10.0                |
| 100             | QPSK       | 1       | 137       |                       | 9.30                     |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 9.23                     |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 9.34                     |                        | 10.0                |
| 100             | QPSK       | 135     | 69        |                       | 9.45                     |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 9.36                     |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 9.39                     |                        | 10.0                |
| 100             | 16QAM      | 1       | 1         |                       | 8.98                     |                        | 10.0                |
| 100             | 64QAM      | 1       | 1         |                       | 8.75                     |                        | 10.0                |
| 100             | 256QAM     | 1       | 1         |                       | 9.20                     |                        | 10.0                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.81                  | 8.92                     | 8.84                   | 10.0                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 8.84                  | 8.87                     | 8.87                   | 10.0                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 8.82                  | 8.92                     | 8.82                   | 10.0                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.86                  | 8.93                     | 8.77                   | 10.0                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.80                  | 8.87                     | 8.85                   | 10.0                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.86                  | 8.91                     | 8.87                   | 10.0                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.80                  | 8.94                     | 8.84                   | 10.0                |



## &lt;FR1 n77 MIMO 2 Ant Reduced Power&gt; ( Part 27Q)

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 10.76                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 11.05                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 10.78                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 11.01                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 11.15                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 10.95                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 11.00                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 10.67                    |                        | 12.5                |
| 100             | QPSK       | 1       | 137       |                       | 10.98                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 10.73                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 10.98                    |                        | 12.5                |
| 100             | QPSK       | 135     | 69        |                       | 11.10                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 10.92                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 11.00                    |                        | 12.5                |
| 100             | 16QAM      | 1       | 1         |                       | 10.75                    |                        | 12.0                |
| 100             | 64QAM      | 1       | 1         |                       | 10.50                    |                        | 12.0                |
| 100             | 256QAM     | 1       | 1         |                       | 10.91                    |                        | 12.0                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 10.74                 | 10.68                    | 10.66                  | 12.5                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 10.66                 | 10.66                    | 10.63                  | 12.5                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 10.71                 | 10.58                    | 10.66                  | 12.5                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 10.64                 | 10.68                    | 10.64                  | 12.5                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 10.70                 | 10.64                    | 10.61                  | 12.5                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 10.66                 | 10.60                    | 10.59                  | 12.5                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 10.69                 | 10.68                    | 10.56                  | 12.5                |



## &lt;FR1 n77 HPUE Main Ant Default Power&gt; (Part 27Q)

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 24.56                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 24.88                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 24.99                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 24.95                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 24.98                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 24.97                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 24.97                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 24.50                    |                        | 26.5                |
| 100             | QPSK       | 1       | 137       |                       | 24.56                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 24.91                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 24.96                    |                        | 26.5                |
| 100             | QPSK       | 135     | 69        |                       | 24.90                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 24.92                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 24.32                    |                        | 25.5                |
| 100             | 16QAM      | 1       | 1         |                       | 24.55                    |                        | 25.5                |
| 100             | 64QAM      | 1       | 1         |                       | 23.36                    |                        | 24.0                |
| 100             | 256QAM     | 1       | 1         |                       | 21.42                    |                        | 22.0                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 24.77                 | 24.70                    | 24.62                  | 26.5                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 24.58                 | 24.61                    | 24.75                  | 26.5                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 24.59                 | 24.61                    | 24.65                  | 26.5                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 24.66                 | 24.65                    | 24.61                  | 26.5                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 24.67                 | 24.55                    | 24.56                  | 26.5                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 24.56                 | 24.53                    | 24.71                  | 26.5                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 24.57                 | 24.62                    | 24.64                  | 26.5                |

**<FR1 n77 HPUE MIMO 2 Ant Default Power> ( Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 24.85                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 25.00                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 24.92                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 24.32                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 24.87                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 24.24                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 24.82                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 24.83                    |                        | 26.5                |
| 100             | QPSK       | 1       | 137       |                       | 24.58                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 24.57                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 24.50                    |                        | 26.5                |
| 100             | QPSK       | 135     | 69        |                       | 24.57                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 24.63                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 24.57                    |                        | 25.5                |
| 100             | 16QAM      | 1       | 1         |                       | 24.49                    |                        | 25.5                |
| 100             | 64QAM      | 1       | 1         |                       | 22.76                    |                        | 24.0                |
| 100             | 256QAM     | 1       | 1         |                       | 20.34                    |                        | 22.0                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 24.78                 | 24.90                    | 24.78                  | 26.5                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 24.89                 | 24.80                    | 24.67                  | 26.5                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 24.75                 | 24.81                    | 24.87                  | 26.5                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 24.89                 | 24.94                    | 24.67                  | 26.5                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 24.75                 | 24.78                    | 24.70                  | 26.5                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 24.80                 | 24.78                    | 24.82                  | 26.5                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 24.74                 | 24.92                    | 24.67                  | 26.5                |

**<FR1 n77 HPUE Main Ant Reduced Power> (Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 11.10                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 11.66                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 11.58                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 11.55                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 11.58                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 11.45                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 11.53                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 11.11                    |                        | 13.0                |
| 100             | QPSK       | 1       | 137       |                       | 11.40                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 11.40                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 11.55                    |                        | 13.0                |
| 100             | QPSK       | 135     | 69        |                       | 11.60                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 11.54                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 11.56                    |                        | 13.0                |
| 100             | 16QAM      | 1       | 1         |                       | 11.03                    |                        | 13.0                |
| 100             | 64QAM      | 1       | 1         |                       | 11.00                    |                        | 13.0                |
| 100             | 256QAM     | 1       | 1         |                       | 11.41                    |                        | 13.0                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 11.01                 | 11.03                    | 11.05                  | 13.0                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 11.04                 | 11.03                    | 11.02                  | 13.0                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 11.05                 | 11.03                    | 11.00                  | 13.0                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 11.07                 | 11.02                    | 11.03                  | 13.0                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 11.00                 | 11.02                    | 11.03                  | 13.0                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 11.01                 | 11.00                    | 11.04                  | 13.0                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 11.50                 | 11.05                    | 11.02                  | 13.0                |

**<FR1 n77 HPUE MIMO 2 Ant Reduced Power> (Part 27Q)**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 633332                   |                        | 15.5                |
| Frequency (MHz) |            |         |           |                       | 3499.98                  |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 13.89                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 14.46                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 14.16                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 14.30                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 14.52                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 14.39                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 14.31                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 13.82                    |                        | 15.5                |
| 100             | QPSK       | 1       | 137       |                       | 14.37                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 14.18                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 14.26                    |                        | 15.5                |
| 100             | QPSK       | 135     | 69        |                       | 14.50                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 14.36                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 14.23                    |                        | 15.5                |
| 100             | 16QAM      | 1       | 1         |                       | 14.20                    |                        | 15.5                |
| 100             | 64QAM      | 1       | 1         |                       | 14.25                    |                        | 15.5                |
| 100             | 256QAM     | 1       | 1         |                       | 14.00                    |                        | 15.5                |
| Channel         |            |         |           | 632668                | 633332                   | 634000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3490.02               | 3499.98                  | 3510                   |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 13.88                 | 13.85                    | 13.84                  | 15.5                |
| Channel         |            |         |           | 632000                | 633332                   | 634666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3480                  | 3499.98                  | 3519.99                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 13.82                 | 13.81                    | 13.77                  | 15.5                |
| Channel         |            |         |           | 631668                | 633332                   | 635000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3475.02               | 3499.98                  | 3525                   |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 13.87                 | 13.76                    | 13.76                  | 15.5                |
| Channel         |            |         |           | 631334                | 633332                   | 635332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3470.01               | 3499.98                  | 3529.98                |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 13.88                 | 13.81                    | 13.80                  | 15.5                |
| Channel         |            |         |           | 630668                | 633332                   | 636000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3460.02               | 3499.98                  | 3540                   |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 13.83                 | 13.77                    | 13.79                  | 15.5                |
| Channel         |            |         |           | 630500                | 633332                   | 636166                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3457.5                | 3499.98                  | 3542.49                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 13.88                 | 13.80                    | 13.81                  | 15.5                |
| Channel         |            |         |           | 630334                | 633332                   | 636332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3455.01               | 3499.98                  | 3544.98                |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 13.79                 | 13.78                    | 13.77                  | 15.5                |



## &lt;FR1 n78 Main Ant Default Power&gt;

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 22.26                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 23.18                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 22.28                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 22.78                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 23.04                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 22.79                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 22.94                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 22.23                    |                        | 24.0                |
| 100             | QPSK       | 1       | 137       |                       | 22.92                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 22.25                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 23.03                    |                        | 24.0                |
| 100             | QPSK       | 135     | 69        |                       | 23.10                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 22.89                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 22.90                    |                        | 23.0                |
| 100             | 16QAM      | 1       | 1         |                       | 22.29                    |                        | 23.0                |
| 100             | 64QAM      | 1       | 1         |                       | 21.39                    |                        | 21.5                |
| 100             | 256QAM     | 1       | 1         |                       | 19.46                    |                        | 19.5                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 22.17                 | 22.34                    | 22.30                  | 24.0                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 22.17                 | 22.30                    | 22.30                  | 24.0                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 22.16                 | 22.21                    | 22.22                  | 24.0                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 22.24                 | 22.23                    | 22.34                  | 24.0                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 22.26                 | 22.33                    | 22.28                  | 24.0                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.22                 | 22.27                    | 22.26                  | 24.0                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.28                 | 22.30                    | 22.18                  | 24.0                |



## &lt;FR1 n78 MIMO 2 Ant Default Power&gt;

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 22.14                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 22.99                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 22.44                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 22.62                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 22.95                    |                        | 24.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 22.80                    |                        | 23.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 22.80                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 22.12                    |                        | 24.0                |
| 100             | QPSK       | 1       | 137       |                       | 22.88                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 22.54                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 22.62                    |                        | 24.0                |
| 100             | QPSK       | 135     | 69        |                       | 22.88                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 22.80                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 22.68                    |                        | 23.0                |
| 100             | 16QAM      | 1       | 1         |                       | 21.90                    |                        | 23.0                |
| 100             | 64QAM      | 1       | 1         |                       | 20.45                    |                        | 21.5                |
| 100             | 256QAM     | 1       | 1         |                       | 18.60                    |                        | 19.5                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 22.02                 | 22.09                    | 22.03                  | 24.0                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 22.08                 | 22.02                    | 22.11                  | 24.0                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 22.03                 | 22.01                    | 22.11                  | 24.0                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 22.13                 | 22.01                    | 22.04                  | 24.0                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 22.20                 | 22.09                    | 22.08                  | 24.0                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 22.05                 | 22.02                    | 22.21                  | 24.0                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 22.04                 | 22.00                    | 22.02                  | 24.0                |



**<FR1 n78 MIMO 1 Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 9.97                     |                        | 11.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 10.01                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 10.20                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 10.18                    |                        | 11.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 10.19                    |                        | 11.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 10.25                    |                        | 11.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 10.23                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 9.65                     |                        | 11.0                |
| 100             | QPSK       | 1       | 137       |                       | 10.08                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 10.27                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 9.99                     |                        | 11.0                |
| 100             | QPSK       | 135     | 69        |                       | 10.13                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 10.16                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 10.20                    |                        | 11.0                |
| 100             | 16QAM      | 1       | 1         |                       | 9.89                     |                        | 11.0                |
| 100             | 64QAM      | 1       | 1         |                       | 9.63                     |                        | 11.0                |
| 100             | 256QAM     | 1       | 1         |                       | 10.08                    |                        | 11.0                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 9.81                  | 9.84                     | 9.82                   | 11.0                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 9.80                  | 9.74                     | 9.81                   | 11.0                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 9.79                  | 9.74                     | 9.81                   | 11.0                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 9.76                  | 9.84                     | 9.80                   | 11.0                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 9.76                  | 9.74                     | 9.82                   | 11.0                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 9.72                  | 9.79                     | 9.72                   | 11.0                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 9.77                  | 9.84                     | 9.82                   | 11.0                |

**<FR1 n78 Aux Ant Default Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 8.67                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 8.95                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 8.88                     |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 9.03                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 9.10                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 8.90                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 8.97                     |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 8.60                     |                        | 10.0                |
| 100             | QPSK       | 1       | 137       |                       | 8.90                     |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 8.79                     |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 9.01                     |                        | 10.0                |
| 100             | QPSK       | 135     | 69        |                       | 9.07                     |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 8.90                     |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 8.95                     |                        | 10.0                |
| 100             | 16QAM      | 1       | 1         |                       | 8.53                     |                        | 9.5                 |
| 100             | 64QAM      | 1       | 1         |                       | 8.34                     |                        | 9.5                 |
| 100             | 256QAM     | 1       | 1         |                       | 8.72                     |                        | 9.5                 |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.87                  | 8.93                     | 8.91                   | 10.0                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 8.80                  | 8.89                     | 8.89                   | 10.0                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 8.79                  | 8.87                     | 8.82                   | 10.0                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.79                  | 8.93                     | 8.88                   | 10.0                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.78                  | 8.87                     | 8.87                   | 10.0                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.82                  | 8.85                     | 8.83                   | 10.0                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.87                  | 8.85                     | 8.82                   | 10.0                |



**<FR1 n78 Main Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 8.33                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 8.63                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 8.55                     |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 8.60                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 8.68                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 8.51                     |                        | 10.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 8.65                     |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 8.26                     |                        | 10.0                |
| 100             | QPSK       | 1       | 137       |                       | 8.46                     |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 8.52                     |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 8.43                     |                        | 10.0                |
| 100             | QPSK       | 135     | 69        |                       | 8.58                     |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 8.64                     |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 8.60                     |                        | 10.0                |
| 100             | 16QAM      | 1       | 1         |                       | 8.24                     |                        | 10.0                |
| 100             | 64QAM      | 1       | 1         |                       | 8.20                     |                        | 10.0                |
| 100             | 256QAM     | 1       | 1         |                       | 8.28                     |                        | 10.0                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 8.19                  | 8.29                     | 8.23                   | 10.0                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 8.15                  | 8.26                     | 8.31                   | 10.0                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 8.16                  | 8.22                     | 8.32                   | 10.0                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 8.21                  | 8.23                     | 8.30                   | 10.0                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 8.15                  | 8.27                     | 8.27                   | 10.0                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 8.16                  | 8.28                     | 8.24                   | 10.0                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 8.15                  | 8.30                     | 8.23                   | 10.0                |



**<FR1 n78 MIMO 2 Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 10.65                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 10.97                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 11.07                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 11.04                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 11.10                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 11.07                    |                        | 12.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 11.03                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 10.50                    |                        | 12.5                |
| 100             | QPSK       | 1       | 137       |                       | 10.66                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 10.80                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 10.65                    |                        | 12.5                |
| 100             | QPSK       | 135     | 69        |                       | 10.74                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 10.72                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 10.71                    |                        | 12.5                |
| 100             | 16QAM      | 1       | 1         |                       | 10.61                    |                        | 12.0                |
| 100             | 64QAM      | 1       | 1         |                       | 10.32                    |                        | 12.0                |
| 100             | 256QAM     | 1       | 1         |                       | 10.78                    |                        | 12.0                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 10.60                 | 10.56                    | 10.65                  | 12.5                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 10.54                 | 10.53                    | 10.58                  | 12.5                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 10.58                 | 10.54                    | 10.63                  | 12.5                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 10.56                 | 10.52                    | 10.63                  | 12.5                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 10.51                 | 10.55                    | 10.63                  | 12.5                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 10.59                 | 10.50                    | 10.59                  | 12.5                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 10.50                 | 10.52                    | 10.60                  | 12.5                |



## &lt;FR1 n78 HPUE Main Ant Default Power&gt;

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 24.65                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 25.08                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 24.60                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 24.68                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 24.94                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 24.69                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 24.84                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 24.51                    |                        | 26.5                |
| 100             | QPSK       | 1       | 137       |                       | 24.82                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 24.55                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 24.93                    |                        | 26.5                |
| 100             | QPSK       | 135     | 69        |                       | 25.00                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 24.79                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 24.80                    |                        | 25.5                |
| 100             | 16QAM      | 1       | 1         |                       | 24.19                    |                        | 25.5                |
| 100             | 64QAM      | 1       | 1         |                       | 23.29                    |                        | 24.0                |
| 100             | 256QAM     | 1       | 1         |                       | 21.36                    |                        | 22.0                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 24.57                 | 24.75                    | 24.59                  | 26.5                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 24.50                 | 24.70                    | 24.56                  | 26.5                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 24.65                 | 24.59                    | 24.63                  | 26.5                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 24.59                 | 24.69                    | 24.70                  | 26.5                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 24.50                 | 24.59                    | 24.57                  | 26.5                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 24.55                 | 24.56                    | 24.78                  | 26.5                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 24.64                 | 24.61                    | 24.56                  | 26.5                |



## &lt;FR1 n78 HPUE MIMO 2 Ant Default Power&gt;

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 24.52                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 25.02                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 24.50                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 24.60                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 24.75                    |                        | 26.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 24.80                    |                        | 26.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 24.78                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 24.50                    |                        | 26.5                |
| 100             | QPSK       | 1       | 137       |                       | 24.69                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 24.52                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 24.52                    |                        | 26.5                |
| 100             | QPSK       | 135     | 69        |                       | 24.88                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 24.67                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 24.57                    |                        | 25.5                |
| 100             | 16QAM      | 1       | 1         |                       | 23.89                    |                        | 25.5                |
| 100             | 64QAM      | 1       | 1         |                       | 22.26                    |                        | 24.0                |
| 100             | 256QAM     | 1       | 1         |                       | 20.48                    |                        | 22.0                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 24.65                 | 24.50                    | 24.61                  | 26.5                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 24.54                 | 24.58                    | 24.60                  | 26.5                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 24.52                 | 24.63                    | 24.56                  | 26.5                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 24.50                 | 24.53                    | 24.51                  | 26.5                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 24.50                 | 24.61                    | 24.54                  | 26.5                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 24.57                 | 24.50                    | 24.51                  | 26.5                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 24.52                 | 24.54                    | 24.63                  | 26.5                |

**<FR1 n78 HPUE Main Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 12.35                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 12.65                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 12.37                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 12.63                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 12.61                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 12.46                    |                        | 13.0                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 12.63                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 12.10                    |                        | 13.0                |
| 100             | QPSK       | 1       | 137       |                       | 12.40                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 12.42                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 12.42                    |                        | 13.0                |
| 100             | QPSK       | 135     | 69        |                       | 12.44                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 12.57                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 12.63                    |                        | 13.0                |
| 100             | 16QAM      | 1       | 1         |                       | 12.19                    |                        | 13.0                |
| 100             | 64QAM      | 1       | 1         |                       | 12.16                    |                        | 13.0                |
| 100             | 256QAM     | 1       | 1         |                       | 12.18                    |                        | 13.0                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 12.22                 | 12.30                    | 12.22                  | 13.0                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 12.18                 | 12.32                    | 12.29                  | 13.0                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 12.22                 | 12.23                    | 12.20                  | 13.0                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 12.24                 | 12.24                    | 12.22                  | 13.0                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 12.17                 | 12.24                    | 12.25                  | 13.0                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 12.24                 | 12.25                    | 12.24                  | 13.0                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 12.17                 | 12.33                    | 12.22                  | 13.0                |

**<FR1 n78 HPUE MIMO 2 Ant Reduced Power>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) |
|-----------------|------------|---------|-----------|-----------------------|--------------------------|------------------------|---------------------|
| Channel         |            |         |           |                       | 650000                   |                        |                     |
| Frequency (MHz) |            |         |           |                       | 3750                     |                        |                     |
| 100             | PI/2 BPSK  | 1       | 1         |                       | 13.82                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 1       | 137       |                       | 14.33                    |                        |                     |
| 100             | PI/2 BPSK  | 1       | 271       |                       | 14.01                    |                        |                     |
| 100             | PI/2 BPSK  | 135     | 0         |                       | 14.15                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 135     | 69        |                       | 14.41                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 135     | 138       |                       | 14.33                    |                        | 15.5                |
| 100             | PI/2 BPSK  | 270     | 0         |                       | 14.26                    |                        |                     |
| 100             | QPSK       | 1       | 1         |                       | 13.62                    |                        | 15.5                |
| 100             | QPSK       | 1       | 137       |                       | 14.20                    |                        |                     |
| 100             | QPSK       | 1       | 271       |                       | 14.17                    |                        |                     |
| 100             | QPSK       | 135     | 0         |                       | 14.25                    |                        | 15.5                |
| 100             | QPSK       | 135     | 69        |                       | 14.34                    |                        |                     |
| 100             | QPSK       | 135     | 138       |                       | 14.29                    |                        |                     |
| 100             | QPSK       | 270     | 0         |                       | 14.10                    |                        | 15.5                |
| 100             | 16QAM      | 1       | 1         |                       | 14.00                    |                        | 15.5                |
| 100             | 64QAM      | 1       | 1         |                       | 14.15                    |                        | 15.5                |
| 100             | 256QAM     | 1       | 1         |                       | 13.88                    |                        | 15.5                |
| Channel         |            |         |           | 649334                | 650000                   | 650666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3740.01               | 3750                     | 3759.99                |                     |
| 80              | PI/2 BPSK  | 1       | 1         | 13.76                 | 13.75                    | 13.82                  | 15.5                |
| Channel         |            |         |           | 648668                | 650000                   | 651332                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3730.02               | 3750                     | 3769.98                |                     |
| 60              | PI/2 BPSK  | 1       | 1         | 13.73                 | 13.67                    | 13.73                  | 15.5                |
| Channel         |            |         |           | 648334                | 650000                   | 651666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3725.01               | 3750                     | 3774.99                |                     |
| 50              | PI/2 BPSK  | 1       | 1         | 13.73                 | 13.73                    | 13.82                  | 15.5                |
| Channel         |            |         |           | 648000                | 650000                   | 652000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3720                  | 3750                     | 3780                   |                     |
| 40              | PI/2 BPSK  | 1       | 1         | 13.71                 | 13.74                    | 13.81                  | 15.5                |
| Channel         |            |         |           | 647334                | 650000                   | 652666                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3710.01               | 3750                     | 3789.99                |                     |
| 20              | PI/2 BPSK  | 1       | 1         | 13.69                 | 13.65                    | 13.82                  | 15.5                |
| Channel         |            |         |           | 647168                | 650000                   | 652832                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3707.52               | 3750                     | 3792.48                |                     |
| 15              | PI/2 BPSK  | 1       | 1         | 13.71                 | 13.74                    | 13.72                  | 15.5                |
| Channel         |            |         |           | 647000                | 650000                   | 653000                 | Tune-up limit (dBm) |
| Frequency (MHz) |            |         |           | 3705                  | 3750                     | 3795                   |                     |
| 10              | PI/2 BPSK  | 1       | 1         | 13.69                 | 13.73                    | 13.76                  | 15.5                |

**<SAR test exclusion table>****General Note:**

- The below table, when the distance is < 50 mm exclusion threshold is "Ratio", when the distance is > 50 mm exclusion threshold is "mW"
- Maximum power is the source-based time-average power and represents the maximum RF output power among production units
- Per KDB 447498 D01v06, for larger devices, the test separation distance of adjacent edge configuration is determined by the closest separation between the antenna and the user.
- Per KDB 447498 D01v06, standalone SAR test exclusion threshold is applied; If the test separation distance is < 5mm, 5mm is used to determine SAR exclusion threshold.
- Per KDB 447498 D01v06, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:  

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR}$$
  - f(GHz) is the RF channel transmit frequency in GHz
  - Power and distance are rounded to the nearest mW and mm before calculation
  - The result is rounded to one decimal place for comparison
- Per KDB 447498 D01v06, at 100 MHz to 6 GHz and for *test separation distances* > 50 mm, the SAR test exclusion threshold is determined according to the following
  - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · ( f(MHz)/150)] mW, at 100 MHz to 1500 MHz
  - [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) · 10] mW at > 1500 MHz and ≤ 6 GHz

**<WWAN Main Antenna>**

| Exposure Position | Wireless Interface         | WCDMA Band V | WCDMA Band IV | WCDMA Band II | LTE Band 71/n71 | LTE Band 12 | LTE Band 13 | LTE Band 14 | LTE Band 17 | LTE Band 5/n5 | LTE Band 26 | LTE Band 4 | LTE Band 66/n66 | LTE Band 2/n2 | LTE Band 25/n25 | LTE Band 30/n30 | LTE Band 7/n7 | LTE Band 38/n38 | LTE Band 41/n41 | LTE Band 48 | LTE Band n77/n78 |
|-------------------|----------------------------|--------------|---------------|---------------|-----------------|-------------|-------------|-------------|-------------|---------------|-------------|------------|-----------------|---------------|-----------------|-----------------|---------------|-----------------|-----------------|-------------|------------------|
|                   | Calculated Frequency (MHz) | 846          | 1750          | 1907          | 695             | 715         | 784         | 795         | 713         | 848           | 848         | 1754       | 1779            | 1909          | 1914            | 2312            | 2567          | 2617            | 2687            | 3697        | 3975             |
|                   | Maximum power (dBm)        | 24.5         | 24.5          | 24.5          | 25.0            | 25.0        | 25.0        | 25.0        | 25.0        | 25.0          | 25.0        | 24.0       | 24.0            | 24.0          | 24.0            | 23.0            | 24.0          | 24.0            | 24.0            | 21.0        | 24.0             |
|                   | Maximum rated power(mW)    | 281.84       | 281.84        | 281.84        | 316.23          | 316.23      | 316.23      | 316.23      | 316.23      | 316.23        | 316.23      | 251.19     | 251.19          | 251.19        | 251.19          | 199.53          | 251.19        | 251.19          | 251.19          | 125.89      | 251.19           |
| Bottom Face       | Separation distance(mm)    | 5.0          |               |               |                 |             |             |             |             |               |             |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 51.9         | 74.6          | 77.8          | 52.7            | 53.5        | 56.0        | 56.4        | 53.4        | 58.2          | 58.2        | 66.5       | 67.0            | 69.4          | 69.5            | 60.7            | 80.5          | 81.3            | 82.4            | 48.4        | 100.2            |
|                   | Testing required?          | Yes          | Yes           | Yes           | Yes             | Yes         | Yes         | Yes         | Yes         | Yes           | Yes         | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |
| Edge 1            | Separation distance(mm)    | 5.0          |               |               |                 |             |             |             |             |               |             |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 51.9         | 74.6          | 77.8          | 52.7            | 53.5        | 56.0        | 56.4        | 53.4        | 58.2          | 58.2        | 66.5       | 67.0            | 69.4          | 69.5            | 60.7            | 80.5          | 81.3            | 82.4            | 48.4        | 100.2            |
|                   | Testing required?          | Yes          | Yes           | Yes           | Yes             | Yes         | Yes         | Yes         | Yes         | Yes           | Yes         | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |
| Edge 2            | Separation distance(mm)    | 5.0          |               |               |                 |             |             |             |             |               |             |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 51.9         | 74.6          | 77.8          | 52.7            | 53.5        | 56.0        | 56.4        | 53.4        | 58.2          | 58.2        | 66.5       | 67.0            | 69.4          | 69.5            | 60.7            | 80.5          | 81.3            | 82.4            | 48.4        | 100.2            |
|                   | Testing required?          | Yes          | Yes           | Yes           | Yes             | Yes         | Yes         | Yes         | Yes         | Yes           | Yes         | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |
| Edge 3            | Separation distance(mm)    | 202.0        |               |               |                 |             |             |             |             |               |             |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 1020.0       | 1633.0        | 1629.0        | 884.0           | 902.0       | 964.0       | 974.0       | 900.0       | 1022.0        | 1022.0      | 1633.0     | 1632.0          | 1629.0        | 1628.0          | 1619.0          | 1614.0        | 1613.0          | 1612.0          | 1598.0      | 1595.0           |
|                   | Testing required?          | No           | No            | No            | No              | No          | No          | No          | No          | No            | No          | No         | No              | No            | No              | No              | No            | No              | No              | No          | No               |
| Edge 4            | Separation distance(mm)    | 226.0        |               |               |                 |             |             |             |             |               |             |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 1156.0       | 1873.0        | 1869.0        | 995.0           | 1016.0      | 1089.0      | 1101.0      | 1014.0      | 1158.0        | 1158.0      | 1873.0     | 1872.0          | 1869.0        | 1868.0          | 1859.0          | 1854.0        | 1853.0          | 1852.0          | 1838.0      | 1835.0           |
|                   | Testing required?          | No           | No            | No            | No              | No          | No          | No          | No          | No            | No          | No         | No              | No            | No              | No              | No            | No              | No              | No          | No               |
| Bottom of Laptop  | Separation distance(mm)    | 5.0          |               |               |                 |             |             |             |             |               |             |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 51.9         | 74.6          | 77.8          | 52.7            | 53.5        | 56.0        | 56.4        | 53.4        | 58.2          | 58.2        | 66.5       | 67.0            | 69.4          | 69.5            | 60.7            | 80.5          | 81.3            | 82.4            | 48.4        | 100.2            |
|                   | Testing required?          | Yes          | Yes           | Yes           | Yes             | Yes         | Yes         | Yes         | Yes         | Yes           | Yes         | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |

**<WWAN Aux Antenna>**

| Exposure Position | Wireless Interface         | LTE Band n41 | LTE Band n77/n78 |
|-------------------|----------------------------|--------------|------------------|
|                   | Calculated Frequency (MHz) | 2687         | 3975             |
|                   | Maximum power (dBm)        | 12.0         | 10.0             |
|                   | Maximum rated power(mW)    | 15.85        | 10.00            |
| Bottom Face       | Separation distance(mm)    | 5.0          |                  |
|                   | exclusion threshold        | 5.2          | 4.0              |
|                   | Testing required?          | Yes          | Yes              |
| Edge 1            | Separation distance(mm)    | 5.0          |                  |
|                   | exclusion threshold        | 5.2          | 4.0              |
|                   | Testing required?          | Yes          | Yes              |
| Edge 2            | Separation distance(mm)    | 227.6        |                  |
|                   | exclusion threshold        | 1868.0       | 1851.0           |
|                   | Testing required?          | No           | No               |
| Edge 3            | Separation distance(mm)    | 202.0        |                  |
|                   | exclusion threshold        | 1612.0       | 1595.0           |
|                   | Testing required?          | No           | No               |
| Edge 4            | Separation distance(mm)    | 5.0          |                  |
|                   | exclusion threshold        | 5.2          | 4.0              |
|                   | Testing required?          | Yes          | Yes              |
| Bottom of Laptop  | Separation distance(mm)    | 5.0          |                  |
|                   | exclusion threshold        | 5.2          | 4.0              |
|                   | Testing required?          | Yes          | Yes              |

**<WWAN MIMO 1 Antenna>**

| Exposure Position | Wireless Interface         | LTE Band n41 | LTE Band n77/n78 |
|-------------------|----------------------------|--------------|------------------|
|                   | Calculated Frequency (MHz) | 2687         | 3975             |
|                   | Maximum power (dBm)        | 9.0          | 11.0             |
|                   | Maximum rated power(mW)    | 7.94         | 12.59            |
| Bottom Face       | Separation distance(mm)    | 5.0          |                  |
|                   | exclusion threshold        | 2.6          | 5.0              |
|                   | Testing required?          | No           | Yes              |
| Edge 1            | Separation distance(mm)    | 23.9         |                  |
|                   | exclusion threshold        | 0.5          | 1.1              |
|                   | Testing required?          | No           | No               |
| Edge 2            | Separation distance(mm)    | 5.0          |                  |
|                   | exclusion threshold        | 2.6          | 5.0              |
|                   | Testing required?          | No           | Yes              |
| Edge 3            | Separation distance(mm)    | 159.6        |                  |
|                   | exclusion threshold        | 1188.0       | 1171.0           |
|                   | Testing required?          | No           | No               |
| Edge 4            | Separation distance(mm)    | 301.0        |                  |
|                   | exclusion threshold        | 2602.0       | 2585.0           |
|                   | Testing required?          | No           | No               |
| Bottom of Laptop  | Separation distance(mm)    | 5.0          |                  |
|                   | exclusion threshold        | 2.6          | 5.0              |
|                   | Testing required?          | No           | Yes              |

**<WWAN MIMO 2 Antenna>**

| Exposure Position | Wireless Interface         | WCDMA Band IV | WCDMA Band II | LTE Band 4 | LTE Band 66/n66 | LTE Band 2/n2 | LTE Band 25/n25 | LTE Band 30/n30 | LTE Band 7/n7 | LTE Band 38/n38 | LTE Band 41/n41 | LTE Band 48 | LTE Band n77/n78 |
|-------------------|----------------------------|---------------|---------------|------------|-----------------|---------------|-----------------|-----------------|---------------|-----------------|-----------------|-------------|------------------|
|                   | Calculated Frequency (MHz) | 1750          | 1907          | 1754       | 1779            | 1909          | 1914            | 2312            | 2567          | 2617            | 2687            | 3697        | 3975             |
|                   | Maximum power (dBm)        | 24.0          | 24.0          | 24.0       | 24.0            | 24.0          | 24.0            | 23.0            | 24.0          | 24.0            | 24.0            | 22.0        | 24.0             |
|                   | Maximum rated power(mW)    | 251.19        | 251.19        | 251.19     | 251.19          | 251.19        | 251.19          | 199.53          | 251.19        | 251.19          | 251.19          | 158.49      | 251.19           |
| Bottom Face       | Separation distance(mm)    | 5.0           |               |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 66.5          | 69.4          | 66.5       | 67.0            | 69.4          | 69.5            | 60.7            | 80.5          | 81.3            | 82.4            | 61.0        | 100.2            |
|                   | Testing required?          | Yes           | Yes           | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |
| Edge 1            | Separation distance(mm)    | 25.5          |               |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 13.0          | 13.6          | 13.1       | 13.1            | 13.6          | 13.6            | 11.9            | 15.8          | 15.9            | 16.2            | 12.0        | 19.6             |
|                   | Testing required?          | Yes           | Yes           | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |
| Edge 2            | Separation distance(mm)    | 301.0         |               |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 2623.0        | 2619.0        | 2623.0     | 2622.0          | 2619.0        | 2618.0          | 2609.0          | 2604.0        | 2603.0          | 2602.0          | 2588.0      | 2585.0           |
|                   | Testing required?          | No            | No            | No         | No              | No            | No              | No              | No            | No              | No              | No          | No               |
| Edge 3            | Separation distance(mm)    | 158.0         |               |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 1193.0        | 1189.0        | 1193.0     | 1192.0          | 1189.0        | 1188.0          | 1179.0          | 1174.0        | 1173.0          | 1172.0          | 1158.0      | 1155.0           |
|                   | Testing required?          | No            | No            | No         | No              | No            | No              | No              | No            | No              | No              | No          | No               |
| Edge 4            | Separation distance(mm)    | 5.0           |               |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 66.5          | 69.4          | 66.5       | 67.0            | 69.4          | 69.5            | 60.7            | 80.5          | 81.3            | 82.4            | 61.0        | 100.2            |
|                   | Testing required?          | Yes           | Yes           | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |
| Bottom of Laptop  | Separation distance(mm)    | 5.0           |               |            |                 |               |                 |                 |               |                 |                 |             |                  |
|                   | exclusion threshold        | 66.5          | 69.4          | 66.5       | 67.0            | 69.4          | 69.5            | 60.7            | 80.5          | 81.3            | 82.4            | 61.0        | 100.2            |
|                   | Testing required?          | Yes           | Yes           | Yes        | Yes             | Yes           | Yes             | Yes             | Yes           | Yes             | Yes             | Yes         | Yes              |

### 13. SAR Test Results

**General Note:**

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
  - a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
  - b. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor
  - c. For TDD LTE SAR measurement, the duty cycle 1:1.59 (62.9 %) was used perform testing and considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix  $63.3\%/62.9\% = 1.006$  is applied to scale-up the measured SAR result. The Reported TDD LTE SAR = measured SAR (W/kg)\* Tune-up Scaling Factor\* scaling factor for extended cyclic prefix.
2. Per KDB 447498 D01v06, for each exposure position, testing of other required channels within the operating mode of a frequency band is not required when the *reported* 1-g or 10-g SAR for the mid-band or highest output power channel is:
  - $\leq 0.8$  W/kg or  $2.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz
  - $\leq 0.6$  W/kg or  $1.5$  W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
  - $\leq 0.4$  W/kg or  $1.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg.
4. For the exposure positions that proximity sensor power reduction is applied for SAR compliance, additional SAR testing with EUT transmitting full power in sensor trigger distance was performed according to section 4. The test results just verification the sensor trigger distance to meet KDB 616217 requirement, when in normal usage will not operate at trigger distance, therefore, these results were not using performed Sim-Tx analysis

**UMTS Note:**

1. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".
2. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is  $\leq \frac{1}{4}$  dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than  $\frac{1}{4}$  dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA.

**LTE Note:**

1. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
2. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
3. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
4. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, 16QAM SAR testing is not required.
5. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is  $>$  not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.
6. For LTE B4/B5/B12/B17/B26/B38/B71 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.
7. LTE band 2/4/5/17/38 SAR test was covered by Band 25/66/26/12/41; according to TCB workshop, SAR test for overlapping LTE bands can be reduced if
  - a. The maximum output power, including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion.
  - b. The channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

**5G NR Note:**

1. The device support SCS 15KHz and 30KHz for NR FDD and TDD and have the same maximum power, in this report only select SCS 15KHz for NR FDD and SCS 30KHz for NR TDD power measurement, due to SCS 15KHz for FDD and SCS 30KHz for TDD have highest support bandwidth, and the NR SAR is  $< 1g$  SAR 1.45W/kg. Output power and SAR measurement for SCS30KHz for FDD and SCS15KHz for TDD shall be not necessary.
2. Referencing the procedure in KDB 941225, the test procedures are outlined as below:
  - a. To start SAR test for the largest channel bandwidth for PI/2 BPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. Also do SAR test for 50% RB allocation for PI/2 BPSK SAR testing using 1RB PI/2 BPSK allocation procedure
  - b. For PI/2 BPSK with 100% RB allocation, SAR test is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.
  - c. For higher modulation QPSK/16QAM/64QAM/256QAM, according to tune-up document the power level is not  $\frac{1}{2}$  dB higher than the same configuration in PI/2 BPSK, also reported SAR for the PI/2 BPSK configuration is less than 1.45 W/kg, QPSK/16QAM/64QAM/256QAM SAR testing are not required.
  - d. Smaller bandwidth output power for each RB allocation configuration for this device is not  $\frac{1}{2}$  dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is  $\leq 1.45$  W/kg, smaller bandwidth SAR testing is not required for this device
  - e. The NR n5/41/66/71/77 the maximum bandwidth does not support three non-overlapping channels, per KDB 941225 D05v02r05, when a device supports overlapping channel assignment in a channel bandwidth.
  - f. The NR n2/38 SAR test was covered by NR n25/41; due to SAR test for overlapping NR bands can be reduced if the maximum power including tolerance, for the smaller band is  $\leq$  the larger band to qualify for the SAR test exclusion and the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band
  - g. Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission. And only for TDD power class2 was performed using Factory Test Mode software to establish the connection and perform SAR with 50% transmission

**13.1 Body SAR****<WCDMA SAR>**

| Plot No. | Band            | Mode         | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.  | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-----------------|--------------|------------------|----------|----------------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom of Laptop | 0mm      | Amphenol       | ON              | 9538 | 1907.6      | 13.04               | 13.50               | 1.112                  | -0.17            | 0.352                  | 0.391                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 9538 | 1907.6      | 13.04               | 13.50               | 1.112                  | -0.07            | 1.000                  | 1.112                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 9262 | 1852.4      | 12.98               | 13.50               | 1.127                  | 0.14             | 0.874                  | 0.985                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 9400 | 1880        | 12.97               | 13.50               | 1.130                  | 0.04             | 0.914                  | 1.033                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Edge 1           | 0mm      | Amphenol       | ON              | 9538 | 1907.6      | 13.04               | 13.50               | 1.112                  | -0.05            | 0.279                  | 0.310                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Edge 2           | 0mm      | Amphenol       | ON              | 9538 | 1907.6      | 13.04               | 13.50               | 1.112                  | 0.07             | 0.075                  | 0.083                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 9538 | 1907.6      | 22.96               | 24.50               | 1.426                  | 0.04             | 0.098                  | 0.140                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom Face      | 34mm     | Amphenol       | OFF             | 9538 | 1907.6      | 22.96               | 24.50               | 1.426                  | -0.03            | 0.063                  | 0.090                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Edge 1           | 24mm     | Amphenol       | OFF             | 9538 | 1907.6      | 22.96               | 24.50               | 1.426                  | 0.02             | 0.105                  | 0.150                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Edge 2           | 6mm      | Amphenol       | OFF             | 9538 | 1907.6      | 22.96               | 24.50               | 1.426                  | 0.08             | 0.085                  | 0.121                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 9538 | 1907.6      | 13.04               | 13.50               | 1.112                  | 0.03             | 0.858                  | 0.954                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 9262 | 1852.4      | 12.98               | 13.50               | 1.127                  | 0.12             | 0.750                  | 0.845                  |
|          | WCDMA II_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 9400 | 1880        | 12.97               | 13.50               | 1.130                  | 0.04             | 0.784                  | 0.886                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Bottom of Laptop | 0mm      | Amphenol       | ON              | 9538 | 1907.6      | 12.41               | 12.50               | 1.021                  | -0.14            | 0.219                  | 0.224                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 9538 | 1907.6      | 12.41               | 12.50               | 1.021                  | 0.06             | 1.050                  | 1.072                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 9262 | 1852.4      | 12.30               | 12.50               | 1.047                  | 0.18             | 0.889                  | 0.931                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 9400 | 1880        | 12.33               | 12.50               | 1.040                  | 0.11             | 0.962                  | 1.000                  |
| 01       | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | Amphenol       | ON              | 9538 | 1907.6      | 12.41               | 12.50               | 1.021                  | -0.15            | 1.140                  | 1.164                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | Amphenol       | ON              | 9262 | 1852.4      | 12.30               | 12.50               | 1.047                  | 0.05             | 1.030                  | 1.079                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | Amphenol       | ON              | 9400 | 1880        | 12.33               | 12.50               | 1.040                  | 0.07             | 1.070                  | 1.113                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 9538 | 1907.6      | 22.73               | 24.00               | 1.340                  | 0.04             | 0.188                  | 0.252                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 24mm     | Amphenol       | OFF             | 9538 | 1907.6      | 22.73               | 24.00               | 1.340                  | -0.09            | 0.164                  | 0.220                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 1           | 0mm      | Amphenol       | OFF             | 9538 | 1907.6      | 22.73               | 24.00               | 1.340                  | 0.13             | 0.045                  | 0.060                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 4           | 22mm     | Amphenol       | OFF             | 9538 | 1907.6      | 22.73               | 24.00               | 1.340                  | 0.05             | 0.261                  | 0.350                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | NVC            | ON              | 9538 | 1907.6      | 12.41               | 12.50               | 1.021                  | 0.12             | 0.934                  | 0.954                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | NVC            | ON              | 9262 | 1852.4      | 12.30               | 12.50               | 1.047                  | -0.11            | 0.089                  | 0.093                  |
|          | WCDMA II_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | NVC            | ON              | 9400 | 1880        | 12.33               | 12.50               | 1.040                  | -0.03            | 0.865                  | 0.900                  |



| Plot No. | Band            | Mode         | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.  | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-----------------|--------------|------------------|----------|----------------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 02       | WCDMA IV_Main   | RMC 12.2Kbps | Bottom of Laptop | 0mm      | Amphenol       | ON              | 1312 | 1712.4      | 13.44               | 13.50               | 1.014                  | -0.07            | 0.333                  | 0.338                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 1312 | 1712.4      | 13.44               | 13.50               | 1.014                  | -0.13            | 1.070                  | 1.085                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 1413 | 1732.6      | 13.35               | 13.50               | 1.035                  | 0                | 1.100                  | 1.139                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 1513 | 1752.6      | 13.29               | 13.50               | 1.050                  | -0.17            | 1.080                  | 1.134                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Edge 1           | 0mm      | Amphenol       | ON              | 1312 | 1712.4      | 13.44               | 13.50               | 1.014                  | -0.05            | 0.303                  | 0.307                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Edge 2           | 0mm      | Amphenol       | ON              | 1312 | 1712.4      | 13.44               | 13.50               | 1.014                  | -0.12            | 0.145                  | 0.147                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 1312 | 1712.4      | 23.30               | 24.50               | 1.318                  | 0.04             | 0.136                  | 0.179                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom Face      | 34mm     | Amphenol       | OFF             | 1312 | 1712.4      | 23.30               | 24.50               | 1.318                  | 0.07             | 0.091                  | 0.120                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Edge 1           | 24mm     | Amphenol       | OFF             | 1312 | 1712.4      | 23.30               | 24.50               | 1.318                  | 0.12             | 0.137                  | 0.181                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Edge 2           | 6mm      | Amphenol       | OFF             | 1312 | 1712.4      | 23.30               | 24.50               | 1.318                  | 0.09             | 0.087                  | 0.115                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 1413 | 1732.6      | 13.35               | 13.50               | 1.035                  | -0.14            | 1.040                  | 1.077                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 1312 | 1712.4      | 13.44               | 13.50               | 1.014                  | -0.03            | 0.868                  | 0.880                  |
|          | WCDMA IV_Main   | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 1513 | 1752.6      | 13.29               | 13.50               | 1.050                  | -0.02            | 0.958                  | 1.005                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Bottom of Laptop | 0mm      | Amphenol       | ON              | 1513 | 1752.6      | 11.76               | 12.50               | 1.186                  | 0.14             | 0.220                  | 0.261                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 1513 | 1752.6      | 11.76               | 12.50               | 1.186                  | -0.17            | 0.816                  | 0.968                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 1312 | 1712.4      | 11.70               | 12.50               | 1.202                  | 0.08             | 0.790                  | 0.950                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 1413 | 1732.6      | 11.74               | 12.50               | 1.191                  | -0.01            | 0.816                  | 0.972                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | Amphenol       | ON              | 1513 | 1752.6      | 11.76               | 12.50               | 1.186                  | -0.18            | 0.893                  | 1.059                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | Amphenol       | ON              | 1312 | 1712.4      | 11.70               | 12.50               | 1.202                  | -0.13            | 0.912                  | 1.096                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | Amphenol       | ON              | 1413 | 1732.6      | 11.74               | 12.50               | 1.191                  | 0.15             | 0.912                  | 1.086                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 1413 | 1732.6      | 23.00               | 24.00               | 1.259                  | 0.03             | 0.207                  | 0.261                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Bottom Face      | 24mm     | Amphenol       | OFF             | 1413 | 1732.6      | 23.00               | 24.00               | 1.259                  | 0.08             | 0.128                  | 0.161                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 1           | 0mm      | Amphenol       | OFF             | 1413 | 1732.6      | 23.00               | 24.00               | 1.259                  | 0.06             | 0.001                  | 0.001                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 4           | 22mm     | Amphenol       | OFF             | 1413 | 1732.6      | 23.00               | 24.00               | 1.259                  | -0.02            | 0.212                  | 0.267                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | NVC            | ON              | 1312 | 1712.4      | 11.70               | 12.50               | 1.202                  | -0.07            | 0.809                  | 0.973                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | NVC            | ON              | 1513 | 1752.6      | 11.76               | 12.50               | 1.186                  | 0.03             | 0.841                  | 0.997                  |
|          | WCDMA IV_MIMO 2 | RMC 12.2Kbps | Edge 4           | 0mm      | NVC            | ON              | 1413 | 1732.6      | 11.74               | 12.50               | 1.191                  | 0.08             | 0.738                  | 0.879                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom of Laptop | 0mm      | Amphenol       | ON              | 4132 | 826.4       | 13.98               | 14.50               | 1.127                  | -0.13            | 0.227                  | 0.256                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 4132 | 826.4       | 13.98               | 14.50               | 1.127                  | -0.12            | 0.789                  | 0.889                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 4182 | 836.4       | 13.94               | 14.50               | 1.138                  | -0.03            | 0.850                  | 0.967                  |
| 03       | WCDMA V_Main    | RMC 12.2Kbps | Bottom Face      | 0mm      | Amphenol       | ON              | 4233 | 846.6       | 13.85               | 14.50               | 1.161                  | -0.13            | 0.869                  | 1.009                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 1           | 0mm      | Amphenol       | ON              | 4132 | 826.4       | 13.98               | 14.50               | 1.127                  | 0.11             | 0.204                  | 0.230                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 2           | 0mm      | Amphenol       | ON              | 4132 | 826.4       | 13.98               | 14.50               | 1.127                  | -0.17            | 0.771                  | 0.869                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 2           | 0mm      | Amphenol       | ON              | 4182 | 836.4       | 13.94               | 14.50               | 1.138                  | 0.16             | 0.789                  | 0.898                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 2           | 0mm      | Amphenol       | ON              | 4233 | 846.6       | 13.85               | 14.50               | 1.161                  | 0.18             | 0.829                  | 0.963                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 4132 | 826.4       | 22.87               | 24.50               | 1.455                  | 0.04             | 0.127                  | 0.185                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom Face      | 34mm     | Amphenol       | OFF             | 4132 | 826.4       | 22.87               | 24.50               | 1.455                  | -0.07            | 0.001                  | 0.001                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 1           | 24mm     | Amphenol       | OFF             | 4132 | 826.4       | 22.87               | 24.50               | 1.455                  | 0.03             | 0.001                  | 0.001                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 2           | 6mm      | Amphenol       | OFF             | 4132 | 826.4       | 22.87               | 24.50               | 1.455                  | 0.05             | 0.430                  | 0.626                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 3           | 0mm      | Amphenol       | OFF             | 4132 | 826.4       | 22.87               | 24.50               | 1.455                  | 0.17             | 0.001                  | 0.001                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Edge 4           | 0mm      | Amphenol       | OFF             | 4132 | 826.4       | 22.87               | 24.50               | 1.455                  | 0.19             | 0.001                  | 0.001                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 4233 | 846.6       | 13.85               | 14.50               | 1.161                  | -0.09            | 0.810                  | 0.941                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 4132 | 826.4       | 13.98               | 14.50               | 1.127                  | -0.12            | 0.843                  | 0.950                  |
|          | WCDMA V_Main    | RMC 12.2Kbps | Bottom Face      | 0mm      | NVC            | ON              | 4182 | 836.4       | 13.94               | 14.50               | 1.138                  | -0.05            | 0.806                  | 0.917                  |



## &lt;FDD LTE SAR&gt;

| Plot No. | Band               | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|--------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.31               | 10.50               | 1.045                  | 0.02             | 0.244                  | 0.255                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.08               | 10.50               | 1.102                  | 0.03             | 0.237                  | 0.261                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.31               | 10.50               | 1.045                  | 0.09             | 0.957                  | 1.000                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 20850 | 2510        | 10.16               | 10.50               | 1.081                  | -0.05            | 0.859                  | 0.929                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 21100 | 2535        | 10.24               | 10.50               | 1.062                  | -0.03            | 0.935                  | 0.993                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.08               | 10.50               | 1.102                  | -0.02            | 0.996                  | 1.097                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 20850 | 2510        | 9.87                | 10.50               | 1.156                  | -0.04            | 0.867                  | 1.002                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 21100 | 2535        | 9.98                | 10.50               | 1.127                  | -0.02            | 0.938                  | 1.057                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.05               | 10.50               | 1.109                  | -0.03            | 0.986                  | 1.094                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.31               | 10.50               | 1.045                  | 0.02             | 0.191                  | 0.200                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Edge 1           | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.08               | 10.50               | 1.102                  | 0.08             | 0.194                  | 0.214                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Edge 2           | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.31               | 10.50               | 1.045                  | 0.12             | 0.001                  | 0.001                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Edge 2           | 0mm      | Amphenol       | ON              | 21350 | 2560        | 10.08               | 10.50               | 1.102                  | 0.11             | 0.001                  | 0.001                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 21350 | 2560        | 22.57               | 24.00               | 1.390                  | 0.08             | 0.069                  | 0.096                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | -0.16            | 0.052                  | 0.072                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Bottom Face      | 34mm     | Amphenol       | OFF             | 21350 | 2560        | 22.57               | 24.00               | 1.390                  | 0.19             | 0.082                  | 0.114                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Bottom Face      | 34mm     | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | -0.03            | 0.067                  | 0.093                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Edge 1           | 24mm     | Amphenol       | OFF             | 21350 | 2560        | 22.57               | 24.00               | 1.390                  | -0.12            | 0.104                  | 0.145                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Edge 1           | 24mm     | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | 0.06             | 0.088                  | 0.122                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 1       | 49        | Edge 2           | 6mm      | Amphenol       | OFF             | 21350 | 2560        | 22.57               | 24.00               | 1.390                  | -0.13            | 0.156                  | 0.217                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Edge 2           | 6mm      | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | -0.11            | 0.128                  | 0.178                  |
|          | LTE Band 7C_Main   | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 21350 | 2560        | 9.74                | 10.50               | 1.191                  | 0.18             | 0.852                  | 1.015                  |
|          | LTE Band 7C_Main   | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 20850 | 2510        | 9.60                | 10.50               | 1.230                  | 0.05             | 0.848                  | 1.043                  |
|          | LTE Band 7C_Main   | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 21100 | 2535        | 9.72                | 10.50               | 1.197                  | 0.16             | 0.877                  | 1.050                  |
|          | LTE Band 7_Main    | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | NVC            | ON              | 21350 | 2560        | 10.08               | 10.50               | 1.102                  | 0.01             | 0.648                  | 0.714                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.98                | 9.50                | 1.127                  | 0                | 0.153                  | 0.172                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.97                | 9.50                | 1.130                  | 0.03             | 0.164                  | 0.185                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.98                | 9.50                | 1.127                  | -0.03            | 0.927                  | 1.045                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 20850 | 2510        | 8.84                | 9.50                | 1.164                  | 0.03             | 0.877                  | 1.021                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 21350 | 2560        | 8.90                | 9.50                | 1.148                  | 0.01             | 0.946                  | 1.086                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.97                | 9.50                | 1.130                  | -0.05            | 0.976                  | 1.103                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 20850 | 2510        | 8.94                | 9.50                | 1.138                  | 0.01             | 0.912                  | 1.038                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 21350 | 2560        | 8.96                | 9.50                | 1.132                  | -0.03            | 0.995                  | 1.127                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.96                | 9.50                | 1.132                  | 0.03             | 0.988                  | 1.119                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.98                | 9.50                | 1.127                  | 0.02             | 0.929                  | 1.047                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 20850 | 2510        | 8.84                | 9.50                | 1.164                  | -0.02            | 0.872                  | 1.015                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 21350 | 2560        | 8.90                | 9.50                | 1.148                  | 0.01             | 0.982                  | 1.127                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.97                | 9.50                | 1.130                  | 0.05             | 0.986                  | 1.114                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 20850 | 2510        | 8.94                | 9.50                | 1.138                  | -0.03            | 0.933                  | 1.061                  |
| 04       | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 21350 | 2560        | 8.96                | 9.50                | 1.132                  | -0.04            | 1.020                  | 1.155                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 100     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.96                | 9.50                | 1.132                  | 0.04             | 0.989                  | 1.120                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 21350 | 2560        | 22.53               | 24.00               | 1.403                  | -0.19            | 0.294                  | 0.412                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | -0.13            | 0.249                  | 0.345                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 24mm     | Amphenol       | OFF             | 21350 | 2560        | 22.53               | 24.00               | 1.403                  | 0.18             | 0.381                  | 0.534                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 24mm     | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | 0.05             | 0.324                  | 0.449                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | OFF             | 21350 | 2560        | 22.53               | 24.00               | 1.403                  | -0.01            | 0.001                  | 0.001                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 1           | 0mm      | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | 0.05             | 0.001                  | 0.001                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 22mm     | Amphenol       | OFF             | 21350 | 2560        | 22.53               | 24.00               | 1.403                  | 0.09             | 0.395                  | 0.554                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 22mm     | Amphenol       | OFF             | 21350 | 2560        | 21.58               | 23.00               | 1.387                  | -0.08            | 0.335                  | 0.465                  |
|          | LTE Band 7C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 21100 | 2535        | 8.99                | 9.50                | 1.125                  | 0.02             | 0.835                  | 0.939                  |
|          | LTE Band 7C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 20850 | 2510        | 8.94                | 9.50                | 1.138                  | 0.18             | 0.867                  | 0.986                  |
|          | LTE Band 7C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 21350 | 2560        | 8.94                | 9.50                | 1.138                  | 0.05             | 0.829                  | 0.943                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 21350 | 2560        | 8.96                | 9.50                | 1.132                  | 0.04             | 0.769                  | 0.871                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 21100 | 2535        | 8.97                | 9.50                | 1.130                  | -0.03            | 0.753                  | 0.851                  |
|          | LTE Band 7_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 20850 | 2510        | 8.94                | 9.50                | 1.138                  | 0.01             | 0.760                  | 0.865                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band             | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.50               | 14.50               | 1.000                  | 0.11             | 0.130                  | 0.130                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 12        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.39               | 14.50               | 1.026                  | -0.01            | 0.124                  | 0.127                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Bottom Face      | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.50               | 14.50               | 1.000                  | 0.09             | 0.301                  | 0.301                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 12        | Bottom Face      | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.39               | 14.50               | 1.026                  | -0.11            | 0.317                  | 0.325                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Edge 1           | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.50               | 14.50               | 1.000                  | 0.11             | 0.050                  | 0.050                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 12        | Edge 1           | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.39               | 14.50               | 1.026                  | -0.19            | 0.049                  | 0.050                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Edge 2           | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.50               | 14.50               | 1.000                  | -0.05            | 0.845                  | 0.845                  |
| 05       | LTE Band 12_Main | 10M      | QPSK       | 25      | 12        | Edge 2           | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.39               | 14.50               | 1.026                  | -0.02            | 0.964                  | 0.989                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 50      | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 23095 | 707.5       | 14.23               | 14.50               | 1.064                  | 0.15             | 0.858                  | 0.913                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 23095 | 707.5       | 23.81               | 25.00               | 1.315                  | -0.07            | 0.052                  | 0.068                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 25        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 23095 | 707.5       | 22.76               | 24.00               | 1.330                  | 0.15             | 0.041                  | 0.055                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Bottom Face      | 34mm     | Amphenol       | OFF             | 23095 | 707.5       | 23.81               | 25.00               | 1.315                  | 0.04             | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 25        | Bottom Face      | 34mm     | Amphenol       | OFF             | 23095 | 707.5       | 22.76               | 24.00               | 1.330                  | -0.04            | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Edge 1           | 24mm     | Amphenol       | OFF             | 23095 | 707.5       | 23.81               | 25.00               | 1.315                  | -0.08            | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 25        | Edge 1           | 24mm     | Amphenol       | OFF             | 23095 | 707.5       | 22.76               | 24.00               | 1.330                  | 0.06             | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Edge 2           | 6mm      | Amphenol       | OFF             | 23095 | 707.5       | 23.81               | 25.00               | 1.315                  | -0.15            | 0.310                  | 0.408                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 25        | Edge 2           | 6mm      | Amphenol       | OFF             | 23095 | 707.5       | 22.76               | 24.00               | 1.330                  | 0.14             | 0.275                  | 0.366                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Edge 3           | 0mm      | Amphenol       | OFF             | 23095 | 707.5       | 23.81               | 25.00               | 1.315                  | 0.1              | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 25        | Edge 3           | 0mm      | Amphenol       | OFF             | 23095 | 707.5       | 22.76               | 24.00               | 1.330                  | 0.09             | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 1       | 25        | Edge 4           | 0mm      | Amphenol       | OFF             | 23095 | 707.5       | 23.81               | 25.00               | 1.315                  | 0.01             | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 25        | Edge 4           | 0mm      | Amphenol       | OFF             | 23095 | 707.5       | 22.76               | 24.00               | 1.330                  | -0.08            | 0.001                  | 0.001                  |
|          | LTE Band 12_Main | 10M      | QPSK       | 25      | 12        | Edge 2           | 0mm      | NVC            | ON              | 23095 | 707.5       | 14.39               | 14.50               | 1.026                  | -0.1             | 0.920                  | 0.944                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.92               | 15.00               | 1.019                  | 0.15             | 0.235                  | 0.239                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.74               | 15.00               | 1.062                  | -0.08            | 0.227                  | 0.241                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Bottom Face      | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.92               | 15.00               | 1.019                  | -0.08            | 0.455                  | 0.463                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Bottom Face      | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.74               | 15.00               | 1.062                  | 0.08             | 0.443                  | 0.470                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Edge 1           | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.92               | 15.00               | 1.019                  | 0.02             | 0.142                  | 0.145                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Edge 1           | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.74               | 15.00               | 1.062                  | 0.14             | 0.132                  | 0.140                  |
| 06       | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Edge 2           | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.92               | 15.00               | 1.019                  | -0.05            | 0.804                  | 0.819                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Edge 2           | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.74               | 15.00               | 1.062                  | 0.14             | 0.752                  | 0.798                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 50      | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 23230 | 782         | 14.66               | 15.00               | 1.081                  | -0.08            | 0.753                  | 0.814                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 23230 | 782         | 23.87               | 25.00               | 1.297                  | -0.1             | 0.111                  | 0.144                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 23230 | 782         | 22.80               | 24.00               | 1.318                  | 0.18             | 0.092                  | 0.121                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Bottom Face      | 34mm     | Amphenol       | OFF             | 23230 | 782         | 23.87               | 25.00               | 1.297                  | 0.18             | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Bottom Face      | 34mm     | Amphenol       | OFF             | 23230 | 782         | 22.80               | 24.00               | 1.318                  | 0.11             | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Edge 1           | 24mm     | Amphenol       | OFF             | 23230 | 782         | 23.87               | 25.00               | 1.297                  | -0.14            | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Edge 1           | 24mm     | Amphenol       | OFF             | 23230 | 782         | 22.80               | 24.00               | 1.318                  | -0.19            | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Edge 2           | 6mm      | Amphenol       | OFF             | 23230 | 782         | 23.87               | 25.00               | 1.297                  | 0.04             | 0.232                  | 0.301                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Edge 2           | 6mm      | Amphenol       | OFF             | 23230 | 782         | 22.80               | 24.00               | 1.318                  | -0.09            | 0.178                  | 0.235                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Edge 3           | 0mm      | Amphenol       | OFF             | 23230 | 782         | 23.87               | 25.00               | 1.297                  | 0.04             | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Edge 3           | 0mm      | Amphenol       | OFF             | 23230 | 782         | 22.80               | 24.00               | 1.318                  | -0.17            | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Edge 4           | 0mm      | Amphenol       | OFF             | 23230 | 782         | 23.87               | 25.00               | 1.297                  | 0.05             | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 25      | 12        | Edge 4           | 0mm      | Amphenol       | OFF             | 23230 | 782         | 22.80               | 24.00               | 1.318                  | -0.12            | 0.001                  | 0.001                  |
|          | LTE Band 13_Main | 10M      | QPSK       | 1       | 25        | Edge 2           | 0mm      | NVC            | ON              | 23230 | 782         | 14.92               | 15.00               | 1.019                  | 0.05             | 0.769                  | 0.783                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band             | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.30               | 15.50               | 1.047                  | -0.12            | 0.251                  | 0.263                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.17               | 15.50               | 1.079                  | 0.11             | 0.257                  | 0.277                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Bottom Face      | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.30               | 15.50               | 1.047                  | -0.08            | 0.501                  | 0.525                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Bottom Face      | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.17               | 15.50               | 1.079                  | 0.05             | 0.519                  | 0.560                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Edge 1           | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.30               | 15.50               | 1.047                  | 0.06             | 0.161                  | 0.169                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Edge 1           | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.17               | 15.50               | 1.079                  | -0.19            | 0.164                  | 0.177                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Edge 2           | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.30               | 15.50               | 1.047                  | -0.14            | 0.807                  | 0.845                  |
| 07       | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Edge 2           | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.17               | 15.50               | 1.079                  | -0.08            | 0.843                  | 0.910                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 50      | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 23330 | 793         | 15.14               | 15.50               | 1.086                  | 0.1              | 0.835                  | 0.907                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 23330 | 793         | 23.79               | 25.00               | 1.321                  | 0.09             | 0.109                  | 0.144                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 23330 | 793         | 22.71               | 24.00               | 1.346                  | -0.12            | 0.092                  | 0.124                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Bottom Face      | 34mm     | Amphenol       | OFF             | 23330 | 793         | 23.79               | 25.00               | 1.321                  | -0.19            | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Bottom Face      | 34mm     | Amphenol       | OFF             | 23330 | 793         | 22.71               | 24.00               | 1.346                  | 0.11             | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Edge 1           | 24mm     | Amphenol       | OFF             | 23330 | 793         | 23.79               | 25.00               | 1.321                  | -0.18            | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Edge 1           | 24mm     | Amphenol       | OFF             | 23330 | 793         | 22.71               | 24.00               | 1.346                  | 0.08             | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Edge 2           | 6mm      | Amphenol       | OFF             | 23330 | 793         | 23.79               | 25.00               | 1.321                  | -0.18            | 0.115                  | 0.152                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Edge 2           | 6mm      | Amphenol       | OFF             | 23330 | 793         | 22.71               | 24.00               | 1.346                  | -0.1             | 0.157                  | 0.211                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Edge 3           | 0mm      | Amphenol       | OFF             | 23330 | 793         | 23.79               | 25.00               | 1.321                  | -0.13            | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Edge 3           | 0mm      | Amphenol       | OFF             | 23330 | 793         | 22.71               | 24.00               | 1.346                  | 0.17             | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 1       | 25        | Edge 4           | 0mm      | Amphenol       | OFF             | 23330 | 793         | 23.79               | 25.00               | 1.321                  | 0.02             | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 25      | 12        | Edge 4           | 0mm      | Amphenol       | OFF             | 23330 | 793         | 22.71               | 24.00               | 1.346                  | -0.13            | 0.001                  | 0.001                  |
|          | LTE Band 14_Main | 10M      | QPSK       | 50      | 0         | Edge 2           | 0mm      | NVC            | ON              | 23330 | 793         | 15.14               | 15.50               | 1.086                  | -0.13            | 0.721                  | 0.783                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band               | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|--------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.99               | 13.00               | 1.002                  | -0.05            | 0.404                  | 0.405                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.93               | 13.00               | 1.016                  | -0.06            | 0.406                  | 0.413                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.99               | 13.00               | 1.002                  | -0.13            | 0.934                  | 0.936                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 26140 | 1860        | 12.97               | 13.00               | 1.007                  | -0.09            | 0.991                  | 0.998                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 26340 | 1880        | 12.94               | 13.00               | 1.014                  | -0.11            | 1.020                  | 1.034                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.93               | 13.00               | 1.016                  | 0.13             | 1.080                  | 1.098                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 26140 | 1860        | 12.92               | 13.00               | 1.019                  | -0.07            | 1.070                  | 1.090                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 26340 | 1880        | 12.84               | 13.00               | 1.038                  | 0.04             | 1.030                  | 1.069                  |
| 08       | LTE Band 25_Main   | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.83               | 13.00               | 1.040                  | -0.04            | 1.090                  | 1.134                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.99               | 13.00               | 1.002                  | 0.1              | 0.277                  | 0.278                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 24        | Edge 1           | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.93               | 13.00               | 1.016                  | 0.18             | 0.286                  | 0.291                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Edge 2           | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.99               | 13.00               | 1.002                  | -0.06            | 0.074                  | 0.074                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 24        | Edge 2           | 0mm      | Amphenol       | ON              | 26590 | 1905        | 12.93               | 13.00               | 1.016                  | 0.19             | 0.072                  | 0.073                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 26590 | 1905        | 22.55               | 24.00               | 1.396                  | -0.15            | 0.097                  | 0.135                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | 0.01             | 0.088                  | 0.123                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Bottom Face      | 34mm     | Amphenol       | OFF             | 26590 | 1905        | 22.55               | 24.00               | 1.396                  | 0.1              | 0.057                  | 0.080                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 0         | Bottom Face      | 34mm     | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | 0                | 0.051                  | 0.072                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Edge 1           | 24mm     | Amphenol       | OFF             | 26590 | 1905        | 22.55               | 24.00               | 1.396                  | 0.11             | 0.092                  | 0.128                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 0         | Edge 1           | 24mm     | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | -0.11            | 0.079                  | 0.111                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 1       | 49        | Edge 2           | 6mm      | Amphenol       | OFF             | 26590 | 1905        | 22.55               | 24.00               | 1.396                  | -0.03            | 0.082                  | 0.115                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 50      | 0         | Edge 2           | 6mm      | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | -0.03            | 0.071                  | 0.100                  |
|          | LTE Band 25_Main   | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | NVC            | ON              | 26590 | 1905        | 12.83               | 13.00               | 1.040                  | -0.11            | 0.877                  | 0.912                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 26340 | 1880        | 11.75               | 12.00               | 1.059                  | -0.18            | 0.215                  | 0.228                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 26340 | 1880        | 11.71               | 12.00               | 1.069                  | 0.18             | 0.218                  | 0.233                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 26340 | 1880        | 11.75               | 12.00               | 1.059                  | 0.12             | 0.821                  | 0.870                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 26140 | 1860        | 11.57               | 12.00               | 1.104                  | -0.06            | 0.784                  | 0.866                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 26590 | 1905        | 11.67               | 12.00               | 1.079                  | -0.06            | 0.914                  | 0.986                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 26340 | 1880        | 11.71               | 12.00               | 1.069                  | -0.04            | 0.833                  | 0.891                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 26140 | 1860        | 11.70               | 12.00               | 1.072                  | -0.14            | 0.802                  | 0.859                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 26590 | 1905        | 11.68               | 12.00               | 1.076                  | -0.05            | 0.950                  | 1.023                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 26590 | 1905        | 11.70               | 12.00               | 1.072                  | -0.03            | 0.821                  | 0.880                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 26340 | 1880        | 11.75               | 12.00               | 1.059                  | -0.04            | 0.896                  | 0.949                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 26140 | 1860        | 11.57               | 12.00               | 1.104                  | 0.09             | 0.850                  | 0.938                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 26590 | 1905        | 11.67               | 12.00               | 1.079                  | 0.11             | 0.958                  | 1.034                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 26340 | 1880        | 11.71               | 12.00               | 1.069                  | -0.02            | 0.913                  | 0.976                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 26140 | 1860        | 11.70               | 12.00               | 1.072                  | -0.05            | 0.869                  | 0.931                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 26590 | 1905        | 11.68               | 12.00               | 1.076                  | -0.02            | 0.995                  | 1.071                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 100     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 26590 | 1905        | 11.70               | 12.00               | 1.072                  | 0.09             | 0.924                  | 0.990                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 26590 | 1905        | 22.52               | 24.00               | 1.406                  | -0.01            | 0.196                  | 0.276                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | -0.02            | 0.198                  | 0.278                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Bottom Face      | 24mm     | Amphenol       | OFF             | 26590 | 1905        | 22.52               | 24.00               | 1.406                  | -0.1             | 0.146                  | 0.205                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 0         | Bottom Face      | 24mm     | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | 0.17             | 0.141                  | 0.198                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | OFF             | 26590 | 1905        | 22.52               | 24.00               | 1.406                  | 0.1              | 0.001                  | 0.001                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 0         | Edge 1           | 0mm      | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | 0.05             | 0.001                  | 0.001                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 22mm     | Amphenol       | OFF             | 26590 | 1905        | 22.52               | 24.00               | 1.406                  | -0.16            | 0.251                  | 0.353                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 0         | Edge 4           | 22mm     | Amphenol       | OFF             | 26590 | 1905        | 21.53               | 23.00               | 1.403                  | 0.09             | 0.243                  | 0.341                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 26590 | 1905        | 11.68               | 12.00               | 1.076                  | -0.16            | 0.961                  | 1.034                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 26140 | 1860        | 11.70               | 12.00               | 1.072                  | 0.04             | 0.953                  | 1.021                  |
|          | LTE Band 25_MIMO 2 | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 26340 | 1880        | 11.71               | 12.00               | 1.069                  | -0.06            | 0.934                  | 0.998                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band             | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.35               | 14.50               | 1.035                  | -0.12            | 0.171                  | 0.177                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.11               | 14.50               | 1.094                  | 0.15             | 0.174                  | 0.190                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Bottom Face      | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.35               | 14.50               | 1.035                  | -0.06            | 0.565                  | 0.585                  |
| 09       | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Bottom Face      | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.11               | 14.50               | 1.094                  | -0.08            | 0.586                  | 0.641                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Edge 1           | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.35               | 14.50               | 1.035                  | 0.18             | 0.121                  | 0.125                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Edge 1           | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.11               | 14.50               | 1.094                  | 0.02             | 0.126                  | 0.138                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Edge 2           | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.35               | 14.50               | 1.035                  | 0.14             | 0.518                  | 0.536                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Edge 2           | 0mm      | Amphenol       | ON              | 26865 | 831.5       | 14.11               | 14.50               | 1.094                  | 0.09             | 0.510                  | 0.558                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 26865 | 831.5       | 23.80               | 25.00               | 1.318                  | -0.05            | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 26865 | 831.5       | 22.77               | 24.00               | 1.327                  | -0.18            | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Bottom Face      | 34mm     | Amphenol       | OFF             | 26865 | 831.5       | 23.80               | 25.00               | 1.318                  | -0.04            | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Bottom Face      | 34mm     | Amphenol       | OFF             | 26865 | 831.5       | 22.77               | 24.00               | 1.327                  | 0.15             | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Edge 1           | 24mm     | Amphenol       | OFF             | 26865 | 831.5       | 23.80               | 25.00               | 1.318                  | -0.02            | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Edge 1           | 24mm     | Amphenol       | OFF             | 26865 | 831.5       | 22.77               | 24.00               | 1.327                  | 0.08             | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Edge 2           | 6mm      | Amphenol       | OFF             | 26865 | 831.5       | 23.80               | 25.00               | 1.318                  | -0.12            | 0.101                  | 0.133                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Edge 2           | 6mm      | Amphenol       | OFF             | 26865 | 831.5       | 22.77               | 24.00               | 1.327                  | -0.14            | 0.092                  | 0.122                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Edge 3           | 0mm      | Amphenol       | OFF             | 26865 | 831.5       | 23.80               | 25.00               | 1.318                  | -0.19            | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Edge 3           | 0mm      | Amphenol       | OFF             | 26865 | 831.5       | 22.77               | 24.00               | 1.327                  | -0.07            | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 1       | 37        | Edge 4           | 0mm      | Amphenol       | OFF             | 26865 | 831.5       | 23.80               | 25.00               | 1.318                  | -0.12            | 0.001                  | 0.001                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Edge 4           | 0mm      | Amphenol       | OFF             | 26865 | 831.5       | 22.77               | 24.00               | 1.327                  | 0.19             | 0.001                  | 0.001                  |
|          | LTE Band 5B_Main | 10M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 20575 | 841.5       | 13.14               | 14.50               | 1.368                  | -0.07            | 0.456                  | 0.624                  |
|          | LTE Band 26_Main | 15M      | QPSK       | 36      | 20        | Bottom Face      | 0mm      | NVC            | ON              | 26865 | 831.5       | 14.11               | 14.50               | 1.094                  | 0.01             | 0.453                  | 0.496                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band               | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|--------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.86               | 11.50               | 1.159                  | -0.17            | 0.294                  | 0.341                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 12        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.76               | 11.50               | 1.186                  | 0.08             | 0.294                  | 0.349                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.86               | 11.50               | 1.159                  | 0.17             | 0.935                  | 1.083                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 12        | Bottom Face      | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.76               | 11.50               | 1.186                  | 0.14             | 0.944                  | 1.119                  |
| 10       | LTE Band 30_Main   | 10M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.61               | 11.50               | 1.227                  | -0.18            | 0.932                  | 1.144                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 0         | Edge 1           | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.86               | 11.50               | 1.159                  | -0.05            | 0.197                  | 0.228                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 12        | Edge 1           | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.76               | 11.50               | 1.186                  | -0.15            | 0.188                  | 0.223                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.86               | 11.50               | 1.159                  | -0.16            | 0.381                  | 0.441                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 12        | Edge 2           | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.76               | 11.50               | 1.186                  | 0.09             | 0.382                  | 0.453                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 25        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 27710 | 2310        | 21.78               | 23.00               | 1.324                  | 0.14             | 0.078                  | 0.103                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 0         | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 27710 | 2310        | 20.75               | 22.00               | 1.334                  | 0.06             | 0.067                  | 0.089                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 25        | Bottom Face      | 34mm     | Amphenol       | OFF             | 27710 | 2310        | 21.78               | 23.00               | 1.324                  | 0                | 0.055                  | 0.073                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 0         | Bottom Face      | 34mm     | Amphenol       | OFF             | 27710 | 2310        | 20.75               | 22.00               | 1.334                  | 0.19             | 0.047                  | 0.063                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 25        | Edge 1           | 24mm     | Amphenol       | OFF             | 27710 | 2310        | 21.78               | 23.00               | 1.324                  | 0.02             | 0.069                  | 0.091                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 0         | Edge 1           | 24mm     | Amphenol       | OFF             | 27710 | 2310        | 20.75               | 22.00               | 1.334                  | -0.07            | 0.061                  | 0.081                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 1       | 25        | Edge 2           | 6mm      | Amphenol       | OFF             | 27710 | 2310        | 21.78               | 23.00               | 1.324                  | 0.17             | 0.146                  | 0.193                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 25      | 0         | Edge 2           | 6mm      | Amphenol       | OFF             | 27710 | 2310        | 20.75               | 22.00               | 1.334                  | 0.04             | 0.122                  | 0.163                  |
|          | LTE Band 30_Main   | 10M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 27710 | 2310        | 10.61               | 11.50               | 1.227                  | 0.14             | 0.650                  | 0.798                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 1       | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.15               | 10.50               | 1.084                  | -0.17            | 0.161                  | 0.175                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 25      | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.08               | 10.50               | 1.102                  | 0.02             | 0.156                  | 0.172                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.15               | 10.50               | 1.084                  | -0.13            | 0.891                  | 0.966                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 25      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.08               | 10.50               | 1.102                  | -0.06            | 0.854                  | 0.941                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 27710 | 2310        | 9.92                | 10.50               | 1.143                  | -0.02            | 0.860                  | 0.983                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.15               | 10.50               | 1.084                  | 0.19             | 0.784                  | 0.850                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 25      | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 27710 | 2310        | 10.08               | 10.50               | 1.102                  | 0.16             | 0.747                  | 0.823                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 50      | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 27710 | 2310        | 9.92                | 10.50               | 1.143                  | 0.08             | 0.745                  | 0.851                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 1       | 0         | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 27710 | 2310        | 21.39               | 23.00               | 1.449                  | 0.07             | 0.180                  | 0.261                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 25      | 0         | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 27710 | 2310        | 20.34               | 22.00               | 1.466                  | 0.15             | 0.148                  | 0.217                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 1       | 0         | Bottom Face      | 24mm     | Amphenol       | OFF             | 27710 | 2310        | 21.39               | 23.00               | 1.449                  | -0.08            | 0.196                  | 0.284                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 25      | 0         | Bottom Face      | 24mm     | Amphenol       | OFF             | 27710 | 2310        | 20.34               | 22.00               | 1.466                  | 0.09             | 0.161                  | 0.236                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 1       | 0         | Edge 1           | 0mm      | Amphenol       | OFF             | 27710 | 2310        | 21.39               | 23.00               | 1.449                  | -0.07            | 0.001                  | 0.001                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 25      | 0         | Edge 1           | 0mm      | Amphenol       | OFF             | 27710 | 2310        | 20.34               | 22.00               | 1.466                  | 0.01             | 0.001                  | 0.001                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 1       | 0         | Edge 4           | 22mm     | Amphenol       | OFF             | 27710 | 2310        | 21.39               | 23.00               | 1.449                  | -0.09            | 0.293                  | 0.424                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 25      | 0         | Edge 4           | 22mm     | Amphenol       | OFF             | 27710 | 2310        | 20.34               | 22.00               | 1.466                  | -0.12            | 0.249                  | 0.365                  |
|          | LTE Band 30_MIMO 2 | 10M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 27710 | 2310        | 9.92                | 10.50               | 1.143                  | -0.07            | 0.585                  | 0.669                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band              | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.33               | 13.50               | 1.040                  | 0.01             | 0.343                  | 0.357                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.12               | 13.50               | 1.091                  | 0.05             | 0.362                  | 0.395                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.33               | 13.50               | 1.040                  | 0.19             | 0.993                  | 1.033                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 132072 | 1720        | 13.29               | 13.50               | 1.050                  | -0.12            | 0.988                  | 1.037                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 132572 | 1770        | 13.26               | 13.50               | 1.057                  | -0.11            | 0.998                  | 1.055                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.12               | 13.50               | 1.091                  | 0.07             | 1.030                  | 1.124                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 132072 | 1720        | 13.11               | 13.50               | 1.094                  | 0.18             | 1.000                  | 1.094                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 132572 | 1770        | 13.07               | 13.50               | 1.104                  | -0.19            | 1.060                  | 1.170                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132072 | 1720        | 13.03               | 13.50               | 1.114                  | -0.05            | 1.040                  | 1.159                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.33               | 13.50               | 1.040                  | -0.11            | 0.315                  | 0.328                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Edge 1           | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.12               | 13.50               | 1.091                  | 0.02             | 0.321                  | 0.350                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Edge 2           | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.33               | 13.50               | 1.040                  | -0.05            | 0.134                  | 0.139                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Edge 2           | 0mm      | Amphenol       | ON              | 132322 | 1745        | 13.12               | 13.50               | 1.091                  | 0.01             | 0.148                  | 0.162                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 132072 | 1720        | 22.83               | 24.00               | 1.309                  | -0.12            | 0.103                  | 0.135                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 132072 | 1720        | 21.80               | 23.00               | 1.318                  | -0.14            | 0.091                  | 0.120                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 34mm     | Amphenol       | OFF             | 132072 | 1720        | 22.83               | 24.00               | 1.309                  | 0.06             | 0.076                  | 0.099                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 34mm     | Amphenol       | OFF             | 132072 | 1720        | 21.80               | 23.00               | 1.318                  | -0.18            | 0.065                  | 0.086                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Edge 1           | 24mm     | Amphenol       | OFF             | 132072 | 1720        | 22.83               | 24.00               | 1.309                  | -0.04            | 0.103                  | 0.135                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Edge 1           | 24mm     | Amphenol       | OFF             | 132072 | 1720        | 21.80               | 23.00               | 1.318                  | 0.08             | 0.089                  | 0.117                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 1       | 49        | Edge 2           | 6mm      | Amphenol       | OFF             | 132072 | 1720        | 22.83               | 24.00               | 1.309                  | -0.11            | 0.054                  | 0.071                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Edge 2           | 6mm      | Amphenol       | OFF             | 132072 | 1720        | 21.80               | 23.00               | 1.318                  | -0.1             | 0.047                  | 0.062                  |
|          | LTE Band 66B_Main | 15M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132597 | 1772.5      | 12.64               | 13.50               | 1.219                  | 0.16             | 0.812                  | 0.990                  |
|          | LTE Band 66B_Main | 15M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132047 | 1717.5      | 12.63               | 13.50               | 1.222                  | 0.06             | 0.793                  | 0.969                  |
|          | LTE Band 66B_Main | 15M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.52               | 13.50               | 1.253                  | 0.19             | 0.774                  | 0.970                  |
|          | LTE Band 66C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.75               | 13.50               | 1.189                  | -0.01            | 0.754                  | 0.896                  |
|          | LTE Band 66C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132072 | 1720        | 12.69               | 13.50               | 1.205                  | -0.03            | 0.732                  | 0.882                  |
|          | LTE Band 66C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132572 | 1770        | 12.70               | 13.50               | 1.202                  | 0.12             | 0.726                  | 0.873                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | NVC            | ON              | 132572 | 1770        | 13.07               | 13.50               | 1.104                  | 0.05             | 0.836                  | 0.923                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | NVC            | ON              | 132072 | 1720        | 13.11               | 13.50               | 1.094                  | 0.04             | 0.828                  | 0.906                  |
|          | LTE Band 66_Main  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | NVC            | ON              | 132322 | 1745        | 13.12               | 13.50               | 1.091                  | -0.09            | 0.796                  | 0.869                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band                | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|---------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.76               | 13.00               | 1.057                  | -0.05            | 0.318                  | 0.336                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.61               | 13.00               | 1.094                  | 0.14             | 0.325                  | 0.356                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.76               | 13.00               | 1.057                  | 0.05             | 1.030                  | 1.089                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 132072 | 1720        | 12.64               | 13.00               | 1.086                  | 0.02             | 1.040                  | 1.130                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 132572 | 1770        | 12.58               | 13.00               | 1.102                  | 0.15             | 1.030                  | 1.135                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.61               | 13.00               | 1.094                  | 0.13             | 1.040                  | 1.138                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 132072 | 1720        | 12.42               | 13.00               | 1.143                  | -0.01            | 1.030                  | 1.177                  |
| 11       | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 132572 | 1770        | 12.58               | 13.00               | 1.102                  | -0.15            | 1.070                  | 1.179                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.43               | 13.00               | 1.140                  | -0.12            | 1.030                  | 1.174                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.76               | 13.00               | 1.057                  | -0.07            | 1.030                  | 1.089                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 132072 | 1720        | 12.64               | 13.00               | 1.086                  | -0.1             | 1.020                  | 1.108                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 132572 | 1770        | 12.58               | 13.00               | 1.102                  | -0.06            | 0.984                  | 1.084                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.61               | 13.00               | 1.094                  | -0.14            | 1.060                  | 1.160                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 132072 | 1720        | 12.42               | 13.00               | 1.143                  | 0.16             | 1.010                  | 1.154                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 132572 | 1770        | 12.58               | 13.00               | 1.102                  | 0.19             | 0.992                  | 1.093                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 100     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.43               | 13.00               | 1.140                  | 0.13             | 1.000                  | 1.140                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 132322 | 1745        | 22.45               | 24.00               | 1.429                  | -0.15            | 0.258                  | 0.369                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 132322 | 1745        | 21.50               | 23.00               | 1.413                  | 0.11             | 0.208                  | 0.294                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 24mm     | Amphenol       | OFF             | 132322 | 1745        | 22.45               | 24.00               | 1.429                  | 0.07             | 0.144                  | 0.206                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 24mm     | Amphenol       | OFF             | 132322 | 1745        | 21.50               | 23.00               | 1.413                  | 0.08             | 0.112                  | 0.158                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | OFF             | 132322 | 1745        | 22.45               | 24.00               | 1.429                  | 0.05             | 0.001                  | 0.001                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 0         | Edge 1           | 0mm      | Amphenol       | OFF             | 132322 | 1745        | 21.50               | 23.00               | 1.413                  | -0.04            | 0.001                  | 0.001                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 22mm     | Amphenol       | OFF             | 132322 | 1745        | 22.45               | 24.00               | 1.429                  | 0.03             | 0.258                  | 0.369                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 0         | Edge 4           | 22mm     | Amphenol       | OFF             | 132322 | 1745        | 21.50               | 23.00               | 1.413                  | 0.17             | 0.212                  | 0.299                  |
|          | LTE Band 66B_MIMO 2 | 15M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132597 | 1772.5      | 12.30               | 13.00               | 1.175                  | -0.03            | 0.742                  | 0.872                  |
|          | LTE Band 66B_MIMO 2 | 15M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132047 | 1717.5      | 12.06               | 13.00               | 1.242                  | -0.15            | 0.778                  | 0.966                  |
|          | LTE Band 66B_MIMO 2 | 15M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.21               | 13.00               | 1.199                  | -0.09            | 0.752                  | 0.902                  |
|          | LTE Band 66C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132322 | 1745        | 12.17               | 13.00               | 1.211                  | -0.07            | 0.660                  | 0.799                  |
|          | LTE Band 66C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132072 | 1720        | 12.05               | 13.00               | 1.245                  | 0.16             | 0.703                  | 0.875                  |
|          | LTE Band 66C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 132572 | 1770        | 12.13               | 13.00               | 1.222                  | -0.03            | 0.647                  | 0.791                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | NVC            | ON              | 132572 | 1770        | 12.58               | 13.00               | 1.102                  | 0.01             | 0.773                  | 0.851                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | NVC            | ON              | 132072 | 1720        | 12.42               | 13.00               | 1.143                  | -0.01            | 0.683                  | 0.781                  |
|          | LTE Band 66_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | NVC            | ON              | 132322 | 1745        | 12.61               | 13.00               | 1.094                  | 0.13             | 0.744                  | 0.814                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band             | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.52               | 14.00               | 1.117                  | -0.15            | 0.121                  | 0.135                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.49               | 14.00               | 1.125                  | 0.1              | 0.130                  | 0.146                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.52               | 14.00               | 1.117                  | -0.15            | 0.287                  | 0.321                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.49               | 14.00               | 1.125                  | 0.19             | 0.298                  | 0.335                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.52               | 14.00               | 1.117                  | -0.02            | 0.077                  | 0.086                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 24        | Edge 1           | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.49               | 14.00               | 1.125                  | 0.02             | 0.088                  | 0.099                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Edge 2           | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.52               | 14.00               | 1.117                  | 0.18             | 0.852                  | 0.952                  |
| 12       | LTE Band 71_Main | 20M      | QPSK       | 50      | 24        | Edge 2           | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.49               | 14.00               | 1.125                  | -0.04            | 0.892                  | 1.003                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 100     | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 133297 | 680.5       | 13.48               | 14.00               | 1.127                  | -0.16            | 0.856                  | 0.965                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 133297 | 680.5       | 23.96               | 25.00               | 1.271                  | 0.08             | 0.055                  | 0.070                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 50        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 133297 | 680.5       | 23.11               | 24.00               | 1.227                  | -0.16            | 0.047                  | 0.058                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Bottom Face      | 34mm     | Amphenol       | OFF             | 133297 | 680.5       | 23.96               | 25.00               | 1.271                  | -0.16            | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 50        | Bottom Face      | 34mm     | Amphenol       | OFF             | 133297 | 680.5       | 23.11               | 24.00               | 1.227                  | -0.07            | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Edge 1           | 24mm     | Amphenol       | OFF             | 133297 | 680.5       | 23.96               | 25.00               | 1.271                  | -0.15            | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 50        | Edge 1           | 24mm     | Amphenol       | OFF             | 133297 | 680.5       | 23.11               | 24.00               | 1.227                  | 0.03             | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Edge 2           | 6mm      | Amphenol       | OFF             | 133297 | 680.5       | 23.96               | 25.00               | 1.271                  | 0.19             | 0.281                  | 0.357                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 50        | Edge 2           | 6mm      | Amphenol       | OFF             | 133297 | 680.5       | 23.11               | 24.00               | 1.227                  | 0.18             | 0.242                  | 0.297                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Edge 3           | 0mm      | Amphenol       | OFF             | 133297 | 680.5       | 23.96               | 25.00               | 1.271                  | 0.08             | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 50        | Edge 3           | 0mm      | Amphenol       | OFF             | 133297 | 680.5       | 23.11               | 24.00               | 1.227                  | -0.06            | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | OFF             | 133297 | 680.5       | 23.96               | 25.00               | 1.271                  | 0.03             | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 50        | Edge 4           | 0mm      | Amphenol       | OFF             | 133297 | 680.5       | 23.11               | 24.00               | 1.227                  | 0.19             | 0.001                  | 0.001                  |
|          | LTE Band 71_Main | 20M      | QPSK       | 50      | 24        | Edge 2           | 0mm      | NVC            | ON              | 133297 | 680.5       | 13.49               | 14.00               | 1.125                  | 0.03             | 0.878                  | 0.987                  |

## <TDD LTE SAR>

| Plot No. | Band              | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.83               | 12.00               | 1.040                  | 62.9         | 1.006                     | 0.14             | 0.225                  | 0.235                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.89               | 12.00               | 1.026                  | 62.9         | 1.006                     | 0.1              | 0.222                  | 0.229                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.83               | 12.00               | 1.040                  | 62.9         | 1.006                     | -0.16            | 0.920                  | 0.962                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.89               | 12.00               | 1.026                  | 62.9         | 1.006                     | 0.11             | 0.918                  | 0.947                  |
| 13       | LTE Band 38_Main  | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.83               | 12.00               | 1.040                  | 62.9         | 1.006                     | -0.11            | 0.923                  | 0.966                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.83               | 12.00               | 1.040                  | 62.9         | 1.006                     | 0.05             | 0.246                  | 0.257                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Edge 1           | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.89               | 12.00               | 1.026                  | 62.9         | 1.006                     | -0.07            | 0.201                  | 0.207                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Edge 2           | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.83               | 12.00               | 1.040                  | 62.9         | 1.006                     | 0.1              | 0.001                  | 0.001                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 38000 | 2595        | 11.89               | 12.00               | 1.026                  | 62.9         | 1.006                     | 0.11             | 0.001                  | 0.001                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 38000 | 2595        | 22.53               | 24.00               | 1.403                  | 62.9         | 1.006                     | 0.04             | 0.060                  | 0.085                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 38000 | 2595        | 21.61               | 23.00               | 1.377                  | 62.9         | 1.006                     | 0.19             | 0.049                  | 0.068                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 34mm     | Amphenol       | OFF             | 38000 | 2595        | 22.53               | 24.00               | 1.403                  | 62.9         | 1.006                     | 0.07             | 0.087                  | 0.123                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 34mm     | Amphenol       | OFF             | 38000 | 2595        | 21.61               | 23.00               | 1.377                  | 62.9         | 1.006                     | -0.01            | 0.068                  | 0.094                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Edge 1           | 24mm     | Amphenol       | OFF             | 38000 | 2595        | 22.53               | 24.00               | 1.403                  | 62.9         | 1.006                     | -0.11            | 0.107                  | 0.151                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Edge 1           | 24mm     | Amphenol       | OFF             | 38000 | 2595        | 21.61               | 23.00               | 1.377                  | 62.9         | 1.006                     | 0.17             | 0.086                  | 0.119                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 1       | 49        | Edge 2           | 6mm      | Amphenol       | OFF             | 38000 | 2595        | 22.53               | 24.00               | 1.403                  | 62.9         | 1.006                     | 0.03             | 0.001                  | 0.001                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 50      | 0         | Edge 2           | 6mm      | Amphenol       | OFF             | 38000 | 2595        | 21.61               | 23.00               | 1.377                  | 62.9         | 1.006                     | 0.18             | 0.001                  | 0.001                  |
|          | LTE Band 38C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 37901 | 2585.1      | 11.36               | 12.00               | 1.159                  | 62.9         | 1.006                     | 0.18             | 0.603                  | 0.703                  |
|          | LTE Band 38_Main  | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | NVC            | ON              | 38000 | 2595        | 11.83               | 12.00               | 1.040                  | 62.9         | 1.006                     | 0.16             | 0.620                  | 0.649                  |



| Plot No. | Band                  | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-----------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.62               | 12.00               | 1.091                  | 62.9         | 1.006                     | -0.17            | 0.193                  | 0.212                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.58               | 12.00               | 1.102                  | 62.9         | 1.006                     | -0.16            | 0.190                  | 0.211                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.62               | 12.00               | 1.091                  | 62.9         | 1.006                     | 0.06             | 0.771                  | 0.847                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 39750 | 2506        | 11.52               | 12.00               | 1.117                  | 62.9         | 1.006                     | -0.07            | 0.463                  | 0.520                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.52               | 12.00               | 1.406                  | 62.9         | 1.006                     | 0.17             | 0.516                  | 0.730                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 40620 | 2593        | 11.02               | 12.00               | 1.253                  | 62.9         | 1.006                     | 0                | 0.729                  | 0.919                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 41490 | 2680        | 11.14               | 12.00               | 1.219                  | 62.9         | 1.006                     | -0.08            | 0.621                  | 0.762                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.58               | 12.00               | 1.102                  | 62.9         | 1.006                     | 0.11             | 0.792                  | 0.878                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 39750 | 2506        | 11.57               | 12.00               | 1.104                  | 62.9         | 1.006                     | 0.08             | 0.469                  | 0.521                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.62               | 12.00               | 1.374                  | 62.9         | 1.006                     | 0.13             | 0.531                  | 0.734                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 40620 | 2593        | 11.02               | 12.00               | 1.253                  | 62.9         | 1.006                     | -0.07            | 0.764                  | 0.963                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 41490 | 2680        | 11.22               | 12.00               | 1.197                  | 62.9         | 1.006                     | 0.08             | 0.630                  | 0.758                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.52               | 12.00               | 1.117                  | 62.9         | 1.006                     | 0.1              | 0.764                  | 0.858                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Edge 1           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.62               | 12.00               | 1.091                  | 62.9         | 1.006                     | -0.16            | 0.225                  | 0.247                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Edge 1           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.58               | 12.00               | 1.102                  | 62.9         | 1.006                     | 0.14             | 0.224                  | 0.248                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.62               | 12.00               | 1.091                  | 62.9         | 1.006                     | 0.09             | 0.001                  | 0.001                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.58               | 12.00               | 1.102                  | 62.9         | 1.006                     | 0.18             | 0.001                  | 0.001                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 41055 | 2636.5      | 21.35               | 22.00               | 1.161                  | 62.9         | 1.006                     | 0.07             | 0.053                  | 0.062                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 41055 | 2636.5      | 20.46               | 21.00               | 1.132                  | 62.9         | 1.006                     | 0.18             | 0.047                  | 0.054                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Bottom Face      | 34mm     | Amphenol       | OFF             | 41055 | 2636.5      | 21.35               | 22.00               | 1.161                  | 62.9         | 1.006                     | -0.07            | 0.029                  | 0.034                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 34mm     | Amphenol       | OFF             | 41055 | 2636.5      | 20.46               | 21.00               | 1.132                  | 62.9         | 1.006                     | 0                | 0.025                  | 0.028                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Edge 1           | 24mm     | Amphenol       | OFF             | 41055 | 2636.5      | 21.35               | 22.00               | 1.161                  | 62.9         | 1.006                     | 0.14             | 0.056                  | 0.065                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Edge 1           | 24mm     | Amphenol       | OFF             | 41055 | 2636.5      | 20.46               | 21.00               | 1.132                  | 62.9         | 1.006                     | -0.03            | 0.048                  | 0.055                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 1       | 0         | Edge 2           | 6mm      | Amphenol       | OFF             | 41055 | 2636.5      | 21.35               | 22.00               | 1.161                  | 62.9         | 1.006                     | 0.1              | 0.035                  | 0.041                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Edge 2           | 6mm      | Amphenol       | OFF             | 41055 | 2636.5      | 20.46               | 21.00               | 1.132                  | 62.9         | 1.006                     | -0.1             | 0.029                  | 0.033                  |
|          | LTE Band 41C_Main     | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 39750 | 2506        | 11.49               | 12.00               | 1.125                  | 62.9         | 1.006                     | 0.19             | 0.789                  | 0.893                  |
|          | LTE Band 41C_Main     | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 11.38               | 12.00               | 1.153                  | 62.9         | 1.006                     | -0.13            | 0.798                  | 0.926                  |
|          | LTE Band 41C_Main     | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 40620 | 2593        | 11.19               | 12.00               | 1.205                  | 62.9         | 1.006                     | 0.01             | 0.777                  | 0.942                  |
|          | LTE Band 41C_Main     | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.37               | 12.00               | 1.156                  | 62.9         | 1.006                     | -0.15            | 0.651                  | 0.757                  |
|          | LTE Band 41C_Main     | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 41490 | 2680        | 11.43               | 12.00               | 1.140                  | 62.9         | 1.006                     | -0.09            | 0.652                  | 0.748                  |
|          | LTE Band 41_HPUE_Main | 20M      | QPSK       | 1       | 99        | Bottom Face      | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 11.76               | 12.00               | 1.057                  | 42.9         | 1.009                     | -0.13            | 0.560                  | 0.597                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 40620 | 2593        | 11.02               | 12.00               | 1.253                  | 62.9         | 1.006                     | -0.02            | 0.503                  | 0.634                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 39750 | 2506        | 11.57               | 12.00               | 1.104                  | 62.9         | 1.006                     | 0.06             | 0.468                  | 0.520                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 41055 | 2636.5      | 11.58               | 12.00               | 1.102                  | 62.9         | 1.006                     | -0.15            | 0.781                  | 0.865                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 40185 | 2549.5      | 10.62               | 12.00               | 1.374                  | 62.9         | 1.006                     | 0.16             | 0.689                  | 0.952                  |
|          | LTE Band 41_Main      | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 41490 | 2680        | 11.22               | 12.00               | 1.197                  | 62.9         | 1.006                     | -0.11            | 0.630                  | 0.758                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band                    | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.64               | 11.00               | 1.086                  | 62.9         | 1.006                     | 0.03             | 0.128                  | 0.140                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.57               | 11.00               | 1.104                  | 62.9         | 1.006                     | -0.08            | 0.133                  | 0.148                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.64               | 11.00               | 1.086                  | 62.9         | 1.006                     | -0.17            | 0.829                  | 0.906                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 39750 | 2506        | 10.44               | 11.00               | 1.138                  | 62.9         | 1.006                     | -0.01            | 0.724                  | 0.829                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.42               | 11.00               | 1.143                  | 62.9         | 1.006                     | -0.11            | 0.826                  | 0.950                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 10.34               | 11.00               | 1.164                  | 62.9         | 1.006                     | -0.02            | 0.881                  | 1.032                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 41490 | 2680        | 10.39               | 11.00               | 1.151                  | 62.9         | 1.006                     | 0.05             | 0.855                  | 0.990                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.57               | 11.00               | 1.104                  | 62.9         | 1.006                     | -0.05            | 0.864                  | 0.960                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 39750 | 2506        | 10.52               | 11.00               | 1.117                  | 62.9         | 1.006                     | -0.19            | 0.780                  | 0.876                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.45               | 11.00               | 1.135                  | 62.9         | 1.006                     | 0.18             | 0.831                  | 0.949                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 10.42               | 11.00               | 1.143                  | 62.9         | 1.006                     | -0.15            | 0.889                  | 1.022                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom Face      | 0mm      | Amphenol       | ON              | 41490 | 2680        | 10.48               | 11.00               | 1.127                  | 62.9         | 1.006                     | -0.05            | 0.897                  | 1.017                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.54               | 11.00               | 1.112                  | 62.9         | 1.006                     | 0.03             | 0.875                  | 0.979                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.64               | 11.00               | 1.086                  | 62.9         | 1.006                     | -0.12            | 0.836                  | 0.914                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 39750 | 2506        | 10.44               | 11.00               | 1.138                  | 62.9         | 1.006                     | 0                | 0.644                  | 0.737                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.42               | 11.00               | 1.143                  | 62.9         | 1.006                     | 0.04             | 0.783                  | 0.900                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 10.34               | 11.00               | 1.164                  | 62.9         | 1.006                     | 0.11             | 0.876                  | 1.026                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 41490 | 2680        | 10.39               | 11.00               | 1.151                  | 62.9         | 1.006                     | 0.18             | 0.883                  | 1.022                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.57               | 11.00               | 1.104                  | 62.9         | 1.006                     | 0.13             | 0.860                  | 0.955                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 39750 | 2506        | 10.52               | 11.00               | 1.117                  | 62.9         | 1.006                     | 0.1              | 0.696                  | 0.782                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.45               | 11.00               | 1.135                  | 62.9         | 1.006                     | 0.01             | 0.806                  | 0.920                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 10.42               | 11.00               | 1.143                  | 62.9         | 1.006                     | 0.06             | 0.906                  | 1.042                  |
| 14       | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | Amphenol       | ON              | 41490 | 2680        | 10.48               | 11.00               | 1.127                  | 62.9         | 1.006                     | -0.06            | 0.949                  | 1.076                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 100     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.54               | 11.00               | 1.112                  | 62.9         | 1.006                     | 0.16             | 0.865                  | 0.967                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 40620 | 2593        | 22.66               | 24.00               | 1.361                  | 62.9         | 1.006                     | -0.13            | 0.237                  | 0.325                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 40620 | 2593        | 21.72               | 23.00               | 1.343                  | 62.9         | 1.006                     | 0.12             | 0.216                  | 0.292                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Bottom Face      | 24mm     | Amphenol       | OFF             | 40620 | 2593        | 22.66               | 24.00               | 1.361                  | 62.9         | 1.006                     | 0.14             | 0.648                  | 0.888                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Bottom Face      | 24mm     | Amphenol       | OFF             | 40620 | 2593        | 21.72               | 23.00               | 1.343                  | 62.9         | 1.006                     | 0.03             | 0.601                  | 0.812                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | OFF             | 40620 | 2593        | 22.66               | 24.00               | 1.361                  | 62.9         | 1.006                     | -0.03            | 0.034                  | 0.047                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 1           | 0mm      | Amphenol       | OFF             | 40620 | 2593        | 21.72               | 23.00               | 1.343                  | 62.9         | 1.006                     | -0.11            | 0.037                  | 0.050                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 1       | 49        | Edge 4           | 22mm     | Amphenol       | OFF             | 40620 | 2593        | 22.66               | 24.00               | 1.361                  | 62.9         | 1.006                     | 0.03             | 0.305                  | 0.418                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 22mm     | Amphenol       | OFF             | 40620 | 2593        | 21.72               | 23.00               | 1.343                  | 62.9         | 1.006                     | 0.06             | 0.287                  | 0.388                  |
|          | LTE Band 41C_MIMO 2     | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 41490 | 2680        | 10.68               | 11.00               | 1.076                  | 62.9         | 1.006                     | 0.17             | 0.676                  | 0.732                  |
|          | LTE Band 41C_MIMO 2     | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 39750 | 2506        | 10.00               | 11.00               | 1.259                  | 62.9         | 1.006                     | 0.03             | 0.645                  | 0.817                  |
|          | LTE Band 41C_MIMO 2     | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.28               | 11.00               | 1.180                  | 62.9         | 1.006                     | -0.05            | 0.524                  | 0.622                  |
|          | LTE Band 41C_MIMO 2     | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.32               | 11.00               | 1.169                  | 62.9         | 1.006                     | -0.02            | 0.497                  | 0.585                  |
|          | LTE Band 41C_MIMO 2     | 20M      | QPSK       | 1       | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 10.47               | 11.00               | 1.130                  | 62.9         | 1.006                     | 0.13             | 0.604                  | 0.686                  |
|          | LTE Band 41_HPUE_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 40620 | 2593        | 10.66               | 11.00               | 1.081                  | 42.9         | 1.009                     | -0.11            | 0.550                  | 0.600                  |
|          | LTE Band 41_HPUE_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 39750 | 2506        | 10.39               | 11.00               | 1.151                  | 42.9         | 1.009                     | 0.15             | 0.464                  | 0.539                  |
|          | LTE Band 41_HPUE_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 40185 | 2549.5      | 10.34               | 11.00               | 1.164                  | 42.9         | 1.009                     | -0.16            | 0.490                  | 0.576                  |
|          | LTE Band 41_HPUE_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 41055 | 2636.5      | 10.27               | 11.00               | 1.183                  | 42.9         | 1.009                     | 0.16             | 0.579                  | 0.691                  |
|          | LTE Band 41_HPUE_MIMO 2 | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 41490 | 2680        | 10.34               | 11.00               | 1.164                  | 42.9         | 1.009                     | -0.02            | 0.573                  | 0.673                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 41490 | 2680        | 10.48               | 11.00               | 1.127                  | 62.9         | 1.006                     | 0.13             | 0.755                  | 0.856                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 39750 | 2506        | 10.52               | 11.00               | 1.117                  | 62.9         | 1.006                     | 0.1              | 0.695                  | 0.781                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 40620 | 2593        | 10.57               | 11.00               | 1.104                  | 62.9         | 1.006                     | 0.13             | 0.859                  | 0.954                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 40185 | 2549.5      | 10.45               | 11.00               | 1.135                  | 62.9         | 1.006                     | 0.01             | 0.805                  | 0.919                  |
|          | LTE Band 41_MIMO 2      | 20M      | QPSK       | 50      | 24        | Edge 4           | 0mm      | NVC            | ON              | 41055 | 2636.5      | 10.42               | 11.00               | 1.143                  | 62.9         | 1.006                     | 0.06             | 0.905                  | 1.041                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band              | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.04               | 11.50               | 1.112                  | 62.9         | 1.006                     | -0.03            | 0.068                  | 0.076                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.03               | 11.50               | 1.114                  | 62.9         | 1.006                     | 0.13             | 0.074                  | 0.083                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.04               | 11.50               | 1.112                  | 62.9         | 1.006                     | -0.15            | 0.489                  | 0.547                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.03               | 11.50               | 1.114                  | 62.9         | 1.006                     | 0.09             | 0.493                  | 0.553                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55340 | 3560        | 10.35               | 11.50               | 1.303                  | 62.9         | 1.006                     | -0.04            | 0.612                  | 0.802                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55830 | 3609        | 10.65               | 11.50               | 1.216                  | 62.9         | 1.006                     | -0.08            | 0.601                  | 0.735                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56150 | 3641        | 10.72               | 11.50               | 1.197                  | 62.9         | 1.006                     | -0.09            | 0.570                  | 0.686                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56640 | 3690        | 10.84               | 11.50               | 1.164                  | 62.9         | 1.006                     | 0                | 0.477                  | 0.559                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Edge 1           | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.04               | 11.50               | 1.112                  | 62.9         | 1.006                     | -0.09            | 0.089                  | 0.100                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Edge 1           | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.03               | 11.50               | 1.114                  | 62.9         | 1.006                     | -0.13            | 0.095                  | 0.106                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.04               | 11.50               | 1.112                  | 62.9         | 1.006                     | -0.02            | 0.031                  | 0.035                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Edge 2           | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.03               | 11.50               | 1.114                  | 62.9         | 1.006                     | -0.16            | 0.028                  | 0.031                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 55340 | 3560        | 20.12               | 21.00               | 1.225                  | 62.9         | 1.006                     | -0.15            | 0.052                  | 0.064                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 55340 | 3560        | 19.25               | 20.00               | 1.189                  | 62.9         | 1.006                     | -0.08            | 0.044                  | 0.053                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Bottom Face      | 34mm     | Amphenol       | OFF             | 55340 | 3560        | 20.12               | 21.00               | 1.225                  | 62.9         | 1.006                     | 0.12             | 0.047                  | 0.058                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 34mm     | Amphenol       | OFF             | 55340 | 3560        | 19.25               | 20.00               | 1.189                  | 62.9         | 1.006                     | 0.15             | 0.041                  | 0.049                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Edge 1           | 24mm     | Amphenol       | OFF             | 55340 | 3560        | 20.12               | 21.00               | 1.225                  | 62.9         | 1.006                     | 0.01             | 0.021                  | 0.026                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Edge 1           | 24mm     | Amphenol       | OFF             | 55340 | 3560        | 19.25               | 20.00               | 1.189                  | 62.9         | 1.006                     | 0.16             | 0.189                  | 0.226                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 1       | 0         | Edge 2           | 6mm      | Amphenol       | OFF             | 55340 | 3560        | 20.12               | 21.00               | 1.225                  | 62.9         | 1.006                     | -0.19            | 0.074                  | 0.091                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Edge 2           | 6mm      | Amphenol       | OFF             | 55340 | 3560        | 19.25               | 20.00               | 1.189                  | 62.9         | 1.006                     | -0.15            | 0.068                  | 0.081                  |
|          | LTE Band 48C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56150 | 3641        | 10.63               | 11.50               | 1.222                  | 62.9         | 1.006                     | -0.09            | 0.577                  | 0.709                  |
|          | LTE Band 48C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55340 | 3560        | 10.67               | 11.50               | 1.211                  | 62.9         | 1.006                     | 0.15             | 0.440                  | 0.536                  |
|          | LTE Band 48C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55830 | 3609        | 10.84               | 11.50               | 1.164                  | 62.9         | 1.006                     | -0.12            | 0.640                  | 0.750                  |
|          | LTE Band 48C_Main | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56640 | 3690        | 10.81               | 11.50               | 1.172                  | 62.9         | 1.006                     | 0.09             | 0.533                  | 0.629                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 55340 | 3560        | 10.35               | 11.50               | 1.303                  | 62.9         | 1.006                     | 0.06             | 0.510                  | 0.669                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 55830 | 3609        | 10.65               | 11.50               | 1.216                  | 62.9         | 1.006                     | -0.1             | 0.404                  | 0.494                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 56150 | 3641        | 10.72               | 11.50               | 1.197                  | 62.9         | 1.006                     | 0.15             | 0.532                  | 0.640                  |
|          | LTE Band 48_Main  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 56640 | 3690        | 11.03               | 11.50               | 1.114                  | 62.9         | 1.006                     | 0.13             | 0.568                  | 0.637                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band                | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|---------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 55830 | 3609        | 13.08               | 13.50               | 1.102                  | 62.9         | 1.006                     | -0.05            | 0.127                  | 0.141                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom of Laptop | 0mm      | Amphenol       | ON              | 55830 | 3609        | 13.06               | 13.50               | 1.107                  | 62.9         | 1.006                     | 0.11             | 0.141                  | 0.157                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 55830 | 3609        | 13.08               | 13.50               | 1.102                  | 62.9         | 1.006                     | -0.11            | 0.754                  | 0.836                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 55340 | 3560        | 12.69               | 13.50               | 1.205                  | 62.9         | 1.006                     | 0.07             | 0.796                  | 0.965                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 56150 | 3641        | 12.87               | 13.50               | 1.156                  | 62.9         | 1.006                     | -0.15            | 0.831                  | 0.966                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 0mm      | Amphenol       | ON              | 56640 | 3690        | 12.82               | 13.50               | 1.169                  | 62.9         | 1.006                     | -0.1             | 0.900                  | 1.059                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55830 | 3609        | 13.06               | 13.50               | 1.107                  | 62.9         | 1.006                     | 0.08             | 0.772                  | 0.859                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55340 | 3560        | 12.64               | 13.50               | 1.219                  | 62.9         | 1.006                     | -0.1             | 0.811                  | 0.995                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56150 | 3641        | 12.89               | 13.50               | 1.151                  | 62.9         | 1.006                     | 0.18             | 0.862                  | 0.998                  |
| 15       | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56640 | 3690        | 12.77               | 13.50               | 1.183                  | 62.9         | 1.006                     | -0.11            | 0.938                  | 1.116                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56150 | 3641        | 12.86               | 13.50               | 1.159                  | 62.9         | 1.006                     | -0.09            | 0.777                  | 0.906                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 55830 | 3609        | 13.08               | 13.50               | 1.102                  | 62.9         | 1.006                     | 0.15             | 0.728                  | 0.807                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 55340 | 3560        | 12.69               | 13.50               | 1.205                  | 62.9         | 1.006                     | 0.15             | 0.765                  | 0.927                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 56150 | 3641        | 12.87               | 13.50               | 1.156                  | 62.9         | 1.006                     | 0.03             | 0.705                  | 0.820                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 0mm      | Amphenol       | ON              | 56640 | 3690        | 12.82               | 13.50               | 1.169                  | 62.9         | 1.006                     | -0.04            | 0.684                  | 0.805                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 55830 | 3609        | 13.06               | 13.50               | 1.107                  | 62.9         | 1.006                     | -0.12            | 0.732                  | 0.815                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 55340 | 3560        | 12.64               | 13.50               | 1.219                  | 62.9         | 1.006                     | 0.13             | 0.803                  | 0.985                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 56150 | 3641        | 12.89               | 13.50               | 1.151                  | 62.9         | 1.006                     | -0.18            | 0.724                  | 0.838                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 56640 | 3690        | 12.77               | 13.50               | 1.183                  | 62.9         | 1.006                     | -0.01            | 0.689                  | 0.820                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 100     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 56150 | 3641        | 12.86               | 13.50               | 1.159                  | 62.9         | 1.006                     | -0.13            | 0.722                  | 0.842                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 55830 | 3609        | 21.25               | 22.00               | 1.189                  | 62.9         | 1.006                     | 0.05             | 0.126                  | 0.151                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 55830 | 3609        | 20.28               | 21.00               | 1.180                  | 62.9         | 1.006                     | -0.15            | 0.112                  | 0.133                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Bottom Face      | 24mm     | Amphenol       | OFF             | 55830 | 3609        | 21.25               | 22.00               | 1.189                  | 62.9         | 1.006                     | 0.09             | 0.100                  | 0.120                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 24        | Bottom Face      | 24mm     | Amphenol       | OFF             | 55830 | 3609        | 20.28               | 21.00               | 1.180                  | 62.9         | 1.006                     | 0.05             | 0.091                  | 0.108                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 1           | 0mm      | Amphenol       | OFF             | 55830 | 3609        | 21.25               | 22.00               | 1.189                  | 62.9         | 1.006                     | 0.09             | 0.053                  | 0.063                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 1           | 0mm      | Amphenol       | OFF             | 55830 | 3609        | 20.28               | 21.00               | 1.180                  | 62.9         | 1.006                     | 0.17             | 0.055                  | 0.065                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 1       | 49        | Edge 4           | 22mm     | Amphenol       | OFF             | 55830 | 3609        | 21.25               | 22.00               | 1.189                  | 62.9         | 1.006                     | -0.17            | 0.164                  | 0.196                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 24        | Edge 4           | 22mm     | Amphenol       | OFF             | 55830 | 3609        | 20.28               | 21.00               | 1.180                  | 62.9         | 1.006                     | 0.13             | 0.142                  | 0.169                  |
|          | LTE Band 48C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56150 | 3641        | 12.16               | 13.50               | 1.361                  | 62.9         | 1.006                     | 0.08             | 0.512                  | 0.701                  |
|          | LTE Band 48C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55340 | 3560        | 11.76               | 13.50               | 1.493                  | 62.9         | 1.006                     | 0.09             | 0.520                  | 0.781                  |
|          | LTE Band 48C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 55830 | 3609        | 11.92               | 13.50               | 1.439                  | 62.9         | 1.006                     | 0.02             | 0.571                  | 0.826                  |
|          | LTE Band 48C_MIMO 2 | 20M      | QPSK       | 1       | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 56640 | 3690        | 11.97               | 13.50               | 1.422                  | 62.9         | 1.006                     | -0.03            | 0.494                  | 0.707                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 56640 | 3690        | 12.77               | 13.50               | 1.183                  | 62.9         | 1.006                     | 0.08             | 0.801                  | 0.953                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 55340 | 3560        | 12.64               | 13.50               | 1.219                  | 62.9         | 1.006                     | -0.18            | 0.750                  | 0.920                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 55830 | 3609        | 13.06               | 13.50               | 1.107                  | 62.9         | 1.006                     | 0.07             | 0.818                  | 0.911                  |
|          | LTE Band 48_MIMO 2  | 20M      | QPSK       | 50      | 0         | Bottom Face      | 0mm      | NVC            | ON              | 56150 | 3641        | 12.89               | 13.50               | 1.151                  | 62.9         | 1.006                     | -0.09            | 0.795                  | 0.920                  |

**<5G NR SAR>**

| Plot No. | Band        | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.31               | 14.50               | 1.315                  | 0.01             | 0.182                  | 0.239                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.26               | 14.50               | 1.330                  | 0.02             | 0.181                  | 0.241                  |
| 16       | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.31               | 14.50               | 1.315                  | -0.06            | 0.612                  | 0.805                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.26               | 14.50               | 1.330                  | 0.14             | 0.593                  | 0.789                  |
|          | FR1 n5_Main | 20M      | BPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.15               | 14.50               | 1.365                  | 0.12             | 0.545                  | 0.744                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Edge 1           | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.31               | 14.50               | 1.315                  | 0.03             | 0.168                  | 0.221                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Edge 1           | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.26               | 14.50               | 1.330                  | -0.02            | 0.109                  | 0.145                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Edge 2           | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.31               | 14.50               | 1.315                  | -0.13            | 0.507                  | 0.667                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Edge 2           | 0mm      | Amphenol       | ON              | 167300 | 836.5       | 13.26               | 14.50               | 1.330                  | -0.1             | 0.384                  | 0.511                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 167300 | 836.5       | 24.27               | 25.00               | 1.183                  | -0.06            | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 167300 | 836.5       | 24.31               | 25.00               | 1.172                  | 0.12             | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Bottom Face      | 34mm     | Amphenol       | OFF             | 167300 | 836.5       | 24.27               | 25.00               | 1.183                  | -0.04            | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Bottom Face      | 34mm     | Amphenol       | OFF             | 167300 | 836.5       | 24.31               | 25.00               | 1.172                  | -0.05            | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Edge 1           | 24mm     | Amphenol       | OFF             | 167300 | 836.5       | 24.27               | 25.00               | 1.183                  | -0.13            | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Edge 1           | 24mm     | Amphenol       | OFF             | 167300 | 836.5       | 24.31               | 25.00               | 1.172                  | -0.16            | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Edge 2           | 6mm      | Amphenol       | OFF             | 167300 | 836.5       | 24.27               | 25.00               | 1.183                  | -0.05            | 0.232                  | 0.274                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Edge 2           | 6mm      | Amphenol       | OFF             | 167300 | 836.5       | 24.31               | 25.00               | 1.172                  | 0.03             | 0.187                  | 0.219                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Edge 3           | 0mm      | Amphenol       | OFF             | 167300 | 836.5       | 24.27               | 25.00               | 1.183                  | -0.18            | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Edge 3           | 0mm      | Amphenol       | OFF             | 167300 | 836.5       | 24.31               | 25.00               | 1.172                  | 0.17             | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Edge 4           | 0mm      | Amphenol       | OFF             | 167300 | 836.5       | 24.27               | 25.00               | 1.183                  | 0.05             | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 50      | 28        | Edge 4           | 0mm      | Amphenol       | OFF             | 167300 | 836.5       | 24.31               | 25.00               | 1.172                  | 0.01             | 0.001                  | 0.001                  |
|          | FR1 n5_Main | 20M      | BPSK       | 1       | 53        | Bottom Face      | 0mm      | NVC            | ON              | 167300 | 836.5       | 13.31               | 14.50               | 1.315                  | -0.16            | 0.432                  | 0.568                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band          | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|---------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.80                | 10.50               | 1.175                  | 0.02             | 0.258                  | 0.303                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.78                | 10.50               | 1.180                  | -0.02            | 0.255                  | 0.301                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.80                | 10.50               | 1.175                  | 0                | 0.867                  | 1.019                  |
|          | FR1 n7_Main   | 20M      | QPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 502000 | 2510        | 9.58                | 10.50               | 1.236                  | -0.05            | 0.767                  | 0.948                  |
|          | FR1 n7_Main   | 20M      | QPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 507000 | 2535        | 9.37                | 10.50               | 1.297                  | 0.03             | 0.772                  | 1.001                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.78                | 10.50               | 1.180                  | -0.16            | 0.876                  | 1.034                  |
|          | FR1 n7_Main   | 20M      | QPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 502000 | 2510        | 9.58                | 10.50               | 1.236                  | -0.03            | 0.772                  | 0.954                  |
|          | FR1 n7_Main   | 20M      | QPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 507000 | 2535        | 9.56                | 10.50               | 1.242                  | -0.04            | 0.804                  | 0.998                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.79                | 10.50               | 1.178                  | -0.02            | 0.782                  | 0.921                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 53        | Edge 1           | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.80                | 10.50               | 1.175                  | 0.01             | 0.197                  | 0.231                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Edge 1           | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.78                | 10.50               | 1.180                  | -0.01            | 0.139                  | 0.164                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 53        | Edge 2           | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.80                | 10.50               | 1.175                  | 0.03             | 0.001                  | 0.001                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Edge 2           | 0mm      | Amphenol       | ON              | 512000 | 2560        | 9.78                | 10.50               | 1.180                  | 0.04             | 0.001                  | 0.001                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 104       | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 507000 | 2535        | 23.15               | 24.00               | 1.216                  | -0.02            | 0.092                  | 0.112                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 507000 | 2535        | 23.24               | 24.00               | 1.191                  | 0.12             | 0.079                  | 0.094                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 104       | Bottom Face      | 34mm     | Amphenol       | OFF             | 507000 | 2535        | 23.15               | 24.00               | 1.216                  | 0.08             | 0.093                  | 0.113                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Bottom Face      | 34mm     | Amphenol       | OFF             | 507000 | 2535        | 23.24               | 24.00               | 1.191                  | 0.17             | 0.081                  | 0.096                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 104       | Edge 1           | 24mm     | Amphenol       | OFF             | 507000 | 2535        | 23.15               | 24.00               | 1.216                  | 0.19             | 0.138                  | 0.168                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Edge 1           | 24mm     | Amphenol       | OFF             | 507000 | 2535        | 23.24               | 24.00               | 1.191                  | 0.01             | 0.123                  | 0.147                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 1       | 104       | Edge 2           | 6mm      | Amphenol       | OFF             | 507000 | 2535        | 23.15               | 24.00               | 1.216                  | -0.04            | 0.190                  | 0.231                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Edge 2           | 6mm      | Amphenol       | OFF             | 507000 | 2535        | 23.24               | 24.00               | 1.191                  | -0.08            | 0.167                  | 0.199                  |
|          | FR1 n7_Main   | 20M      | BPSK       | 50      | 28        | Bottom Face      | 0mm      | NVC            | ON              | 512000 | 2560        | 9.78                | 10.50               | 1.180                  | -0.07            | 0.605                  | 0.714                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 1       | 104       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 507000 | 2535        | 8.50                | 10.00               | 1.413                  | 0.19             | 0.127                  | 0.179                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 50      | 56        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 507000 | 2535        | 8.46                | 10.00               | 1.426                  | -0.15            | 0.123                  | 0.175                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 1       | 104       | Bottom Face      | 0mm      | Amphenol       | ON              | 507000 | 2535        | 8.50                | 10.00               | 1.413                  | 0.15             | 0.711                  | 1.004                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 1       | 104       | Bottom Face      | 0mm      | Amphenol       | ON              | 502000 | 2510        | 8.44                | 10.00               | 1.432                  | 0.08             | 0.642                  | 0.919                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 1       | 104       | Bottom Face      | 0mm      | Amphenol       | ON              | 512000 | 2560        | 8.42                | 10.00               | 1.439                  | -0.05            | 0.740                  | 1.065                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 50      | 56        | Bottom Face      | 0mm      | Amphenol       | ON              | 507000 | 2535        | 8.46                | 10.00               | 1.426                  | 0.07             | 0.703                  | 1.002                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 56        | Bottom Face      | 0mm      | Amphenol       | ON              | 502000 | 2510        | 8.34                | 10.00               | 1.466                  | 0.15             | 0.731                  | 1.071                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 56        | Bottom Face      | 0mm      | Amphenol       | ON              | 512000 | 2560        | 8.33                | 10.00               | 1.469                  | 0.01             | 0.763                  | 1.121                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 512000 | 2560        | 8.43                | 10.00               | 1.435                  | 0.06             | 0.718                  | 1.031                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 1       | 104       | Edge 4           | 0mm      | Amphenol       | ON              | 507000 | 2535        | 8.50                | 10.00               | 1.413                  | -0.13            | 0.685                  | 0.968                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 1       | 104       | Edge 4           | 0mm      | Amphenol       | ON              | 502000 | 2510        | 8.44                | 10.00               | 1.432                  | 0.17             | 0.707                  | 1.013                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 1       | 104       | Edge 4           | 0mm      | Amphenol       | ON              | 512000 | 2560        | 8.41                | 10.00               | 1.442                  | 0.05             | 0.672                  | 0.969                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 50      | 56        | Edge 4           | 0mm      | Amphenol       | ON              | 507000 | 2535        | 8.46                | 10.00               | 1.426                  | -0.14            | 0.712                  | 1.015                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 56        | Edge 4           | 0mm      | Amphenol       | ON              | 502000 | 2510        | 8.34                | 10.00               | 1.466                  | 0.18             | 0.695                  | 1.019                  |
| 17       | FR1 n7_MIMO 2 | 20M      | BPSK       | 50      | 56        | Edge 4           | 0mm      | Amphenol       | ON              | 512000 | 2560        | 8.44                | 10.00               | 1.432                  | -0.09            | 0.806                  | 1.154                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 100     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 512000 | 2560        | 8.43                | 10.00               | 1.435                  | -0.18            | 0.665                  | 0.955                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 512000 | 2560        | 23.23               | 24.00               | 1.194                  | 0.03             | 0.284                  | 0.339                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 28        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 512000 | 2560        | 23.21               | 24.00               | 1.199                  | -0.06            | 0.256                  | 0.307                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 1       | 53        | Bottom Face      | 24mm     | Amphenol       | OFF             | 512000 | 2560        | 23.23               | 24.00               | 1.194                  | 0.07             | 0.422                  | 0.504                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 28        | Bottom Face      | 24mm     | Amphenol       | OFF             | 512000 | 2560        | 23.21               | 24.00               | 1.199                  | 0.07             | 0.391                  | 0.469                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 1       | 104       | Edge 1           | 0mm      | Amphenol       | OFF             | 512000 | 2560        | 23.10               | 24.00               | 1.230                  | -0.07            | 0.649                  | 0.798                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 28        | Edge 1           | 0mm      | Amphenol       | OFF             | 512000 | 2560        | 23.21               | 24.00               | 1.199                  | 0.05             | 0.624                  | 0.748                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 1       | 53        | Edge 4           | 22mm     | Amphenol       | OFF             | 512000 | 2560        | 23.23               | 24.00               | 1.194                  | 0.03             | 0.652                  | 0.778                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 28        | Edge 4           | 22mm     | Amphenol       | OFF             | 512000 | 2560        | 23.21               | 24.00               | 1.199                  | 0.18             | 0.634                  | 0.760                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 50      | 56        | Edge 4           | 0mm      | NVC            | ON              | 512000 | 2560        | 8.44                | 10.00               | 1.432                  | 0.11             | 0.757                  | 1.084                  |
|          | FR1 n7_MIMO 2 | 20M      | BPSK       | 50      | 56        | Edge 4           | 0mm      | NVC            | ON              | 507000 | 2535        | 8.46                | 10.00               | 1.426                  | 0.04             | 0.727                  | 1.036                  |
|          | FR1 n7_MIMO 2 | 20M      | QPSK       | 50      | 56        | Edge 4           | 0mm      | NVC            | ON              | 502000 | 2510        | 8.34                | 10.00               | 1.466                  | -0.19            | 0.721                  | 1.057                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band           | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|----------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.05               | 13.00               | 1.245                  | -0.12            | 0.232                  | 0.289                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.03               | 13.00               | 1.250                  | 0.09             | 0.232                  | 0.290                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.05               | 13.00               | 1.245                  | -0.1             | 0.714                  | 0.889                  |
|          | FR1 n25_Main   | 20M      | QPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 372000 | 1860        | 11.73               | 13.00               | 1.340                  | 0.09             | 0.613                  | 0.821                  |
|          | FR1 n25_Main   | 20M      | QPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 376500 | 1882.5      | 11.89               | 13.00               | 1.291                  | 0.04             | 0.678                  | 0.875                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.03               | 13.00               | 1.250                  | 0.06             | 0.606                  | 0.758                  |
|          | FR1 n25_Main   | 20M      | QPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 372000 | 1860        | 11.77               | 13.00               | 1.327                  | -0.08            | 0.625                  | 0.830                  |
|          | FR1 n25_Main   | 20M      | QPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 376500 | 1882.5      | 11.91               | 13.00               | 1.285                  | -0.03            | 0.683                  | 0.878                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 381000 | 1905        | 11.88               | 13.00               | 1.294                  | -0.13            | 0.613                  | 0.793                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Edge 1           | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.05               | 13.00               | 1.245                  | -0.09            | 0.172                  | 0.214                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Edge 1           | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.03               | 13.00               | 1.250                  | 0.06             | 0.189                  | 0.236                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Edge 2           | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.05               | 13.00               | 1.245                  | 0.08             | 0.034                  | 0.042                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Edge 2           | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.03               | 13.00               | 1.250                  | -0.19            | 0.047                  | 0.059                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 381000 | 1905        | 23.62               | 24.00               | 1.091                  | 0.08             | 0.081                  | 0.088                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 381000 | 1905        | 23.53               | 24.00               | 1.114                  | 0.13             | 0.071                  | 0.079                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Bottom Face      | 34mm     | Amphenol       | OFF             | 381000 | 1905        | 23.62               | 24.00               | 1.091                  | 0                | 0.052                  | 0.057                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Bottom Face      | 34mm     | Amphenol       | OFF             | 381000 | 1905        | 23.53               | 24.00               | 1.114                  | 0.09             | 0.045                  | 0.050                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Edge 1           | 24mm     | Amphenol       | OFF             | 381000 | 1905        | 23.62               | 24.00               | 1.091                  | -0.19            | 0.054                  | 0.059                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Edge 1           | 24mm     | Amphenol       | OFF             | 381000 | 1905        | 23.53               | 24.00               | 1.114                  | -0.04            | 0.047                  | 0.052                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Edge 2           | 6mm      | Amphenol       | OFF             | 381000 | 1905        | 23.62               | 24.00               | 1.091                  | -0.15            | 0.071                  | 0.077                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 50      | 28        | Edge 2           | 6mm      | Amphenol       | OFF             | 381000 | 1905        | 23.53               | 24.00               | 1.114                  | -0.12            | 0.062                  | 0.069                  |
|          | FR1 n25_Main   | 20M      | BPSK       | 1       | 53        | Bottom Face      | 0mm      | NVC            | ON              | 381000 | 1905        | 12.05               | 13.00               | 1.245                  | 0.04             | 0.507                  | 0.631                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.31               | 12.50               | 1.045                  | 0.15             | 0.197                  | 0.206                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.29               | 12.50               | 1.050                  | -0.17            | 0.200                  | 0.210                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.31               | 12.50               | 1.045                  | -0.12            | 0.838                  | 0.875                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 372000 | 1860        | 12.15               | 12.50               | 1.084                  | -0.03            | 0.694                  | 0.752                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 376500 | 1882.5      | 12.18               | 12.50               | 1.076                  | -0.05            | 0.784                  | 0.844                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.29               | 12.50               | 1.050                  | -0.14            | 0.842                  | 0.884                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 372000 | 1860        | 12.07               | 12.50               | 1.104                  | -0.08            | 0.705                  | 0.778                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 376500 | 1882.5      | 12.24               | 12.50               | 1.062                  | -0.08            | 0.787                  | 0.836                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 100     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.05               | 12.50               | 1.109                  | -0.18            | 0.751                  | 0.833                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 1       | 53        | Edge 4           | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.31               | 12.50               | 1.045                  | -0.08            | 1.050                  | 1.097                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 1       | 53        | Edge 4           | 0mm      | Amphenol       | ON              | 372000 | 1860        | 12.15               | 12.50               | 1.084                  | -0.15            | 0.911                  | 0.987                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 1       | 53        | Edge 4           | 0mm      | Amphenol       | ON              | 376500 | 1882.5      | 12.18               | 12.50               | 1.076                  | 0.16             | 0.994                  | 1.070                  |
| 18       | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Edge 4           | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.29               | 12.50               | 1.050                  | -0.06            | 1.070                  | 1.123                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 50      | 28        | Edge 4           | 0mm      | Amphenol       | ON              | 372000 | 1860        | 12.07               | 12.50               | 1.104                  | 0.06             | 0.902                  | 0.996                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 50      | 28        | Edge 4           | 0mm      | Amphenol       | ON              | 376500 | 1882.5      | 12.24               | 12.50               | 1.062                  | 0.11             | 0.994                  | 1.055                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 100     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 381000 | 1905        | 12.05               | 12.50               | 1.109                  | 0.18             | 0.994                  | 1.103                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 381000 | 1905        | 23.96               | 24.00               | 1.009                  | -0.13            | 0.205                  | 0.207                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 376500 | 1882.5      | 23.40               | 24.00               | 1.148                  | 0.17             | 0.190                  | 0.218                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 1       | 53        | Bottom Face      | 24mm     | Amphenol       | OFF             | 381000 | 1905        | 23.96               | 24.00               | 1.009                  | -0.04            | 0.161                  | 0.162                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Bottom Face      | 24mm     | Amphenol       | OFF             | 376500 | 1882.5      | 23.40               | 24.00               | 1.148                  | -0.19            | 0.144                  | 0.165                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 1       | 53        | Edge 1           | 0mm      | Amphenol       | OFF             | 381000 | 1905        | 23.96               | 24.00               | 1.009                  | 0.01             | 0.001                  | 0.001                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Edge 1           | 0mm      | Amphenol       | OFF             | 376500 | 1882.5      | 23.40               | 24.00               | 1.148                  | 0.11             | 0.001                  | 0.001                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 1       | 53        | Edge 4           | 22mm     | Amphenol       | OFF             | 381000 | 1905        | 23.96               | 24.00               | 1.009                  | 0.06             | 0.271                  | 0.274                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Edge 4           | 22mm     | Amphenol       | OFF             | 376500 | 1882.5      | 23.40               | 24.00               | 1.148                  | 0.05             | 0.253                  | 0.290                  |
|          | FR1 n25_MIMO 2 | 20M      | BPSK       | 50      | 28        | Edge 4           | 0mm      | NVC            | ON              | 381000 | 1905        | 12.29               | 12.50               | 1.050                  | -0.13            | 0.943                  | 0.990                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 50      | 28        | Edge 4           | 0mm      | NVC            | ON              | 372000 | 1860        | 12.07               | 12.50               | 1.104                  | 0.05             | 0.921                  | 1.017                  |
|          | FR1 n25_MIMO 2 | 20M      | QPSK       | 50      | 28        | Edge 4           | 0mm      | NVC            | ON              | 376500 | 1882.5      | 12.24               | 12.50               | 1.062                  | 0.03             | 0.930                  | 0.987                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band           | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|----------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 462000 | 2310        | 11.03               | 12.00               | 1.250                  | -0.13            | 0.322                  | 0.403                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.76               | 12.00               | 1.330                  | -0.11            | 0.314                  | 0.418                  |
| 19       | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Bottom Face      | 0mm      | Amphenol       | ON              | 462000 | 2310        | 11.03               | 12.00               | 1.250                  | -0.19            | 0.949                  | 1.186                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Bottom Face      | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.76               | 12.00               | 1.330                  | 0.16             | 0.834                  | 1.110                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.98               | 12.00               | 1.265                  | -0.05            | 0.850                  | 1.075                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Edge 1           | 0mm      | Amphenol       | ON              | 462000 | 2310        | 11.03               | 12.00               | 1.250                  | -0.12            | 0.143                  | 0.179                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Edge 1           | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.76               | 12.00               | 1.330                  | -0.19            | 0.151                  | 0.201                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Edge 2           | 0mm      | Amphenol       | ON              | 462000 | 2310        | 11.03               | 12.00               | 1.250                  | -0.03            | 0.303                  | 0.379                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Edge 2           | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.76               | 12.00               | 1.330                  | 0.12             | 0.170                  | 0.226                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 462000 | 2310        | 22.22               | 23.00               | 1.197                  | -0.06            | 0.094                  | 0.112                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 462000 | 2310        | 22.18               | 23.00               | 1.208                  | 0.19             | 0.084                  | 0.101                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Bottom Face      | 34mm     | Amphenol       | OFF             | 462000 | 2310        | 22.22               | 23.00               | 1.197                  | 0.09             | 0.061                  | 0.073                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Bottom Face      | 34mm     | Amphenol       | OFF             | 462000 | 2310        | 22.18               | 23.00               | 1.208                  | -0.12            | 0.053                  | 0.064                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Edge 1           | 24mm     | Amphenol       | OFF             | 462000 | 2310        | 22.22               | 23.00               | 1.197                  | 0.19             | 0.069                  | 0.083                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Edge 1           | 24mm     | Amphenol       | OFF             | 462000 | 2310        | 22.18               | 23.00               | 1.208                  | -0.03            | 0.061                  | 0.074                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Edge 2           | 6mm      | Amphenol       | OFF             | 462000 | 2310        | 22.22               | 23.00               | 1.197                  | 0.03             | 0.120                  | 0.144                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 25      | 14        | Edge 2           | 6mm      | Amphenol       | OFF             | 462000 | 2310        | 22.18               | 23.00               | 1.208                  | 0.02             | 0.106                  | 0.128                  |
|          | FR1 n30_Main   | 10M      | BPSK       | 1       | 50        | Bottom Face      | 0mm      | NVC            | ON              | 462000 | 2310        | 11.03               | 12.00               | 1.250                  | 0.14             | 0.705                  | 0.881                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.86               | 11.00               | 1.033                  | -0.16            | 0.198                  | 0.204                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 25      | 14        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.82               | 11.00               | 1.042                  | -0.1             | 0.220                  | 0.229                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Bottom Face      | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.86               | 11.00               | 1.033                  | 0                | 0.920                  | 0.950                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 25      | 14        | Bottom Face      | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.82               | 11.00               | 1.042                  | 0.06             | 0.743                  | 0.774                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 50      | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.74               | 11.00               | 1.062                  | 0.11             | 0.791                  | 0.840                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Edge 4           | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.86               | 11.00               | 1.033                  | -0.16            | 1.090                  | 1.126                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 25      | 14        | Edge 4           | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.82               | 11.00               | 1.042                  | -0.13            | 1.040                  | 1.084                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 50      | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.74               | 11.00               | 1.062                  | 0                | 1.050                  | 1.115                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 462000 | 2310        | 22.80               | 23.00               | 1.047                  | -0.1             | 0.212                  | 0.222                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 25      | 14        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 462000 | 2310        | 22.78               | 23.00               | 1.052                  | 0.02             | 0.187                  | 0.197                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Bottom Face      | 24mm     | Amphenol       | OFF             | 462000 | 2310        | 22.80               | 23.00               | 1.047                  | -0.18            | 0.243                  | 0.254                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 25      | 14        | Bottom Face      | 24mm     | Amphenol       | OFF             | 462000 | 2310        | 22.78               | 23.00               | 1.052                  | 0                | 0.222                  | 0.234                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Edge 1           | 0mm      | Amphenol       | OFF             | 462000 | 2310        | 22.80               | 23.00               | 1.047                  | -0.15            | 0.001                  | 0.001                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 25      | 14        | Edge 1           | 0mm      | Amphenol       | OFF             | 462000 | 2310        | 22.78               | 23.00               | 1.052                  | -0.11            | 0.001                  | 0.001                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Edge 4           | 22mm     | Amphenol       | OFF             | 462000 | 2310        | 22.80               | 23.00               | 1.047                  | 0                | 0.335                  | 0.351                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 25      | 14        | Edge 4           | 22mm     | Amphenol       | OFF             | 462000 | 2310        | 22.78               | 23.00               | 1.052                  | -0.08            | 0.304                  | 0.320                  |
|          | FR1 n30_MIMO 2 | 10M      | BPSK       | 1       | 26        | Edge 4           | 0mm      | NVC            | ON              | 462000 | 2310        | 10.86               | 11.00               | 1.033                  | 0.06             | 0.958                  | 0.989                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band           | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|----------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.20               | 13.50               | 1.072                  | -0.17            | 0.282                  | 0.302                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.14               | 13.50               | 1.086                  | -0.11            | 0.298                  | 0.324                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Bottom Face      | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.20               | 13.50               | 1.072                  | 0.07             | 0.796                  | 0.853                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Bottom Face      | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.14               | 13.50               | 1.086                  | 0.11             | 0.777                  | 0.844                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 216     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.88               | 13.50               | 1.153                  | -0.08            | 0.842                  | 0.971                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Edge 1           | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.20               | 13.50               | 1.072                  | 0.13             | 0.194                  | 0.208                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Edge 1           | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.14               | 13.50               | 1.086                  | -0.03            | 0.199                  | 0.216                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Edge 2           | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.20               | 13.50               | 1.072                  | -0.08            | 0.082                  | 0.088                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Edge 2           | 0mm      | Amphenol       | ON              | 349000 | 1745        | 13.14               | 13.50               | 1.086                  | 0.07             | 0.132                  | 0.143                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 349000 | 1745        | 22.99               | 24.00               | 1.262                  | -0.12            | 0.105                  | 0.132                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 349000 | 1745        | 23.09               | 24.00               | 1.233                  | -0.01            | 0.096                  | 0.118                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Bottom Face      | 34mm     | Amphenol       | OFF             | 349000 | 1745        | 22.99               | 24.00               | 1.262                  | -0.06            | 0.074                  | 0.093                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Bottom Face      | 34mm     | Amphenol       | OFF             | 349000 | 1745        | 23.09               | 24.00               | 1.233                  | 0.11             | 0.067                  | 0.083                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Edge 1           | 24mm     | Amphenol       | OFF             | 349000 | 1745        | 22.99               | 24.00               | 1.262                  | 0.12             | 0.100                  | 0.126                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Edge 1           | 24mm     | Amphenol       | OFF             | 349000 | 1745        | 23.09               | 24.00               | 1.233                  | -0.04            | 0.089                  | 0.110                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 1       | 108       | Edge 2           | 6mm      | Amphenol       | OFF             | 349000 | 1745        | 22.99               | 24.00               | 1.262                  | 0.19             | 0.052                  | 0.066                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 108     | 54        | Edge 2           | 6mm      | Amphenol       | OFF             | 349000 | 1745        | 23.09               | 24.00               | 1.233                  | -0.04            | 0.046                  | 0.057                  |
|          | FR1 n66_Main   | 40M      | BPSK       | 216     | 0         | Bottom Face      | 0mm      | NVC            | ON              | 349000 | 1745        | 12.88               | 13.50               | 1.153                  | -0.04            | 0.799                  | 0.922                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.45               | 13.00               | 1.135                  | 0.03             | 0.225                  | 0.255                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 108     | 54        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.42               | 13.00               | 1.143                  | 0.02             | 0.212                  | 0.242                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Bottom Face      | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.45               | 13.00               | 1.135                  | -0.13            | 0.580                  | 0.658                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 108     | 54        | Bottom Face      | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.42               | 13.00               | 1.143                  | 0.12             | 0.605                  | 0.691                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 216     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.18               | 13.00               | 1.208                  | -0.1             | 0.556                  | 0.672                  |
| 20       | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Edge 4           | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.45               | 13.00               | 1.135                  | -0.04            | 0.884                  | 1.003                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 108     | 54        | Edge 4           | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.42               | 13.00               | 1.143                  | -0.16            | 0.793                  | 0.906                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 216     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 349000 | 1745        | 12.18               | 13.00               | 1.208                  | -0.12            | 0.738                  | 0.891                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 349000 | 1745        | 22.94               | 24.00               | 1.276                  | 0.15             | 0.231                  | 0.295                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 108     | 54        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 349000 | 1745        | 23.24               | 24.00               | 1.191                  | 0.02             | 0.212                  | 0.253                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Bottom Face      | 24mm     | Amphenol       | OFF             | 349000 | 1745        | 22.94               | 24.00               | 1.276                  | -0.07            | 0.141                  | 0.180                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 108     | 54        | Bottom Face      | 24mm     | Amphenol       | OFF             | 349000 | 1745        | 23.24               | 24.00               | 1.191                  | -0.17            | 0.129                  | 0.154                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Edge 1           | 0mm      | Amphenol       | OFF             | 349000 | 1745        | 22.94               | 24.00               | 1.276                  | 0.03             | 0.001                  | 0.001                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 108     | 54        | Edge 1           | 0mm      | Amphenol       | OFF             | 349000 | 1745        | 23.24               | 24.00               | 1.191                  | 0.16             | 0.001                  | 0.001                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Edge 4           | 22mm     | Amphenol       | OFF             | 349000 | 1745        | 22.94               | 24.00               | 1.276                  | 0.15             | 0.239                  | 0.305                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 108     | 54        | Edge 4           | 22mm     | Amphenol       | OFF             | 349000 | 1745        | 23.24               | 24.00               | 1.191                  | -0.09            | 0.228                  | 0.272                  |
|          | FR1 n66_MIMO 2 | 40M      | BPSK       | 1       | 108       | Edge 4           | 0mm      | NVC            | ON              | 349000 | 1745        | 12.45               | 13.00               | 1.135                  | -0.08            | 0.859                  | 0.975                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band         | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|--------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.20               | 13.50               | 1.072                  | -0.12            | 0.085                  | 0.091                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.18               | 13.50               | 1.076                  | 0.01             | 0.089                  | 0.096                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Bottom Face      | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.20               | 13.50               | 1.072                  | 0.12             | 0.181                  | 0.194                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Bottom Face      | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.18               | 13.50               | 1.076                  | 0.05             | 0.175                  | 0.188                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Edge 1           | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.20               | 13.50               | 1.072                  | -0.11            | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Edge 1           | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.18               | 13.50               | 1.076                  | -0.04            | 0.001                  | 0.001                  |
| 21       | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Edge 2           | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.20               | 13.50               | 1.072                  | -0.04            | 0.476                  | 0.510                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Edge 2           | 0mm      | Amphenol       | ON              | 136100 | 680.5       | 13.18               | 13.50               | 1.076                  | -0.16            | 0.470                  | 0.506                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 136100 | 680.5       | 23.86               | 25.00               | 1.300                  | 0.02             | 0.070                  | 0.091                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 136100 | 680.5       | 23.77               | 25.00               | 1.327                  | -0.04            | 0.060                  | 0.080                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Bottom Face      | 34mm     | Amphenol       | OFF             | 136100 | 680.5       | 23.86               | 25.00               | 1.300                  | 0.16             | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Bottom Face      | 34mm     | Amphenol       | OFF             | 136100 | 680.5       | 23.77               | 25.00               | 1.327                  | -0.18            | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Edge 1           | 24mm     | Amphenol       | OFF             | 136100 | 680.5       | 23.86               | 25.00               | 1.300                  | 0.13             | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Edge 1           | 24mm     | Amphenol       | OFF             | 136100 | 680.5       | 23.77               | 25.00               | 1.327                  | -0.09            | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Edge 2           | 6mm      | Amphenol       | OFF             | 136100 | 680.5       | 23.86               | 25.00               | 1.300                  | 0.11             | 0.354                  | 0.460                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Edge 2           | 6mm      | Amphenol       | OFF             | 136100 | 680.5       | 23.77               | 25.00               | 1.327                  | 0.18             | 0.321                  | 0.426                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Edge 3           | 0mm      | Amphenol       | OFF             | 136100 | 680.5       | 23.86               | 25.00               | 1.300                  | 0.14             | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Edge 3           | 0mm      | Amphenol       | OFF             | 136100 | 680.5       | 23.77               | 25.00               | 1.327                  | -0.12            | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Edge 4           | 0mm      | Amphenol       | OFF             | 136100 | 680.5       | 23.86               | 25.00               | 1.300                  | -0.02            | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 50      | 28        | Edge 4           | 0mm      | Amphenol       | OFF             | 136100 | 680.5       | 23.77               | 25.00               | 1.327                  | -0.05            | 0.001                  | 0.001                  |
|          | FR1 n71_Main | 20M      | BPSK       | 1       | 53        | Edge 2           | 0mm      | NVC            | ON              | 136100 | 680.5       | 13.20               | 13.50               | 1.072                  | -0.03            | 0.266                  | 0.285                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band                | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|---------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 271       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.36                | 9.50                | 1.033                  | -0.04            | 0.150                  | 0.155                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 138       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.24                | 9.50                | 1.062                  | 0.08             | 0.194                  | 0.206                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 271       | Bottom Face      | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.36                | 9.50                | 1.033                  | -0.11            | 0.524                  | 0.541                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 138       | Bottom Face      | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.24                | 9.50                | 1.062                  | -0.1             | 0.727                  | 0.772                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.78                | 9.50                | 1.180                  | 0.03             | 0.644                  | 0.760                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 271       | Edge 1           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.36                | 9.50                | 1.033                  | -0.02            | 0.106                  | 0.109                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 138       | Edge 1           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.24                | 9.50                | 1.062                  | -0.02            | 0.190                  | 0.202                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 271       | Edge 2           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.36                | 9.50                | 1.033                  | 0.09             | 0.001                  | 0.001                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 138       | Edge 2           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 9.24                | 9.50                | 1.062                  | 0.12             | 0.001                  | 0.001                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.21               | 24.00               | 1.510                  | 0                | 0.380                  | 0.574                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.43               | 24.00               | 1.435                  | -0.16            | 0.357                  | 0.512                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 137       | Bottom Face      | 34mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.21               | 24.00               | 1.510                  | -0.17            | 0.246                  | 0.371                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 69        | Bottom Face      | 34mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.43               | 24.00               | 1.435                  | -0.1             | 0.232                  | 0.333                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 137       | Edge 1           | 24mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.21               | 24.00               | 1.510                  | 0.17             | 0.217                  | 0.328                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 69        | Edge 1           | 24mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.43               | 24.00               | 1.435                  | -0.14            | 0.189                  | 0.271                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 1       | 137       | Edge 2           | 6mm      | Amphenol       | OFF             | 518598 | 2592.99     | 22.21               | 24.00               | 1.510                  | 0.01             | 0.123                  | 0.186                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 69        | Edge 2           | 6mm      | Amphenol       | OFF             | 518598 | 2592.99     | 22.43               | 24.00               | 1.435                  | -0.06            | 0.109                  | 0.156                  |
|          | FR1 n41_HPUE_Main   | 100M     | BPSK       | 1       | 271       | Bottom Face      | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 12.44               | 12.50               | 1.014                  | 0.01             | 0.712                  | 0.722                  |
|          | FR1 n41_Main        | 100M     | BPSK       | 135     | 138       | Bottom Face      | 0mm      | NVC            | ON              | 518598 | 2592.99     | 9.24                | 9.50                | 1.062                  | 0.19             | 0.500                  | 0.531                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.86                | 10.00               | 1.300                  | 0.02             | 0.139                  | 0.181                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.98                | 10.00               | 1.265                  | 0.11             | 0.141                  | 0.178                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.86                | 10.00               | 1.300                  | -0.08            | 0.833                  | 1.083                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.98                | 10.00               | 1.265                  | 0.19             | 0.797                  | 1.008                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.88                | 10.00               | 1.294                  | 0.05             | 0.783                  | 1.013                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.86                | 10.00               | 1.300                  | 0.19             | 0.790                  | 1.027                  |
| 22       | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.98                | 10.00               | 1.265                  | -0.04            | 0.905                  | 1.145                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 270     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 8.88                | 10.00               | 1.294                  | 0.08             | 0.776                  | 1.004                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.71               | 24.00               | 1.346                  | -0.07            | 0.253                  | 0.341                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 518598 | 2592.99     | 23.09               | 24.00               | 1.233                  | 0.05             | 0.235                  | 0.290                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 24mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.71               | 24.00               | 1.346                  | 0.15             | 0.322                  | 0.433                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 24mm     | Amphenol       | OFF             | 518598 | 2592.99     | 23.09               | 24.00               | 1.233                  | -0.07            | 0.308                  | 0.380                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 22.71               | 24.00               | 1.346                  | -0.11            | 0.037                  | 0.050                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 23.09               | 24.00               | 1.233                  | -0.13            | 0.033                  | 0.041                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 4           | 22mm     | Amphenol       | OFF             | 518598 | 2592.99     | 22.71               | 24.00               | 1.346                  | 0.16             | 0.663                  | 0.892                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 22mm     | Amphenol       | OFF             | 518598 | 2592.99     | 23.09               | 24.00               | 1.233                  | 0.07             | 0.631                  | 0.778                  |
|          | FR1 n41_HPUE_MIMO 2 | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | ON              | 518598 | 2592.99     | 11.98               | 13.00               | 1.265                  | 0.07             | 0.853                  | 1.079                  |
|          | FR1 n41_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | NVC            | ON              | 518598 | 2592.99     | 8.98                | 10.00               | 1.265                  | 0.07             | 0.826                  | 1.045                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band           | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|----------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 1       | 271       | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 7.96                | 9.00                | 1.271                  | -0.14            | 0.095                  | 0.121                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 135     | 138       | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 8.05                | 9.00                | 1.245                  | 0                | 0.096                  | 0.119                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 1       | 271       | Bottom Face      | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 7.96                | 9.00                | 1.271                  | -0.08            | 0.665                  | 0.845                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 135     | 138       | Bottom Face      | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 8.05                | 9.00                | 1.245                  | 0.08             | 0.616                  | 0.767                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 7.71                | 9.00                | 1.346                  | -0.18            | 0.556                  | 0.748                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 1       | 271       | Edge 1           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 7.96                | 9.00                | 1.271                  | 0.02             | 0.107                  | 0.136                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 135     | 138       | Edge 1           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 8.05                | 9.00                | 1.245                  | -0.12            | 0.096                  | 0.119                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 1       | 271       | Edge 2           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 7.96                | 9.00                | 1.271                  | 0.13             | 0.810                  | 1.029                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 135     | 138       | Edge 2           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 8.05                | 9.00                | 1.245                  | -0.08            | 0.859                  | 1.069                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 270     | 0         | Edge 2           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 7.71                | 8.50                | 1.199                  | 0.11             | 0.729                  | 0.874                  |
|          | FR1 n41_MIMO 1 | 100M     | BPSK       | 135     | 138       | Edge 2           | 0mm      | NVC            | OFF             | 518598 | 2592.99     | 8.05                | 9.00                | 1.245                  | -0.18            | 0.779                  | 0.969                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 10.86               | 12.00               | 1.300                  | 0.03             | 0.143                  | 0.186                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 11.11               | 12.00               | 1.227                  | -0.04            | 0.179                  | 0.220                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 10.86               | 12.00               | 1.300                  | 0.01             | 0.867                  | 1.127                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 11.11               | 12.00               | 1.227                  | -0.05            | 0.729                  | 0.895                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 10.92               | 12.00               | 1.282                  | -0.01            | 0.723                  | 0.927                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 10.86               | 12.00               | 1.300                  | 0.01             | 0.175                  | 0.228                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 11.11               | 12.00               | 1.227                  | -0.15            | 0.219                  | 0.269                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 10.86               | 12.00               | 1.300                  | 0.13             | 0.090                  | 0.117                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | Amphenol       | OFF             | 518598 | 2592.99     | 11.11               | 12.00               | 1.227                  | -0.09            | 0.103                  | 0.126                  |
|          | FR1 n41_Aux    | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | NVC            | OFF             | 518598 | 2592.99     | 10.86               | 12.00               | 1.300                  | 0.01             | 0.352                  | 0.458                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band              | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|-------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.02                | 10.00               | 1.253                  | -0.1             | 0.182                  | 0.228                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.11                | 10.00               | 1.227                  | 0.11             | 0.189                  | 0.232                  |
| 23       | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.02                | 10.00               | 1.253                  | -0.17            | 0.926                  | 1.160                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.11                | 10.00               | 1.227                  | -0.1             | 0.797                  | 0.978                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 656000 | 3840        | 8.97                | 10.00               | 1.268                  | -0.04            | 0.865                  | 1.097                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.02                | 10.00               | 1.253                  | 0.05             | 0.199                  | 0.249                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.11                | 10.00               | 1.227                  | -0.01            | 0.187                  | 0.230                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 2           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.02                | 10.00               | 1.253                  | 0.05             | 0.032                  | 0.040                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 2           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 9.11                | 10.00               | 1.227                  | 0.06             | 0.025                  | 0.031                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 656000 | 3840        | 23.07               | 24.00               | 1.239                  | 0.15             | 0.450                  | 0.557                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 656000 | 3840        | 23.04               | 24.00               | 1.247                  | -0.08            | 0.424                  | 0.529                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 34mm     | Amphenol       | OFF             | 656000 | 3840        | 23.07               | 24.00               | 1.239                  | -0.19            | 0.394                  | 0.488                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 34mm     | Amphenol       | OFF             | 656000 | 3840        | 23.04               | 24.00               | 1.247                  | 0.09             | 0.375                  | 0.468                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 1           | 24mm     | Amphenol       | OFF             | 656000 | 3840        | 23.07               | 24.00               | 1.239                  | -0.05            | 0.243                  | 0.301                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 1           | 24mm     | Amphenol       | OFF             | 656000 | 3840        | 23.04               | 24.00               | 1.247                  | -0.05            | 0.228                  | 0.284                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 2           | 6mm      | Amphenol       | OFF             | 656000 | 3840        | 23.07               | 24.00               | 1.239                  | 0.09             | 0.470                  | 0.582                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 2           | 6mm      | Amphenol       | OFF             | 656000 | 3840        | 23.04               | 24.00               | 1.247                  | 0.19             | 0.451                  | 0.563                  |
|          | FR1 n77_HPUE_Main | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | ON              | 656000 | 3840        | 12.50               | 13.00               | 1.122                  | -0.04            | 0.958                  | 1.075                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | NVC            | ON              | 656000 | 3840        | 9.02                | 10.00               | 1.253                  | -0.15            | 0.506                  | 0.634                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.38                | 10.00               | 1.153                  | -0.07            | 0.155                  | 0.179                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.47                | 10.00               | 1.130                  | 0.05             | 0.130                  | 0.147                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.38                | 10.00               | 1.153                  | -0.01            | 0.960                  | 1.107                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.47                | 10.00               | 1.130                  | -0.07            | 0.730                  | 0.825                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.41                | 10.00               | 1.146                  | 0.16             | 0.914                  | 1.047                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.38                | 10.00               | 1.153                  | 0.13             | 0.155                  | 0.179                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.47                | 10.00               | 1.130                  | 0.03             | 0.157                  | 0.177                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 2           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.38                | 10.00               | 1.153                  | 0.12             | 0.069                  | 0.080                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 2           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 9.47                | 10.00               | 1.130                  | -0.07            | 0.060                  | 0.068                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.20               | 24.00               | 1.202                  | 0.13             | 0.077                  | 0.093                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 29mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.33               | 24.00               | 1.167                  | 0.04             | 0.067                  | 0.078                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 34mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.20               | 24.00               | 1.202                  | -0.02            | 0.144                  | 0.173                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 34mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.33               | 24.00               | 1.167                  | 0.07             | 0.139                  | 0.162                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 1           | 24mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.20               | 24.00               | 1.202                  | 0.17             | 0.228                  | 0.274                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 1           | 24mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.33               | 24.00               | 1.167                  | -0.1             | 0.209                  | 0.244                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 137       | Edge 2           | 6mm      | Amphenol       | OFF             | 633332 | 3499.98     | 23.20               | 24.00               | 1.202                  | 0.11             | 0.392                  | 0.471                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 135     | 69        | Edge 2           | 6mm      | Amphenol       | OFF             | 633332 | 3499.98     | 23.33               | 24.00               | 1.167                  | -0.07            | 0.378                  | 0.441                  |
|          | FR1 n77_HPUE_Main | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | NVC            | ON              | 633332 | 3499.98     | 11.66               | 13.00               | 1.361                  | 0.14             | 0.779                  | 1.061                  |
|          | FR1 n77_Main      | 100M     | BPSK       | 1       | 271       | Bottom Face      | 0mm      | NVC            | ON              | 633332 | 3499.98     | 9.33                | 10.00               | 1.167                  | 0.13             | 0.649                  | 0.757                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band                | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|---------------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.49               | 12.50               | 1.262                  | 0.11             | 0.179                  | 0.226                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.40               | 12.50               | 1.288                  | -0.12            | 0.181                  | 0.233                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.49               | 12.50               | 1.262                  | -0.06            | 0.535                  | 0.675                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.40               | 12.50               | 1.288                  | -0.18            | 0.515                  | 0.663                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.35               | 12.50               | 1.303                  | 0.09             | 0.541                  | 0.705                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.49               | 12.50               | 1.262                  | -0.06            | 0.701                  | 0.885                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.40               | 12.50               | 1.288                  | -0.16            | 0.672                  | 0.866                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 270     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 11.35               | 12.50               | 1.303                  | 0.15             | 0.569                  | 0.742                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 656000 | 3840        | 23.73               | 24.00               | 1.064                  | 0.03             | 0.372                  | 0.396                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 656000 | 3840        | 23.60               | 24.00               | 1.096                  | 0.18             | 0.344                  | 0.377                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 24mm     | Amphenol       | OFF             | 656000 | 3840        | 23.73               | 24.00               | 1.064                  | 0.13             | 0.243                  | 0.259                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 24mm     | Amphenol       | OFF             | 656000 | 3840        | 23.60               | 24.00               | 1.096                  | 0.17             | 0.233                  | 0.255                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 23.73               | 24.00               | 1.064                  | 0.01             | 0.041                  | 0.044                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 23.60               | 24.00               | 1.096                  | 0.08             | 0.067                  | 0.073                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 4           | 22mm     | Amphenol       | OFF             | 656000 | 3840        | 23.73               | 24.00               | 1.064                  | -0.05            | 0.569                  | 0.605                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 22mm     | Amphenol       | OFF             | 656000 | 3840        | 23.60               | 24.00               | 1.096                  | -0.18            | 0.555                  | 0.609                  |
|          | FR1 n77_HPUE_MIMO 2 | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | ON              | 656000 | 3840        | 14.95               | 15.50               | 1.135                  | -0.09            | 0.627                  | 0.712                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | NVC            | ON              | 656000 | 3840        | 11.49               | 12.50               | 1.262                  | 0.03             | 0.551                  | 0.695                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.05               | 12.50               | 1.396                  | 0.15             | 0.175                  | 0.244                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.15               | 12.50               | 1.365                  | 0.16             | 0.166                  | 0.227                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.05               | 12.50               | 1.396                  | -0.14            | 0.753                  | 1.051                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.15               | 12.50               | 1.365                  | -0.1             | 0.724                  | 0.988                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.00               | 12.50               | 1.413                  | -0.07            | 0.654                  | 0.924                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.05               | 12.50               | 1.396                  | -0.01            | 0.739                  | 1.032                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.15               | 12.50               | 1.365                  | -0.09            | 0.803                  | 1.096                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 270     | 0         | Edge 4           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 11.00               | 12.50               | 1.413                  | 0.13             | 0.773                  | 1.092                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.86               | 24.00               | 1.033                  | -0.05            | 0.318                  | 0.328                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 22mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.78               | 24.00               | 1.052                  | 0.06             | 0.316                  | 0.332                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Bottom Face      | 24mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.86               | 24.00               | 1.033                  | 0.03             | 0.492                  | 0.508                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Bottom Face      | 24mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.78               | 24.00               | 1.052                  | 0.17             | 0.491                  | 0.517                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 23.86               | 24.00               | 1.033                  | 0.01             | 0.062                  | 0.064                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 23.78               | 24.00               | 1.052                  | -0.19            | 0.067                  | 0.070                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 1       | 137       | Edge 4           | 22mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.86               | 24.00               | 1.033                  | -0.12            | 0.423                  | 0.437                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 22mm     | Amphenol       | OFF             | 633332 | 3499.98     | 23.78               | 24.00               | 1.052                  | -0.19            | 0.416                  | 0.438                  |
|          | FR1 n77_HPUE_MIMO 2 | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | ON              | 633332 | 3499.98     | 14.46               | 15.50               | 1.271                  | -0.05            | 0.793                  | 1.008                  |
|          | FR1 n77_MIMO 2      | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | NVC            | ON              | 633332 | 3499.98     | 11.15               | 12.50               | 1.365                  | -0.13            | 0.744                  | 1.015                  |



# FCC SAR TEST REPORT

Report No. : FA2O2027

| Plot No. | Band           | BW (MHz) | Modulation | RB Size | RB offset | Test Position    | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Reported 1g SAR (W/kg) |
|----------|----------------|----------|------------|---------|-----------|------------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.93               | 11.00               | 1.016                  | 0.14             | 0.181                  | 0.184                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.99               | 11.00               | 1.002                  | 0.14             | 0.188                  | 0.188                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.93               | 11.00               | 1.016                  | 0.18             | 0.697                  | 0.708                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.99               | 11.00               | 1.002                  | 0.19             | 0.854                  | 0.856                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.91               | 11.00               | 1.021                  | 0.1              | 0.766                  | 0.782                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.93               | 11.00               | 1.016                  | 0.01             | 0.033                  | 0.034                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.99               | 11.00               | 1.002                  | -0.17            | 0.040                  | 0.040                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Edge 2           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.93               | 11.00               | 1.016                  | -0.05            | 0.967                  | 0.983                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Edge 2           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.99               | 11.00               | 1.002                  | 0.01             | 0.936                  | 0.938                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 270     | 0         | Edge 2           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.91               | 11.00               | 1.021                  | 0.1              | 0.910                  | 0.929                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Edge 2           | 0mm      | NVC            | OFF             | 656000 | 3840        | 10.93               | 11.00               | 1.016                  | 0.02             | 0.923                  | 0.938                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.19               | 11.00               | 1.205                  | 0.02             | 0.140                  | 0.169                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.27               | 11.00               | 1.183                  | 0.01             | 0.141                  | 0.167                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.19               | 11.00               | 1.205                  | -0.14            | 0.706                  | 0.851                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.27               | 11.00               | 1.183                  | 0.02             | 0.760                  | 0.899                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.19               | 11.00               | 1.205                  | -0.18            | 0.717                  | 0.864                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.19               | 11.00               | 1.205                  | 0.02             | 0.021                  | 0.025                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.27               | 11.00               | 1.183                  | -0.1             | 0.021                  | 0.025                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Edge 2           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.19               | 11.00               | 1.205                  | -0.1             | 0.947                  | 1.141                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 135     | 69        | Edge 2           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.27               | 11.00               | 1.183                  | 0.02             | 0.915                  | 1.082                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 270     | 0         | Edge 2           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 10.19               | 11.00               | 1.205                  | 0.08             | 0.888                  | 1.070                  |
|          | FR1 n77_MIMO 1 | 100M     | BPSK       | 1       | 137       | Edge 2           | 0mm      | NVC            | OFF             | 633332 | 3499.98     | 10.19               | 11.00               | 1.205                  | 0.1              | 0.856                  | 1.032                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.56                | 10.00               | 1.393                  | -0.18            | 0.165                  | 0.230                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.63                | 10.00               | 1.371                  | 0.01             | 0.166                  | 0.228                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.56                | 10.00               | 1.393                  | 0                | 0.767                  | 1.069                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.63                | 10.00               | 1.371                  | 0.1              | 0.664                  | 0.910                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.55                | 10.00               | 1.396                  | 0.06             | 0.745                  | 1.040                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.56                | 10.00               | 1.393                  | 0.16             | 0.256                  | 0.357                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.63                | 10.00               | 1.371                  | 0.13             | 0.204                  | 0.280                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 270     | 0         | Edge 1           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.55                | 10.00               | 1.396                  | -0.18            | 0.226                  | 0.316                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.56                | 10.00               | 1.393                  | -0.05            | 0.123                  | 0.171                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 8.63                | 10.00               | 1.371                  | -0.02            | 0.115                  | 0.158                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | NVC            | OFF             | 656000 | 3840        | 8.56                | 10.00               | 1.393                  | -0.03            | 0.661                  | 0.921                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.75                | 10.00               | 1.334                  | -0.13            | 0.092                  | 0.123                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Bottom of Laptop | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.84                | 10.00               | 1.306                  | -0.07            | 0.095                  | 0.124                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Bottom Face      | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.75                | 10.00               | 1.334                  | 0.01             | 0.579                  | 0.772                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.84                | 10.00               | 1.306                  | 0.05             | 0.601                  | 0.785                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 270     | 0         | Bottom Face      | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.78                | 10.00               | 1.324                  | 0.07             | 0.525                  | 0.695                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Edge 1           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.75                | 10.00               | 1.334                  | -0.18            | 0.063                  | 0.084                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Edge 1           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.84                | 10.00               | 1.306                  | -0.18            | 0.076                  | 0.099                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 1       | 137       | Edge 4           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.75                | 10.00               | 1.334                  | -0.06            | 0.052                  | 0.069                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Edge 4           | 0mm      | Amphenol       | OFF             | 633332 | 3499.98     | 8.84                | 10.00               | 1.306                  | 0.02             | 0.064                  | 0.084                  |
|          | FR1 n77_Aux    | 100M     | BPSK       | 135     | 69        | Bottom Face      | 0mm      | NVC            | OFF             | 633332 | 3499.98     | 8.84                | 10.00               | 1.306                  | -0.15            | 0.394                  | 0.515                  |

**13.2 Repeated SAR Measurement**

| No. | Band               | Mode            | Test Position | Gap (mm) | Antenna Vendor | Power Reduction | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 1g SAR (W/kg) | Ratio | Reported 1g SAR (W/kg) |
|-----|--------------------|-----------------|---------------|----------|----------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|-------|------------------------|
| 1st | WCDMA II_MIMO 2    | RMC 12.2Kbps    | Edge 4        | 0mm      | Amphenol       | ON              | 9538   | 1907.6      | 12.41               | 12.50               | 1.021                  |              |                           | -0.15            | 1.140                  | -     | 1.164                  |
| 2nd | WCDMA II_MIMO 2    | RMC 12.2Kbps    | Edge 4        | 0mm      | Amphenol       | ON              | 9538   | 1907.6      | 12.41               | 12.50               | 1.021                  |              |                           | 0.04             | 1.020                  | 1.118 | 1.041                  |
| 1st | WCDMA IV_Main      | RMC 12.2Kbps    | Bottom Face   | 0mm      | Amphenol       | ON              | 1413   | 1732.6      | 13.35               | 13.50               | 1.035                  |              |                           | 0                | 1.100                  | -     | 1.139                  |
| 2nd | WCDMA IV_Main      | RMC 12.2Kbps    | Bottom Face   | 0mm      | Amphenol       | ON              | 1413   | 1732.6      | 13.35               | 13.50               | 1.035                  |              |                           | 0.09             | 1.040                  | 1.058 | 1.077                  |
| 1st | WCDMA V_Main       | RMC 12.2Kbps    | Bottom Face   | 0mm      | Amphenol       | ON              | 4233   | 846.6       | 13.85               | 14.50               | 1.161                  |              |                           | -0.13            | 0.869                  | -     | 1.009                  |
| 2nd | WCDMA V_Main       | RMC 12.2Kbps    | Bottom Face   | 0mm      | Amphenol       | ON              | 4233   | 846.6       | 13.85               | 14.50               | 1.161                  |              |                           | -0.03            | 0.843                  | 1.031 | 0.979                  |
| 1st | LTE Band 7_MIMO 2  | 20M_QPSK_50_24  | Edge 4        | 0mm      | Amphenol       | ON              | 21350  | 2560        | 8.96                | 9.50                | 1.132                  |              |                           | -0.04            | 1.020                  | -     | 1.155                  |
| 2nd | LTE Band 7_MIMO 2  | 20M_QPSK_50_24  | Edge 4        | 0mm      | Amphenol       | ON              | 21350  | 2560        | 8.96                | 9.50                | 1.132                  |              |                           | -0.06            | 0.998                  | 1.022 | 1.130                  |
| 1st | LTE Band 12_Main   | 10M_QPSK_25_12  | Edge 2        | 0mm      | Amphenol       | ON              | 23095  | 707.5       | 14.39               | 14.50               | 1.026                  |              |                           | -0.02            | 0.964                  | -     | 0.989                  |
| 2nd | LTE Band 12_Main   | 10M_QPSK_25_12  | Edge 2        | 0mm      | Amphenol       | ON              | 23095  | 707.5       | 14.39               | 14.50               | 1.026                  |              |                           | 0.04             | 0.953                  | 1.012 | 0.977                  |
| 1st | LTE Band 48_MIMO 2 | 20M_QPSK_50_0   | Bottom Face   | 0mm      | Amphenol       | ON              | 56640  | 3690        | 12.77               | 13.50               | 1.183                  | 62.9         | 1.006                     | -0.11            | 0.938                  | -     | 1.116                  |
| 2nd | LTE Band 48_MIMO 2 | 20M_QPSK_50_0   | Bottom Face   | 0mm      | Amphenol       | ON              | 56640  | 3690        | 12.77               | 13.50               | 1.183                  | 62.9         | 1.006                     | 0.08             | 0.912                  | 1.029 | 1.085                  |
| 1st | FR1 n30_MIMO 2     | 10M_BPSK_1_26   | Edge 4        | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.86               | 11.00               | 1.033                  |              |                           | -0.16            | 1.090                  | -     | 1.126                  |
| 2nd | FR1 n30_MIMO 2     | 10M_BPSK_1_26   | Edge 4        | 0mm      | Amphenol       | ON              | 462000 | 2310        | 10.86               | 11.00               | 1.033                  |              |                           | 0.02             | 1.050                  | 1.038 | 1.084                  |
| 1st | FR1 n77_MIMO 1     | 100M_BPSK_1_137 | Edge 2        | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.93               | 11.00               | 1.016                  |              |                           | -0.05            | 0.967                  | -     | 0.983                  |
| 2nd | FR1 n77_MIMO 1     | 100M_BPSK_1_137 | Edge 2        | 0mm      | Amphenol       | OFF             | 656000 | 3840        | 10.93               | 11.00               | 1.016                  |              |                           | 0.03             | 0.951                  | 1.017 | 0.966                  |

**General Note:**

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8\text{W/kg}$ .
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  and the measured SAR  $< 1.45\text{W/kg}$ , only one repeated measurement is required.
3. The ratio is the difference in percentage between original and repeated *measured SAR*.
4. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

### **13.3 LTE Band 41 Power Class 2 and Power Class 3 Linearity**

This device support Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operation is 43.3% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required

Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

|                                     | LTE Band 41_Main Ant | LTE Band 41_Main Ant |
|-------------------------------------|----------------------|----------------------|
|                                     | (Power Class 3)      | (Power Class 2)      |
| Maximum Tune up Power (dBm)         | 12                   | 12                   |
| Reported 1g SAR (W/kg)              | 0.963                | 0.597                |
| Duty Cycle                          | 63.30%               | 43.30%               |
| Frame Averaged (mW)                 | 10.03                | 6.86                 |
| Linearity SAR(W/kg)                 | 0.66                 |                      |
| % deviation from expected linearity |                      | -9.37%               |

|                                     | LTE Band 41_MIMO 2 Ant | LTE Band 41_MIMO 2 Ant |
|-------------------------------------|------------------------|------------------------|
|                                     | (Power Class 3)        | (Power Class 2)        |
| Maximum Tune up Power (dBm)         | 11                     | 11                     |
| Reported 1g SAR (W/kg)              | 1.076                  | 0.691                  |
| Duty Cycle                          | 63.30%                 | 43.30%                 |
| Frame Averaged (mW)                 | 7.97                   | 5.45                   |
| Linearity SAR(W/kg)                 | 0.74                   |                        |
| % deviation from expected linearity |                        | -6.12%                 |

### **13.4 FR1 n41/n77 Power Class 2 and Power Class 3 Linearity**

This device support Power Class 2 and Power Class 3 operations for FR1 n41/n77. The highest available duty cycle for Power Class 2 operation is 50% using UL-DL configuration 1. Per FCC Guidance based on the device behavior, all SAR tests were performed using Power Class 3. Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each FR1 configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in Power Class 2. When the reported SAR vs. output power is linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg, Separate SAR testing for Power Class 2 is not required.

Use PC3 power level and SAR to estimated PC2 SAR linearly, and check if the deviation from the measured PC2 SAR is <10%

|                                     | FR1 n41_Main Ant | FR1 n41_Main Ant |
|-------------------------------------|------------------|------------------|
|                                     | (Power Class 3)  | (Power Class 2)  |
| Maximum Tune up Power (dBm)         | 9.5              | 12.5             |
| Reported 1g SAR (W/kg)              | 0.772            | 0.722            |
| Duty Cycle                          | 100.00%          | 50.00%           |
| Frame Averaged (mW)                 | 8.91             | 8.89             |
| Linearity SAR(W/kg)                 | 0.77             |                  |
| % deviation from expected linearity |                  | -6.25%           |

|                                     | FR1 n41_MIMO 2 Ant | FR1 n41_MIMO 2 Ant |
|-------------------------------------|--------------------|--------------------|
|                                     | (Power Class 3)    | (Power Class 2)    |
| Maximum Tune up Power (dBm)         | 10                 | 13                 |
| Reported 1g SAR (W/kg)              | 1.145              | 1.079              |
| Duty Cycle                          | 100.00%            | 50.00%             |
| Frame Averaged (mW)                 | 10.00              | 9.98               |
| Linearity SAR(W/kg)                 | 1.14               |                    |
| % deviation from expected linearity |                    | -5.54%             |

|                                     | FR1 n77_Main Ant | FR1 n77_Main Ant |
|-------------------------------------|------------------|------------------|
|                                     | (Power Class 3)  | (Power Class 2)  |
| Maximum Tune up Power (dBm)         | 10               | 13               |
| Reported 1g SAR (W/kg)              | 1.16             | 1.075            |
| Duty Cycle                          | 100.00%          | 50.00%           |
| Frame Averaged (mW)                 | 10.00            | 9.98             |
| Linearity SAR(W/kg)                 | 1.16             |                  |
| % deviation from expected linearity |                  | -7.11%           |

|                                     | FR1 n77_MIMO 2 Ant | FR1 n77_MIMO 2 Ant |
|-------------------------------------|--------------------|--------------------|
|                                     | (Power Class 3)    | (Power Class 2)    |
| Maximum Tune up Power (dBm)         | 12.5               | 15.5               |
| Reported 1g SAR (W/kg)              | 1.096              | 1.008              |
| Duty Cycle                          | 100.00%            | 50.00%             |
| Frame Averaged (mW)                 | 17.78              | 17.74              |
| Linearity SAR(W/kg)                 | 1.09               |                    |
| % deviation from expected linearity |                    | -7.81%             |

## 14. Simultaneous Transmission Analysis

| NO. | Simultaneous Transmission Configurations                                          | Body |
|-----|-----------------------------------------------------------------------------------|------|
| 1.  | WWAN Main + WWAN MIMO 2 + 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2                   | Yes  |
| 2.  | WWAN Main + WWAN MIMO 2 + 2.4GHz WLAN Ant 1 + Bluetooth Ant 2                     | Yes  |
| 3.  | WWAN Main + WWAN MIMO 2 + 5/6GHz WLAN Ant 1 + 5/6GHz WLAN Ant 2 + Bluetooth Ant 2 | Yes  |
| 4.  | WWAN MIMO 1 + 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2                               | Yes  |
| 5.  | WWAN MIMO 1 + 2.4GHz WLAN Ant 1 + Bluetooth Ant 2                                 | Yes  |
| 6.  | WWAN MIMO 1 + 5/6GHz WLAN Ant 1 + 5/6GHz WLAN Ant 2 + Bluetooth Ant 2             | Yes  |
| 7.  | WWAN Aux+ 2.4GHz WLAN Ant 1 + 2.4GHz WLAN Ant 2                                   | Yes  |
| 8.  | WWAN Aux + 2.4GHz WLAN Ant 1 + Bluetooth Ant 2                                    | Yes  |
| 9.  | WWAN Aux + 5/6GHz WLAN Ant 1 + 5/6GHz WLAN Ant 2 + Bluetooth Ant 2                | Yes  |

### General Note:

1. The Intel AX211D2W WLAN/BT module is also integrated into this host. The 2.4GHz, 5GHz and Bluetooth SAR results are referenced from Intel SAR report, report number: 210922-01.TR01 (FCC ID: PD9AX211D2), WLAN 6E SAR refers new report number.: 210922-01.TR02 (FCC ID: PD9AX211D2) and these SAR results are also used to perform simultaneous transmission analysis.
2. The worst case SAR from each WWAN transmit antenna is used for Sim-Tx analysis. Therefore, the following summations represent the absolute worst cases for simultaneous transmission for this device and it is conservative.
3. The Sim-Tx analysis for EN-DC active is choose the worst case standalone SAR from the WWAN main and MIMO2 antenna within the exposure positions, regardless of whether the EN-DC combinations. Therefore, the following summations represent the absolute worst cases for simultaneous transmission for this device and it is conservative.
4. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - i) Scalar SAR summation < 1.6W/kg.
  - ii)  $SPLSR = (SAR1 + SAR2)^{1.5} / (\min. \text{ separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$ , where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - iii) If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary.
  - iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.
  - v) The SPLSR calculated results please refer to section 14.2.

### 14.1 Body Exposure Conditions

#### <WWAN Main + WWAN MIMO 2 + WLAN + Bluetooth>

| Exposure Position       | 1                           | 2                                | 3                       | 4                       | 5                     | 6                     | 7                     | 8                     | 9                  | 1+2+3+4<br>Summed<br>1g SAR<br>(W/kg) | 1+2+3+9<br>Summed<br>1g SAR<br>(W/kg) | 1+2+5+6+9<br>Summed<br>1g SAR<br>(W/kg) | 1+2+7+8+9<br>Summed<br>1g SAR<br>(W/kg) | SPLSR | Case No |
|-------------------------|-----------------------------|----------------------------------|-------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|---------------------------------------|---------------------------------------|-----------------------------------------|-----------------------------------------|-------|---------|
|                         | Maximum<br>WWAN<br>Main Ant | Maximum<br>WWAN<br>MIMO 2<br>Ant | WLAN<br>2.4GHz<br>Ant 1 | WLAN<br>2.4GHz<br>Ant 2 | WLAN<br>5GHz<br>Ant 1 | WLAN<br>5GHz<br>Ant 2 | WLAN<br>6GHz<br>Ant 1 | WLAN<br>6GHz<br>Ant 2 | Bluetooth<br>Ant 2 |                                       |                                       |                                         |                                         |       |         |
|                         | 1g SAR<br>(W/kg)            | 1g SAR<br>(W/kg)                 | 1g SAR<br>(W/kg)        | 1g SAR<br>(W/kg)        | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)   |                                       |                                       |                                         |                                         |       |         |
| Bottom of Laptop at 0mm | 0.418                       | 0.356                            | 0.610                   | 1.160                   | 1.580                 | 1.110                 | 1.590                 | 0.200                 |                    | 2.544                                 | 1.584                                 | 3.664                                   | 4.154                                   | 0.04  | Case 1  |
| Bottom Face at 0mm      | 1.186                       | 1.179                            | 0.760                   | 0.930                   | 0.580                 | 0.590                 | 0.300                 | 0.920                 | 0.120              | 4.055                                 | 3.245                                 | 3.655                                   | 3.705                                   | 0.02  | Case 2  |
| Edge 1 at 0mm           | 0.350                       | 0.798                            |                         |                         |                       |                       |                       |                       |                    | 1.148                                 | 1.148                                 | 1.148                                   | 1.148                                   |       |         |
| Edge 2 at 0mm           | 1.003                       |                                  |                         |                         |                       |                       |                       |                       |                    | 1.003                                 | 1.003                                 | 1.003                                   | 1.003                                   |       |         |
| Edge 3 at 0mm           | 0.001                       |                                  | 0.850                   | 1.140                   | 1.480                 | 0.930                 | 1.340                 | 1.590                 | 0.200              | 1.991                                 | 1.051                                 | 2.611                                   | 3.131                                   | 0.03  | Case 3  |
| Edge 4 at 0mm           | 0.001                       | 1.164                            |                         |                         |                       |                       |                       |                       |                    | 1.165                                 | 1.165                                 | 1.165                                   | 1.165                                   |       |         |

#### <WWAN MIMO 1 + WLAN + Bluetooth>

| Exposure Position       | 1                                | 2                       | 3                       | 4                     | 5                     | 6                     | 7                     | 8                  | 1+2+3<br>Summed<br>1g SAR<br>(W/kg) | 1+2+8<br>Summed<br>1g SAR<br>(W/kg) | 1+4+5+8<br>Summed<br>1g SAR<br>(W/kg) | 1+6+7+8<br>Summed<br>1g SAR<br>(W/kg) | SPLSR | Case No |
|-------------------------|----------------------------------|-------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|-------|---------|
|                         | Maximum<br>WWAN<br>MIMO 1<br>Ant | WLAN<br>2.4GHz<br>Ant 1 | WLAN<br>2.4GHz<br>Ant 2 | WLAN<br>5GHz<br>Ant 1 | WLAN<br>5GHz<br>Ant 2 | WLAN<br>6GHz<br>Ant 1 | WLAN<br>6GHz<br>Ant 2 | Bluetooth<br>Ant 2 |                                     |                                     |                                       |                                       |       |         |
|                         | 1g SAR<br>(W/kg)                 | 1g SAR<br>(W/kg)        | 1g SAR<br>(W/kg)        | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)   |                                     |                                     |                                       |                                       |       |         |
| Bottom of Laptop at 0mm | 0.188                            | 0.610                   | 1.160                   | 1.580                 | 1.110                 | 1.590                 | 1.590                 | 0.200              | 1.958                               | 0.998                               | 3.078                                 | 3.568                                 | 0.04  | Case 4  |
| Bottom Face at 0mm      | 0.899                            | 0.760                   | 0.930                   | 0.580                 | 0.590                 | 0.300                 | 0.920                 | 0.120              | 2.589                               | 1.779                               | 2.189                                 | 2.239                                 | 0.01  | Case 5  |
| Edge 1 at 0mm           | 0.136                            |                         |                         |                       |                       |                       |                       |                    | 0.136                               | 0.136                               | 0.136                                 | 0.136                                 |       |         |
| Edge 2 at 0mm           | 1.141                            |                         |                         |                       |                       |                       |                       |                    | 1.141                               | 1.141                               | 1.141                                 | 1.141                                 |       |         |

#### <WWAN Aux + WLAN + Bluetooth>

| Exposure Position       | 1                          | 2                       | 3                       | 4                     | 5                     | 6                     | 7                     | 8                  | 1+2+3<br>Summed<br>1g SAR<br>(W/kg) | 1+2+8<br>Summed<br>1g SAR<br>(W/kg) | 1+4+5+8<br>Summed<br>1g SAR<br>(W/kg) | 1+6+7+8<br>Summed<br>1g SAR<br>(W/kg) | SPLSR | Case No |
|-------------------------|----------------------------|-------------------------|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|-------|---------|
|                         | Maximum<br>WWAN<br>Aux Ant | WLAN<br>2.4GHz<br>Ant 1 | WLAN<br>2.4GHz<br>Ant 2 | WLAN<br>5GHz Ant<br>1 | WLAN<br>5GHz Ant<br>2 | WLAN<br>6GHz<br>Ant 1 | WLAN<br>6GHz<br>Ant 2 | Bluetooth<br>Ant 2 |                                     |                                     |                                       |                                       |       |         |
|                         | 1g SAR<br>(W/kg)           | 1g SAR<br>(W/kg)        | 1g SAR<br>(W/kg)        | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)      | 1g SAR<br>(W/kg)   |                                     |                                     |                                       |                                       |       |         |
| Bottom of Laptop at 0mm | 0.230                      | 0.610                   | 1.160                   | 1.580                 | 1.110                 | 1.590                 | 1.590                 | 0.200              | 2.000                               | 1.040                               | 3.120                                 | 3.610                                 | 0.04  | Case 6  |
| Bottom Face at 0mm      | 1.127                      | 0.760                   | 0.930                   | 0.580                 | 0.590                 | 0.300                 | 0.920                 | 0.120              | 2.817                               | 2.007                               | 2.417                                 | 2.467                                 | 0.02  | Case 7  |
| Edge 1 at 0mm           | 0.357                      |                         |                         |                       |                       |                       |                       |                    | 0.357                               | 0.357                               | 0.357                                 | 0.357                                 |       |         |
| Edge 4 at 0mm           | 0.171                      |                         |                         |                       |                       |                       |                       |                    | 0.171                               | 0.171                               | 0.171                                 | 0.171                                 |       |         |

## 14.2 SPLSR Evaluation and Analysis

### General Note:

1. According to antenna location of appendix D, the minimum distance between each WWAN/WLAN/BT transmit antenna are using for SPLSR analysis.
2. For SPLSR analysis is selected highest standalone SAR from each WWAN transmit antenna to be evaluated and it is conservative.
3.  $SPLSR = (SAR_1 + SAR_2)^{1.5} / (\text{min. separation distance, mm})$ . If  $SPLSR \leq 0.04$ , simultaneously transmission SAR measurement is not necessary

|        | Band              | Position         | SAR (W/kg) | Gap      | Minimum distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|--------|-------------------|------------------|------------|----------|-----------------------|-------------------|---------------|------------------|
|        |                   |                  |            | (mm)     |                       |                   |               |                  |
| Case 1 | Maximum Main Ant  | Bottom of Laptop | 0.418      | 0mm      | 152.0                 | 0.77              | 0.00          | Not required     |
|        | Maximum MIMO2 Ant |                  | 0.356      | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom of Laptop | 0.418      | 0mm      | 198.0                 | 1.03              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 1  |                  | 0.61       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom of Laptop | 0.418      | 0mm      | 252.0                 | 1.58              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 1.16       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom of Laptop | 0.418      | 0mm      | 198.0                 | 2.00              | 0.01          | Not required     |
|        | WLAN5GHz_Ant 1    |                  | 1.58       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom of Laptop | 0.418      | 0mm      | 198.0                 | 2.01              | 0.01          | Not required     |
|        | WLAN6GHz_Ant 1    |                  | 1.59       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom of Laptop | 0.418      | 0mm      | 252.0                 | 1.73              | 0.01          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 1.31       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom of Laptop | 0.418      | 0mm      | 252.0                 | 2.21              | 0.01          | Not required     |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.79       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO2 Ant | Bottom of Laptop | 0.356      | 0mm      | 276.0                 | 0.97              | 0.00          | Not required     |
|        | WLAN2.4GHz_Ant 1  |                  | 0.61       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO2 Ant | Bottom of Laptop | 0.356      | 0mm      | 152.0                 | 1.52              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 1.16       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO2 Ant | Bottom of Laptop | 0.356      | 0mm      | 276.0                 | 1.94              | 0.01          | Not required     |
|        | WLAN5GHz_Ant 1    |                  | 1.58       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO2 Ant | Bottom of Laptop | 0.356      | 0mm      | 276.0                 | 1.95              | 0.01          | Not required     |
|        | WLAN6GHz_Ant 1    |                  | 1.59       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO2 Ant | Bottom of Laptop | 0.356      | 0mm      | 152.0                 | 1.67              | 0.01          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 1.31       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO2 Ant | Bottom of Laptop | 0.356      | 0mm      | 152.0                 | 2.15              | 0.02          | Not required     |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.79       | 0mm      |                       |                   |               |                  |
|        | WLAN2.4GHz_Ant 1  | Bottom of Laptop | 0.61       | 0mm      | 175.0                 | 1.77              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 1.16       | 0mm      |                       |                   |               |                  |
|        | WLAN5GHz_Ant 1    | Bottom of Laptop | 1.58       | 0mm      | 175.0                 | 2.89              | 0.03          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 1.31       | 0mm      |                       |                   |               |                  |
|        | WLAN6GHz_Ant 1    | Bottom of Laptop | 1.59       | 0mm      | 175.0                 | 3.38              | 0.04          | Not required     |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.79       | 0mm      |                       |                   |               |                  |
| Case 2 | Band              | Position         | SAR (W/kg) | Gap (mm) | Minimum distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|        | Maximum Main Ant  | Bottom Face      | 1.186      | 0mm      | 152.0                 | 2.37              | 0.02          | Not required     |
|        | Maximum MIMO2 Ant |                  | 1.179      | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom Face      | 1.186      | 0mm      | 198.0                 | 1.95              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 1  |                  | 0.76       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom Face      | 1.186      | 0mm      | 252.0                 | 2.12              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 0.93       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom Face      | 1.186      | 0mm      | 198.0                 | 1.77              | 0.01          | Not required     |
|        | WLAN5GHz_Ant 1    |                  | 0.58       | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom Face      | 1.186      | 0mm      | 198.0                 | 1.49              | 0.01          | Not required     |
|        | WLAN6GHz_Ant 1    |                  | 0.3        | 0mm      |                       |                   |               |                  |
|        | Maximum Main Ant  | Bottom Face      | 1.186      | 0mm      | 252.0                 | 1.90              | 0.01          | Not required     |

|        |                   |                 |                   |                 |                              |                          |                      |                         |
|--------|-------------------|-----------------|-------------------|-----------------|------------------------------|--------------------------|----------------------|-------------------------|
|        | WLAN5GHz+BT_Ant 2 |                 | 0.71              | 0mm             |                              |                          |                      |                         |
|        | Maximum Main Ant  | Bottom Face     | 1.186             | 0mm             | 252.0                        | 2.23                     | 0.01                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                 | 1.04              | 0mm             |                              |                          |                      |                         |
|        | Maximum MIMO2 Ant | Bottom Face     | 1.179             | 0mm             | 276.0                        | 1.94                     | 0.01                 | Not required            |
|        | WLAN2.4GHz_Ant 1  |                 | 0.76              | 0mm             |                              |                          |                      |                         |
|        | Maximum MIMO2 Ant | Bottom Face     | 1.179             | 0mm             | 152.0                        | 2.11                     | 0.02                 | Not required            |
|        | WLAN2.4GHz_Ant 2  |                 | 0.93              | 0mm             |                              |                          |                      |                         |
|        | Maximum MIMO2 Ant | Bottom Face     | 1.179             | 0mm             | 276.0                        | 1.76                     | 0.01                 | Not required            |
|        | WLAN5GHz_Ant 1    |                 | 0.58              | 0mm             |                              |                          |                      |                         |
|        | Maximum MIMO2 Ant | Bottom Face     | 1.179             | 0mm             | 276.0                        | 1.48                     | 0.01                 | Not required            |
|        | WLAN6GHz_Ant 1    |                 | 0.3               | 0mm             |                              |                          |                      |                         |
|        | Maximum MIMO2 Ant | Bottom Face     | 1.179             | 0mm             | 152.0                        | 1.89                     | 0.02                 | Not required            |
|        | WLAN5GHz+BT_Ant 2 |                 | 0.71              | 0mm             |                              |                          |                      |                         |
|        | Maximum MIMO2 Ant | Bottom Face     | 1.179             | 0mm             | 152.0                        | 2.22                     | 0.02                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                 | 1.04              | 0mm             |                              |                          |                      |                         |
|        | WLAN2.4GHz_Ant 1  | Bottom Face     | 0.76              | 0mm             | 175.0                        | 1.69                     | 0.01                 | Not required            |
|        | WLAN2.4GHz_Ant 2  |                 | 0.93              | 0mm             |                              |                          |                      |                         |
|        | WLAN2.4GHz_Ant 1  | Bottom Face     | 0.76              | 0mm             | 175.0                        | 0.88                     | 0.00                 | Not required            |
|        | BT_Ant 2          |                 | 0.12              | 0mm             |                              |                          |                      |                         |
|        | WLAN5GHz_Ant 1    | Bottom Face     | 0.58              | 0mm             | 175.0                        | 1.29                     | 0.01                 | Not required            |
|        | WLAN5GHz+BT_Ant 2 |                 | 0.71              | 0mm             |                              |                          |                      |                         |
|        | WLAN6GHz_Ant 1    | Bottom Face     | 0.3               | 0mm             | 175.0                        | 1.34                     | 0.01                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                 | 1.04              | 0mm             |                              |                          |                      |                         |
| Case 3 | <b>Band</b>       | <b>Position</b> | <b>SAR (W/kg)</b> | <b>Gap (mm)</b> | <b>Minimum distance (mm)</b> | <b>Summed SAR (W/kg)</b> | <b>SPLSR Results</b> | <b>Simultaneous SAR</b> |
|        | Maximum Main Ant  | Edge 3          | 0.001             | 0mm             | 198.0                        | 0.85                     | 0.00                 | Not required            |
|        | WLAN2.4GHz_Ant 1  |                 | 0.85              | 0mm             |                              |                          |                      |                         |
|        | Maximum Main Ant  | Edge 3          | 0.001             | 0mm             | 252.0                        | 1.14                     | 0.00                 | Not required            |
|        | WLAN2.4GHz_Ant 2  |                 | 1.14              | 0mm             |                              |                          |                      |                         |
|        | Maximum Main Ant  | Edge 3          | 0.001             | 0mm             | 198.0                        | 1.48                     | 0.01                 | Not required            |
|        | WLAN5GHz_Ant 1    |                 | 1.48              | 0mm             |                              |                          |                      |                         |
|        | Maximum Main Ant  | Edge 3          | 0.001             | 0mm             | 198.0                        | 1.34                     | 0.01                 | Not required            |
|        | WLAN6GHz_Ant 1    |                 | 1.34              | 0mm             |                              |                          |                      |                         |
|        | Maximum Main Ant  | Edge 3          | 0.001             | 0mm             | 252.0                        | 1.13                     | 0.00                 | Not required            |
|        | WLAN5GHz+BT_Ant 2 |                 | 1.13              | 0mm             |                              |                          |                      |                         |
|        | Maximum Main Ant  | Edge 3          | 0.001             | 0mm             | 252.0                        | 1.61                     | 0.01                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                 | 1.61              | 0mm             |                              |                          |                      |                         |
|        | WLAN2.4GHz_Ant 1  | Edge 3          | 0.85              | 0mm             | 175.0                        | 1.99                     | 0.02                 | Not required            |
|        | WLAN2.4GHz_Ant 2  |                 | 1.14              | 0mm             |                              |                          |                      |                         |
|        | WLAN2.4GHz_Ant 1  | Edge 3          | 0.85              | 0mm             | 175.0                        | 1.05                     | 0.01                 | Not required            |
|        | BT_Ant 2          |                 | 0.2               | 0mm             |                              |                          |                      |                         |
|        | WLAN5GHz_Ant 1    | Edge 3          | 1.48              | 0mm             | 175.0                        | 2.61                     | 0.02                 | Not required            |
|        | WLAN5GHz+BT_Ant 2 |                 | 1.13              | 0mm             |                              |                          |                      |                         |
|        | WLAN6GHz_Ant 1    | Edge 3          | 1.34              | 0mm             | 175.0                        | 2.95                     | 0.03                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                 | 1.61              | 0mm             |                              |                          |                      |                         |

|        | Band              | Position         | SAR (W/kg) | Gap      | Minimum distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|--------|-------------------|------------------|------------|----------|-----------------------|-------------------|---------------|------------------|
|        |                   |                  |            | (mm)     |                       |                   |               |                  |
| Case 4 | Maximum MIMO1 Ant | Bottom of Laptop | 0.188      | 0mm      | 158.0                 | 0.80              | 0.00          | Not required     |
|        | WLAN2.4GHz_Ant 1  |                  | 0.61       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom of Laptop | 0.188      | 0mm      | 282.0                 | 1.35              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 1.16       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom of Laptop | 0.188      | 0mm      | 158.0                 | 1.77              | 0.01          | Not required     |
|        | WLAN5GHz_Ant 1    |                  | 1.58       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom of Laptop | 0.188      | 0mm      | 158.0                 | 1.78              | 0.02          | Not required     |
|        | WLAN6GHz_Ant 1    |                  | 1.59       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom of Laptop | 0.188      | 0mm      | 282.0                 | 1.50              | 0.01          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 1.31       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom of Laptop | 0.188      | 0mm      | 282.0                 | 1.98              | 0.01          | Not required     |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.79       | 0mm      |                       |                   |               |                  |
|        | WLAN2.4GHz_Ant 1  | Bottom of Laptop | 0.61       | 0mm      | 175.0                 | 1.77              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 1.16       | 0mm      |                       |                   |               |                  |
|        | WLAN5GHz_Ant 1    | Bottom of Laptop | 1.58       | 0mm      | 175.0                 | 2.89              | 0.03          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 1.31       | 0mm      |                       |                   |               |                  |
|        | WLAN6GHz_Ant 1    | Bottom of Laptop | 1.59       | 0mm      | 175.0                 | 3.38              | 0.04          | Not required     |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.79       | 0mm      |                       |                   |               |                  |
| Case 5 | Band              | Position         | SAR (W/kg) | Gap (mm) | Minimum distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|        | Maximum MIMO1 Ant | Bottom Face      | 0.899      | 0mm      | 158.0                 | 1.66              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 1  |                  | 0.76       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom Face      | 0.899      | 0mm      | 282.0                 | 1.83              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 0.93       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom Face      | 0.899      | 0mm      | 158.0                 | 1.48              | 0.01          | Not required     |
|        | WLAN5GHz_Ant 1    |                  | 0.58       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom Face      | 0.899      | 0mm      | 158.0                 | 1.20              | 0.01          | Not required     |
|        | WLAN6GHz_Ant 1    |                  | 0.3        | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom Face      | 0.899      | 0mm      | 282.0                 | 1.61              | 0.01          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 0.71       | 0mm      |                       |                   |               |                  |
|        | Maximum MIMO1 Ant | Bottom Face      | 0.899      | 0mm      | 282.0                 | 1.94              | 0.01          | Not required     |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.04       | 0mm      |                       |                   |               |                  |
|        | WLAN2.4GHz_Ant 1  | Bottom Face      | 0.76       | 0mm      | 175.0                 | 1.69              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 0.93       | 0mm      |                       |                   |               |                  |
|        | WLAN2.4GHz_Ant 1  | Bottom Face      | 0.76       | 0mm      | 175.0                 | 0.88              | 0.00          | Not required     |
|        | BT_Ant 2          |                  | 0.12       | 0mm      |                       |                   |               |                  |
|        | WLAN5GHz_Ant 1    | Bottom Face      | 0.58       | 0mm      | 175.0                 | 1.29              | 0.01          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 0.71       | 0mm      |                       |                   |               |                  |
|        | WLAN6GHz_Ant 1    | Bottom Face      | 0.3        | 0mm      | 175.0                 | 1.34              | 0.01          | Not required     |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.04       | 0mm      |                       |                   |               |                  |
| Case 6 | Band              | Position         | SAR (W/kg) | Gap (mm) | Minimum distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|        | Maximum Aux Ant   | Bottom of Laptop | 0.23       | 0mm      | 263.0                 | 0.84              | 0.00          | Not required     |
|        | WLAN2.4GHz_Ant 1  |                  | 0.61       | 0mm      |                       |                   |               |                  |
|        | Maximum Aux Ant   | Bottom of Laptop | 0.23       | 0mm      | 198.0                 | 1.39              | 0.01          | Not required     |
|        | WLAN2.4GHz_Ant 2  |                  | 1.16       | 0mm      |                       |                   |               |                  |
|        | Maximum Aux Ant   | Bottom of Laptop | 0.23       | 0mm      | 263.0                 | 1.81              | 0.01          | Not required     |
|        | WLAN5GHz_Ant 1    |                  | 1.58       | 0mm      |                       |                   |               |                  |
|        | Maximum Aux Ant   | Bottom of Laptop | 0.23       | 0mm      | 263.0                 | 1.82              | 0.01          | Not required     |
|        | WLAN6GHz_Ant 1    |                  | 1.59       | 0mm      |                       |                   |               |                  |
|        | Maximum Aux Ant   | Bottom of Laptop | 0.23       | 0mm      | 198.0                 | 1.54              | 0.01          | Not required     |
|        | WLAN5GHz+BT_Ant 2 |                  | 1.31       | 0mm      |                       |                   |               |                  |
|        | Maximum Aux Ant   | Bottom of        | 0.23       | 0mm      | 198.0                 | 2.02              | 0.01          | Not required     |

|        |                   |                  |                   |                 |                              |                          |                      |                         |
|--------|-------------------|------------------|-------------------|-----------------|------------------------------|--------------------------|----------------------|-------------------------|
|        | WLAN6GHz+BT_Ant 2 | Laptop           | 1.79              | 0mm             |                              |                          |                      |                         |
|        | WLAN2.4GHz_Ant 1  | Bottom of Laptop | 0.61              | 0mm             | 175.0                        | 1.77                     | 0.01                 | Not required            |
|        | WLAN2.4GHz_Ant 2  |                  | 1.16              | 0mm             |                              |                          |                      |                         |
|        | WLAN5GHz_Ant 1    | Bottom of Laptop | 1.58              | 0mm             | 175.0                        | 2.89                     | 0.03                 | Not required            |
|        | WLAN5GHz+BT_Ant 2 |                  | 1.31              | 0mm             |                              |                          |                      |                         |
|        | WLAN6GHz_Ant 1    | Bottom of Laptop | 1.59              | 0mm             | 175.0                        | 3.38                     | 0.04                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.79              | 0mm             |                              |                          |                      |                         |
| Case 7 | <b>Band</b>       | <b>Position</b>  | <b>SAR (W/kg)</b> | <b>Gap (mm)</b> | <b>Minimum distance (mm)</b> | <b>Summed SAR (W/kg)</b> | <b>SPLSR Results</b> | <b>Simultaneous SAR</b> |
|        | Maximum Aux Ant   | Bottom Face      | 1.127             | 0mm             | 263.0                        | 1.89                     | 0.01                 | Not required            |
|        | WLAN2.4GHz_Ant 1  |                  | 0.76              | 0mm             |                              |                          |                      |                         |
|        | Maximum Aux Ant   | Bottom Face      | 1.127             | 0mm             | 198.0                        | 2.06                     | 0.01                 | Not required            |
|        | WLAN2.4GHz_Ant 2  |                  | 0.93              | 0mm             |                              |                          |                      |                         |
|        | Maximum Aux Ant   | Bottom Face      | 1.127             | 0mm             | 263.0                        | 1.71                     | 0.01                 | Not required            |
|        | WLAN5GHz_Ant 1    |                  | 0.58              | 0mm             |                              |                          |                      |                         |
|        | Maximum Aux Ant   | Bottom Face      | 1.127             | 0mm             | 263.0                        | 1.43                     | 0.01                 | Not required            |
|        | WLAN6GHz_Ant 1    |                  | 0.3               | 0mm             |                              |                          |                      |                         |
|        | Maximum Aux Ant   | Bottom Face      | 1.127             | 0mm             | 198.0                        | 1.84                     | 0.01                 | Not required            |
|        | WLAN5GHz+BT_Ant 2 |                  | 0.71              | 0mm             |                              |                          |                      |                         |
|        | Maximum Aux Ant   | Bottom Face      | 1.127             | 0mm             | 198.0                        | 2.17                     | 0.02                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.04              | 0mm             |                              |                          |                      |                         |
|        | WLAN2.4GHz_Ant 1  | Bottom Face      | 0.76              | 0mm             | 175.0                        | 1.69                     | 0.01                 | Not required            |
|        | WLAN2.4GHz_Ant 2  |                  | 0.93              | 0mm             |                              |                          |                      |                         |
|        | WLAN2.4GHz_Ant 1  | Bottom Face      | 0.76              | 0mm             | 175.0                        | 0.88                     | 0.00                 | Not required            |
|        | BT_Ant 2          |                  | 0.12              | 0mm             |                              |                          |                      |                         |
|        | WLAN5GHz_Ant 1    | Bottom Face      | 0.58              | 0mm             | 175.0                        | 1.29                     | 0.01                 | Not required            |
|        | WLAN5GHz+BT_Ant 2 |                  | 0.71              | 0mm             |                              |                          |                      |                         |
|        | WLAN6GHz_Ant 1    | Bottom Face      | 0.3               | 0mm             | 175.0                        | 1.34                     | 0.01                 | Not required            |
|        | WLAN6GHz+BT_Ant 2 |                  | 1.04              | 0mm             |                              |                          |                      |                         |

**Test Engineer :** Randy Lin, Sing Lim, Henry Chou and Kevin Guo

## **15. Uncertainty Assessment**

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is  $< 1.5$  W/kg and the measured 10-g SAR within a frequency band is  $< 3.75$  W/kg. The expanded SAR measurement uncertainty must be  $\leq 30\%$ , for a confidence interval of  $k = 2$ . If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg. Therefore, the measurement uncertainty table is not required in this report.

Declaration of Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

## **16. References**

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] ANSI/IEEE Std. C95.1-1992, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", September 1992
- [3] IEEE Std. 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", Sep 2013
- [4] SPEAG DASY System Handbook
- [5] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [6] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [7] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [8] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [9] FCC KDB 616217 D04 v01r02, "SAR Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers", Oct 2015
- [10] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [11] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.