

**<LTE Band 41 Power Class 3>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Low Middle Ch. / Freq. | Power Middle Ch. / Freq. | Power High Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) | MPR (dB) |
|-----------------|------------|---------|-----------|-----------------------|------------------------------|--------------------------|-------------------------------|------------------------|---------------------|----------|
| Channel         |            |         |           | 39750                 | 40185                        | 40620                    | 41055                         | 41490                  |                     |          |
| Frequency (MHz) |            |         |           | 2506                  | 2549.5                       | 2593                     | 2636.5                        | 2680                   |                     |          |
| 20              | QPSK       | 1       | 0         | 21.39                 | 21.50                        | 21.42                    | 21.03                         | 20.93                  | 21.8                | 0        |
| 20              | QPSK       | 1       | 49        | 21.53                 | 21.59                        | 21.52                    | 20.98                         | 20.92                  |                     |          |
| 20              | QPSK       | 1       | 99        | 21.55                 | 21.55                        | 21.65                    | 20.91                         | 21.09                  |                     |          |
| 20              | QPSK       | 50      | 0         | 21.61                 | 21.62                        | 21.63                    | 21.22                         | 21.01                  | 21.8                | 0        |
| 20              | QPSK       | 50      | 24        | 21.62                 | 21.47                        | 21.64                    | 21.19                         | 21.09                  |                     |          |
| 20              | QPSK       | 50      | 50        | 21.59                 | 21.48                        | 21.60                    | 21.11                         | 21.19                  |                     |          |
| 20              | QPSK       | 100     | 0         | 21.60                 | 21.60                        | 21.62                    | 21.13                         | 21.09                  | 21.8                | 0        |
| 20              | 16QAM      | 1       | 0         | 21.25                 | 21.25                        | 21.26                    | 21.38                         | 21.08                  |                     |          |
| 20              | 16QAM      | 1       | 49        | 21.30                 | 21.24                        | 21.29                    | 21.28                         | 21.27                  |                     |          |
| 20              | 16QAM      | 1       | 99        | 21.33                 | 21.27                        | 21.37                    | 21.11                         | 21.44                  | 21.8                | 0        |
| 20              | 16QAM      | 50      | 0         | 21.29                 | 21.39                        | 21.35                    | 21.50                         | 21.27                  |                     |          |
| 20              | 16QAM      | 50      | 24        | 21.41                 | 21.23                        | 21.36                    | 21.44                         | 21.33                  |                     |          |
| 20              | 16QAM      | 50      | 50        | 21.33                 | 21.41                        | 21.39                    | 21.36                         | 21.45                  | 21.8                | 0        |
| 20              | 16QAM      | 100     | 0         | 21.35                 | 21.33                        | 21.38                    | 21.39                         | 21.34                  |                     |          |
| 20              | 64QAM      | 1       | 0         | 20.79                 | 21.22                        | 20.93                    | 20.86                         | 20.81                  |                     |          |
| 20              | 64QAM      | 1       | 49        | 20.92                 | 21.30                        | 20.93                    | 20.77                         | 20.78                  | 21.8                | 0        |
| 20              | 64QAM      | 1       | 99        | 20.91                 | 21.26                        | 20.77                    | 20.43                         | 20.89                  |                     |          |
| 20              | 64QAM      | 50      | 0         | 20.16                 | 20.56                        | 20.27                    | 20.17                         | 19.96                  |                     |          |
| 20              | 64QAM      | 50      | 24        | 20.24                 | 20.63                        | 20.26                    | 20.10                         | 20.04                  | 21.8                | 0        |
| 20              | 64QAM      | 50      | 50        | 20.29                 | 20.59                        | 20.22                    | 20.02                         | 20.07                  |                     |          |
| 20              | 64QAM      | 100     | 0         | 20.24                 | 20.60                        | 20.22                    | 20.06                         | 20.02                  |                     |          |



# FCC SAR Test Report

Report No. : FA970213-03

| Channel         |       |    |    | 39725  | 40173  | 40620 | 41068  | 41515  | Tune-up limit (dBm) | MPR (dB) |
|-----------------|-------|----|----|--------|--------|-------|--------|--------|---------------------|----------|
| Frequency (MHz) |       |    |    | 2503.5 | 2548.3 | 2593  | 2637.8 | 2682.5 |                     |          |
| 15              | QPSK  | 1  | 0  | 21.18  | 21.42  | 21.27 | 21.02  | 20.98  | 21.8                | 0        |
| 15              | QPSK  | 1  | 37 | 21.33  | 21.43  | 21.29 | 20.92  | 21.04  |                     |          |
| 15              | QPSK  | 1  | 74 | 21.29  | 21.41  | 21.17 | 20.96  | 21.01  |                     |          |
| 15              | QPSK  | 36 | 0  | 21.12  | 21.32  | 21.38 | 21.06  | 20.89  | 21.8                | 0        |
| 15              | QPSK  | 36 | 20 | 21.17  | 21.40  | 21.39 | 21.00  | 20.97  |                     |          |
| 15              | QPSK  | 36 | 39 | 21.22  | 21.32  | 21.31 | 20.92  | 20.99  |                     |          |
| 15              | QPSK  | 75 | 0  | 21.16  | 21.40  | 21.38 | 21.09  | 21.00  | 21.8                | 0        |
| 15              | 16QAM | 1  | 0  | 21.03  | 21.48  | 21.40 | 21.07  | 20.84  |                     |          |
| 15              | 16QAM | 1  | 37 | 21.14  | 21.52  | 21.35 | 20.98  | 20.89  |                     |          |
| 15              | 16QAM | 1  | 74 | 21.13  | 21.44  | 21.27 | 20.80  | 21.07  | 21.8                | 0        |
| 15              | 16QAM | 36 | 0  | 21.01  | 21.47  | 21.42 | 21.03  | 20.91  |                     |          |
| 15              | 16QAM | 36 | 20 | 21.11  | 21.55  | 21.41 | 20.98  | 20.97  |                     |          |
| 15              | 16QAM | 36 | 39 | 21.12  | 21.49  | 21.37 | 20.87  | 20.96  | 21.8                | 0        |
| 15              | 16QAM | 75 | 0  | 21.16  | 21.61  | 21.42 | 21.08  | 21.00  |                     |          |
| 15              | 64QAM | 1  | 0  | 20.81  | 21.27  | 21.16 | 20.92  | 20.67  |                     |          |
| 15              | 64QAM | 1  | 37 | 20.81  | 21.23  | 21.06 | 20.64  | 20.71  | 21.8                | 0        |
| 15              | 64QAM | 1  | 74 | 20.94  | 21.26  | 21.01 | 20.57  | 20.90  |                     |          |
| 15              | 64QAM | 36 | 0  | 20.12  | 20.59  | 20.45 | 20.18  | 19.93  |                     |          |
| 15              | 64QAM | 36 | 20 | 20.20  | 20.60  | 20.51 | 20.07  | 20.04  | 21.8                | 0        |
| 15              | 64QAM | 36 | 39 | 20.16  | 20.56  | 20.42 | 19.96  | 20.10  |                     |          |
| 15              | 64QAM | 75 | 0  | 20.16  | 20.60  | 20.48 | 20.04  | 20.11  |                     |          |
| Channel         |       |    |    | 39700  | 40160  | 40620 | 41080  | 41540  | Tune-up limit (dBm) | MPR (dB) |
| Frequency (MHz) |       |    |    | 2501   | 2547   | 2593  | 2639   | 2685   |                     |          |
| 10              | QPSK  | 1  | 0  | 20.74  | 21.34  | 21.08 | 21.02  | 20.91  | 21.8                | 0        |
| 10              | QPSK  | 1  | 25 | 20.83  | 21.35  | 21.13 | 20.95  | 20.86  |                     |          |
| 10              | QPSK  | 1  | 49 | 20.83  | 21.40  | 20.97 | 20.97  | 20.91  |                     |          |
| 10              | QPSK  | 25 | 0  | 20.93  | 21.49  | 21.28 | 21.10  | 21.02  | 21.8                | 0        |
| 10              | QPSK  | 25 | 12 | 20.96  | 21.54  | 21.25 | 21.13  | 21.07  |                     |          |
| 10              | QPSK  | 25 | 25 | 20.95  | 21.49  | 21.19 | 21.05  | 21.01  |                     |          |
| 10              | QPSK  | 50 | 0  | 20.97  | 21.53  | 21.26 | 21.13  | 21.06  | 21.8                | 0        |
| 10              | 16QAM | 1  | 0  | 20.92  | 21.49  | 21.22 | 21.10  | 20.99  |                     |          |
| 10              | 16QAM | 1  | 25 | 20.98  | 21.44  | 21.19 | 21.02  | 20.94  |                     |          |
| 10              | 16QAM | 1  | 49 | 20.85  | 21.44  | 21.05 | 20.98  | 20.95  | 21.8                | 0        |
| 10              | 16QAM | 25 | 0  | 21.00  | 21.52  | 21.30 | 21.12  | 21.06  |                     |          |
| 10              | 16QAM | 25 | 12 | 21.04  | 21.55  | 21.28 | 21.14  | 21.12  |                     |          |
| 10              | 16QAM | 25 | 25 | 20.97  | 21.47  | 21.24 | 21.05  | 21.00  | 21.8                | 0        |
| 10              | 16QAM | 50 | 0  | 20.96  | 21.54  | 21.29 | 21.15  | 21.11  |                     |          |
| 10              | 64QAM | 1  | 0  | 20.53  | 21.11  | 20.94 | 20.82  | 20.82  |                     |          |
| 10              | 64QAM | 1  | 25 | 20.66  | 21.16  | 20.95 | 20.77  | 20.77  | 21.8                | 0        |
| 10              | 64QAM | 1  | 49 | 20.63  | 21.10  | 20.78 | 20.66  | 20.75  |                     |          |
| 10              | 64QAM | 25 | 0  | 20.00  | 20.61  | 20.36 | 20.21  | 20.13  |                     |          |
| 10              | 64QAM | 25 | 12 | 20.02  | 20.56  | 20.32 | 20.16  | 20.21  | 21.8                | 0        |
| 10              | 64QAM | 25 | 25 | 19.97  | 20.58  | 20.24 | 20.16  | 20.11  |                     |          |
| 10              | 64QAM | 50 | 0  | 19.94  | 20.57  | 20.29 | 20.16  | 20.10  |                     |          |



| Channel         |       |    |    | 39675  | 40148  | 40620 | 41093   | 41565  | Tune-up limit (dBm) | MPR (dB) |
|-----------------|-------|----|----|--------|--------|-------|---------|--------|---------------------|----------|
| Frequency (MHz) |       |    |    | 2498.5 | 2545.8 | 2593  | 2640.30 | 2687.5 |                     |          |
| 5               | QPSK  | 1  | 0  | 20.84  | 21.33  | 21.18 | 20.97   | 20.93  | 21.8                | 0        |
| 5               | QPSK  | 1  | 12 | 20.89  | 21.43  | 21.18 | 21.01   | 20.88  |                     |          |
| 5               | QPSK  | 1  | 24 | 20.86  | 21.40  | 21.12 | 20.97   | 20.88  |                     |          |
| 5               | QPSK  | 12 | 0  | 20.97  | 21.51  | 21.26 | 21.05   | 21.05  | 21.8                | 0        |
| 5               | QPSK  | 12 | 7  | 21.04  | 21.53  | 21.36 | 21.12   | 21.05  |                     |          |
| 5               | QPSK  | 12 | 13 | 21.01  | 21.54  | 21.30 | 21.16   | 21.07  |                     |          |
| 5               | QPSK  | 25 | 0  | 20.98  | 21.52  | 21.25 | 21.14   | 21.06  | 21.8                | 0        |
| 5               | 16QAM | 1  | 0  | 20.95  | 21.45  | 21.26 | 21.05   | 21.00  |                     |          |
| 5               | 16QAM | 1  | 12 | 20.98  | 21.50  | 21.30 | 21.09   | 21.00  |                     |          |
| 5               | 16QAM | 1  | 24 | 20.98  | 21.51  | 21.27 | 21.06   | 20.97  | 21.8                | 0        |
| 5               | 16QAM | 12 | 0  | 20.95  | 21.45  | 21.22 | 21.00   | 21.03  |                     |          |
| 5               | 16QAM | 12 | 7  | 20.96  | 21.54  | 21.31 | 21.08   | 21.02  |                     |          |
| 5               | 16QAM | 12 | 13 | 20.93  | 21.50  | 21.25 | 21.12   | 21.02  | 21.8                | 0        |
| 5               | 16QAM | 25 | 0  | 21.02  | 21.56  | 21.27 | 21.15   | 21.06  |                     |          |
| 5               | 64QAM | 1  | 0  | 20.61  | 21.16  | 20.96 | 20.76   | 20.85  |                     |          |
| 5               | 64QAM | 1  | 12 | 20.69  | 21.20  | 20.97 | 20.80   | 20.86  | 21.8                | 0        |
| 5               | 64QAM | 1  | 24 | 20.73  | 21.23  | 20.99 | 20.80   | 20.86  |                     |          |
| 5               | 64QAM | 12 | 0  | 19.96  | 20.53  | 20.28 | 20.11   | 20.16  |                     |          |
| 5               | 64QAM | 12 | 7  | 20.00  | 20.58  | 20.34 | 20.20   | 20.20  | 21.8                | 0        |
| 5               | 64QAM | 12 | 13 | 19.99  | 20.58  | 20.30 | 20.14   | 20.20  |                     |          |
| 5               | 64QAM | 25 | 0  | 20.02  | 20.59  | 20.27 | 20.15   | 20.17  |                     |          |

**<Bottom Antenna--Reduced Power Mode for Handheld On>**

**<LTE Band 38>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low<br>Ch. / Freq. | Power Middle<br>Ch. / Freq. | Power High<br>Ch. / Freq. | Tune-up<br>limit<br>(dBm) | MPR<br>(dB) |
|-----------------|------------|---------|-----------|--------------------------|-----------------------------|---------------------------|---------------------------|-------------|
| Channel         |            |         |           | 37850                    | 38000                       | 38150                     |                           |             |
| Frequency (MHz) |            |         |           | 2580                     | 2595                        | 2610                      |                           |             |
| 20              | QPSK       | 1       | 0         | 21.07                    | 20.93                       | 20.95                     | 21.3                      | 0           |
| 20              | QPSK       | 1       | 49        | 21.08                    | 20.91                       | 20.83                     |                           |             |
| 20              | QPSK       | 1       | 99        | 21.10                    | 20.89                       | 20.78                     |                           |             |
| 20              | QPSK       | 50      | 0         | 21.03                    | 21.06                       | 20.94                     | 21.3                      | 0           |
| 20              | QPSK       | 50      | 24        | 21.06                    | 21.05                       | 20.97                     |                           |             |
| 20              | QPSK       | 50      | 50        | 21.08                    | 21.07                       | 20.96                     |                           |             |
| 20              | QPSK       | 100     | 0         | 21.08                    | 21.06                       | 20.95                     |                           |             |
| 20              | 16QAM      | 1       | 0         | 21.02                    | 21.04                       | 20.87                     | 21.3                      | 0           |
| 20              | 16QAM      | 1       | 49        | 21.03                    | 21.01                       | 20.91                     |                           |             |
| 20              | 16QAM      | 1       | 99        | 21.04                    | 21.08                       | 20.78                     |                           |             |
| 20              | 16QAM      | 50      | 0         | 21.05                    | 21.03                       | 20.94                     | 21.3                      | 0           |
| 20              | 16QAM      | 50      | 24        | 21.07                    | 21.03                       | 20.99                     |                           |             |
| 20              | 16QAM      | 50      | 50        | 21.03                    | 21.06                       | 20.88                     |                           |             |
| 20              | 16QAM      | 100     | 0         | 21.05                    | 20.99                       | 20.92                     |                           |             |
| 20              | 64QAM      | 1       | 0         | 20.89                    | 20.88                       | 20.69                     | 21.3                      | 0           |
| 20              | 64QAM      | 1       | 49        | 20.83                    | 20.78                       | 20.58                     |                           |             |
| 20              | 64QAM      | 1       | 99        | 20.82                    | 20.61                       | 20.40                     |                           |             |
| 20              | 64QAM      | 50      | 0         | 20.52                    | 20.40                       | 20.17                     | 21.3                      | 0           |
| 20              | 64QAM      | 50      | 24        | 20.55                    | 20.38                       | 20.16                     |                           |             |
| 20              | 64QAM      | 50      | 50        | 20.47                    | 20.29                       | 20.08                     |                           |             |
| 20              | 64QAM      | 100     | 0         | 20.46                    | 20.34                       | 20.10                     |                           |             |



| Channel         |       |    |    | 37825  | 38000 | 38175  | Tune-up<br>limit<br>(dBm) | MPR<br>(dB) |
|-----------------|-------|----|----|--------|-------|--------|---------------------------|-------------|
| Frequency (MHz) |       |    |    | 2577.5 | 2595  | 2612.5 |                           |             |
| 15              | QPSK  | 1  | 0  | 20.64  | 20.71 | 20.50  | 21.3                      | 0           |
| 15              | QPSK  | 1  | 37 | 20.64  | 20.66 | 20.46  |                           |             |
| 15              | QPSK  | 1  | 74 | 20.57  | 20.51 | 20.29  |                           |             |
| 15              | QPSK  | 36 | 0  | 20.65  | 20.78 | 20.60  | 21.3                      | 0           |
| 15              | QPSK  | 36 | 20 | 20.80  | 20.81 | 20.56  |                           |             |
| 15              | QPSK  | 36 | 39 | 20.72  | 20.72 | 20.48  |                           |             |
| 15              | QPSK  | 75 | 0  | 20.68  | 20.75 | 20.56  | 21.3                      | 0           |
| 15              | 16QAM | 1  | 0  | 20.64  | 20.74 | 20.69  |                           |             |
| 15              | 16QAM | 1  | 37 | 20.62  | 20.65 | 20.54  |                           |             |
| 15              | 16QAM | 1  | 74 | 20.53  | 20.49 | 20.43  | 21.3                      | 0           |
| 15              | 16QAM | 36 | 0  | 20.64  | 20.75 | 20.55  |                           |             |
| 15              | 16QAM | 36 | 20 | 20.75  | 20.75 | 20.55  |                           |             |
| 15              | 16QAM | 36 | 39 | 20.86  | 20.65 | 20.46  | 21.3                      | 0           |
| 15              | 16QAM | 75 | 0  | 20.86  | 20.77 | 20.53  |                           |             |
| 15              | 64QAM | 1  | 0  | 20.87  | 20.85 | 20.61  |                           |             |
| 15              | 64QAM | 1  | 37 | 20.89  | 20.79 | 20.55  | 21.3                      | 0           |
| 15              | 64QAM | 1  | 74 | 20.80  | 20.66 | 20.40  |                           |             |
| 15              | 64QAM | 36 | 0  | 20.27  | 20.29 | 20.11  |                           |             |
| 15              | 64QAM | 36 | 20 | 20.33  | 20.31 | 20.08  | 21.3                      | 0           |
| 15              | 64QAM | 36 | 39 | 20.26  | 20.24 | 20.00  |                           |             |
| 15              | 64QAM | 75 | 0  | 20.27  | 20.25 | 20.07  |                           |             |
| Channel         |       |    |    | 37800  | 38000 | 38200  | Tune-up<br>limit<br>(dBm) | MPR<br>(dB) |
| Frequency (MHz) |       |    |    | 2575   | 2595  | 2615   |                           |             |
| 10              | QPSK  | 1  | 0  | 20.51  | 20.42 | 20.18  | 21.3                      | 0           |
| 10              | QPSK  | 1  | 25 | 20.58  | 20.40 | 20.19  |                           |             |
| 10              | QPSK  | 1  | 49 | 20.56  | 20.36 | 20.11  |                           |             |
| 10              | QPSK  | 25 | 0  | 20.82  | 20.62 | 20.38  | 21.3                      | 0           |
| 10              | QPSK  | 25 | 12 | 20.81  | 20.62 | 20.36  |                           |             |
| 10              | QPSK  | 25 | 25 | 20.79  | 20.58 | 20.33  |                           |             |
| 10              | QPSK  | 50 | 0  | 20.66  | 20.60 | 20.37  | 21.3                      | 0           |
| 10              | 16QAM | 1  | 0  | 20.62  | 20.70 | 20.45  |                           |             |
| 10              | 16QAM | 1  | 25 | 20.67  | 20.65 | 20.42  |                           |             |
| 10              | 16QAM | 1  | 49 | 20.60  | 20.58 | 20.32  | 21.3                      | 0           |
| 10              | 16QAM | 25 | 0  | 20.64  | 20.65 | 20.43  |                           |             |
| 10              | 16QAM | 25 | 12 | 20.65  | 20.69 | 20.42  |                           |             |
| 10              | 16QAM | 25 | 25 | 20.65  | 20.62 | 20.39  | 21.3                      | 0           |
| 10              | 16QAM | 50 | 0  | 20.81  | 20.63 | 20.39  |                           |             |
| 10              | 64QAM | 1  | 0  | 20.66  | 20.54 | 20.30  |                           |             |
| 10              | 64QAM | 1  | 25 | 20.71  | 20.51 | 20.26  | 21.3                      | 0           |
| 10              | 64QAM | 1  | 49 | 20.68  | 20.44 | 20.23  |                           |             |
| 10              | 64QAM | 25 | 0  | 20.12  | 20.13 | 19.91  |                           |             |
| 10              | 64QAM | 25 | 12 | 20.15  | 20.16 | 19.92  | 21.3                      | 0           |
| 10              | 64QAM | 25 | 25 | 20.18  | 20.14 | 19.87  |                           |             |
| 10              | 64QAM | 50 | 0  | 20.12  | 20.12 | 19.89  |                           |             |

| Channel         |       |    |    | 37775  | 38000 | 38225  | Tune-up<br>limit<br>(dBm) | MPR<br>(dB) |
|-----------------|-------|----|----|--------|-------|--------|---------------------------|-------------|
| Frequency (MHz) |       |    |    | 2572.5 | 2595  | 2617.5 |                           |             |
| 5               | QPSK  | 1  | 0  | 20.35  | 20.39 | 20.15  | 21.3                      | 0           |
| 5               | QPSK  | 1  | 12 | 20.48  | 20.47 | 20.18  |                           |             |
| 5               | QPSK  | 1  | 24 | 20.50  | 20.45 | 20.17  |                           |             |
| 5               | QPSK  | 12 | 0  | 20.56  | 20.55 | 20.35  | 21.3                      | 0           |
| 5               | QPSK  | 12 | 7  | 20.81  | 20.61 | 20.42  |                           |             |
| 5               | QPSK  | 12 | 13 | 20.83  | 20.66 | 20.40  |                           |             |
| 5               | QPSK  | 25 | 0  | 20.84  | 20.56 | 20.38  | 21.3                      | 0           |
| 5               | 16QAM | 1  | 0  | 20.78  | 20.64 | 20.39  |                           |             |
| 5               | 16QAM | 1  | 12 | 20.84  | 20.73 | 20.44  |                           |             |
| 5               | 16QAM | 1  | 24 | 20.86  | 20.71 | 20.43  | 21.3                      | 0           |
| 5               | 16QAM | 12 | 0  | 20.74  | 20.55 | 20.38  |                           |             |
| 5               | 16QAM | 12 | 7  | 20.81  | 20.62 | 20.41  |                           |             |
| 5               | 16QAM | 12 | 13 | 20.88  | 20.64 | 20.42  | 21.3                      | 0           |
| 5               | 16QAM | 25 | 0  | 20.89  | 20.60 | 20.42  |                           |             |
| 5               | 64QAM | 1  | 0  | 20.49  | 20.51 | 20.29  |                           |             |
| 5               | 64QAM | 1  | 12 | 20.62  | 20.57 | 20.33  | 21.3                      | 0           |
| 5               | 64QAM | 1  | 24 | 20.66  | 20.58 | 20.33  |                           |             |
| 5               | 64QAM | 12 | 0  | 20.08  | 20.06 | 19.89  |                           |             |
| 5               | 64QAM | 12 | 7  | 20.23  | 20.15 | 19.89  | 21.3                      | 0           |
| 5               | 64QAM | 12 | 13 | 20.22  | 20.18 | 19.92  |                           |             |
| 5               | 64QAM | 25 | 0  | 20.23  | 20.10 | 19.88  |                           |             |

**<LTE Band 41 Power Class 2>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Low Middle Ch. / Freq. | Power Middle Ch. / Freq. | Power High Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) | MPR (dB) |
|-----------------|------------|---------|-----------|-----------------------|------------------------------|--------------------------|-------------------------------|------------------------|---------------------|----------|
| Channel         |            |         |           | 39750                 | 40185                        | 40620                    | 41055                         | 41490                  |                     |          |
| Frequency (MHz) |            |         |           | 2506                  | 2549.5                       | 2593                     | 2636.5                        | 2680                   |                     |          |
| 20              | QPSK       | 1       | 0         | 24.37                 | 24.25                        | 24.55                    | 24.05                         | 23.91                  | 24.8                | 0        |
| 20              | QPSK       | 1       | 49        | 24.56                 | 24.32                        | 24.53                    | 23.98                         | 23.94                  |                     |          |
| 20              | QPSK       | 1       | 99        | 24.56                 | 24.15                        | 24.58                    | 23.96                         | 24.20                  |                     |          |
| 20              | QPSK       | 50      | 0         | 24.54                 | 24.52                        | 24.50                    | 24.17                         | 23.95                  | 24.8                | 0        |
| 20              | QPSK       | 50      | 24        | 24.36                 | 24.49                        | 24.55                    | 24.28                         | 24.19                  |                     |          |
| 20              | QPSK       | 50      | 50        | 24.46                 | 24.54                        | 24.46                    | 24.09                         | 24.16                  |                     |          |
| 20              | QPSK       | 100     | 0         | 24.40                 | 24.52                        | 24.54                    | 24.06                         | 24.03                  | 24.8                | 0        |
| 20              | 16QAM      | 1       | 0         | 24.48                 | 24.46                        | 24.45                    | 24.29                         | 24.00                  |                     |          |
| 20              | 16QAM      | 1       | 49        | 24.33                 | 24.54                        | 24.50                    | 24.14                         | 24.15                  |                     |          |
| 20              | 16QAM      | 1       | 99        | 24.43                 | 24.47                        | 24.46                    | 23.90                         | 24.31                  | 24.8                | 0        |
| 20              | 16QAM      | 50      | 0         | 24.11                 | 24.15                        | 24.34                    | 23.80                         | 23.69                  |                     |          |
| 20              | 16QAM      | 50      | 24        | 24.24                 | 24.12                        | 24.37                    | 23.82                         | 23.70                  |                     |          |
| 20              | 16QAM      | 50      | 50        | 24.35                 | 24.07                        | 24.36                    | 23.74                         | 23.78                  | 24.8                | 0        |
| 20              | 16QAM      | 100     | 0         | 24.27                 | 24.17                        | 24.35                    | 23.78                         | 23.75                  |                     |          |
| 20              | 64QAM      | 1       | 0         | 23.41                 | 23.92                        | 23.93                    | 23.54                         | 23.25                  |                     |          |
| 20              | 64QAM      | 1       | 49        | 23.97                 | 23.95                        | 23.90                    | 23.38                         | 23.37                  | 24.8                | 0        |
| 20              | 64QAM      | 1       | 99        | 23.42                 | 23.90                        | 23.72                    | 23.14                         | 23.51                  |                     |          |
| 20              | 64QAM      | 50      | 0         | 22.51                 | 23.19                        | 22.98                    | 22.49                         | 22.36                  |                     |          |
| 20              | 64QAM      | 50      | 24        | 23.01                 | 23.23                        | 22.97                    | 22.45                         | 22.43                  | 23.3                | 1.5      |
| 20              | 64QAM      | 50      | 50        | 22.85                 | 23.17                        | 22.93                    | 22.39                         | 22.53                  |                     |          |
| 20              | 64QAM      | 100     | 0         | 22.90                 | 23.18                        | 22.92                    | 22.42                         | 22.48                  |                     |          |



# FCC SAR Test Report

Report No. : FA970213-03

| Channel         |       |    |    | 39725  | 40173  | 40620 | 41068  | 41515  | Tune-up limit (dBm) | MPR (dB) |
|-----------------|-------|----|----|--------|--------|-------|--------|--------|---------------------|----------|
| Frequency (MHz) |       |    |    | 2503.5 | 2548.3 | 2593  | 2637.8 | 2682.5 |                     |          |
| 15              | QPSK  | 1  | 0  | 24.23  | 24.23  | 24.23 | 23.79  | 23.51  | 24.8                | 0        |
| 15              | QPSK  | 1  | 37 | 24.30  | 24.27  | 24.26 | 23.74  | 23.67  |                     |          |
| 15              | QPSK  | 1  | 74 | 24.33  | 24.30  | 24.12 | 23.57  | 23.73  |                     |          |
| 15              | QPSK  | 36 | 0  | 24.36  | 24.29  | 24.39 | 23.86  | 23.72  | 24.8                | 0        |
| 15              | QPSK  | 36 | 20 | 24.48  | 24.34  | 24.37 | 23.90  | 23.84  |                     |          |
| 15              | QPSK  | 36 | 39 | 24.49  | 24.29  | 24.33 | 23.75  | 23.88  |                     |          |
| 15              | QPSK  | 75 | 0  | 24.42  | 24.34  | 24.38 | 23.84  | 23.81  | 24.8                | 0        |
| 15              | 16QAM | 1  | 0  | 24.42  | 24.34  | 24.53 | 23.99  | 23.78  |                     |          |
| 15              | 16QAM | 1  | 37 | 24.50  | 24.33  | 24.48 | 23.91  | 23.88  |                     |          |
| 15              | 16QAM | 1  | 74 | 24.48  | 24.26  | 24.32 | 23.72  | 23.95  | 24.8                | 0        |
| 15              | 16QAM | 36 | 0  | 23.84  | 24.05  | 23.84 | 23.31  | 23.22  |                     |          |
| 15              | 16QAM | 36 | 20 | 23.90  | 24.10  | 23.88 | 23.36  | 23.37  |                     |          |
| 15              | 16QAM | 36 | 39 | 23.95  | 24.07  | 23.82 | 23.24  | 23.32  | 24.8                | 0        |
| 15              | 16QAM | 75 | 0  | 23.93  | 24.13  | 23.88 | 23.33  | 23.33  |                     |          |
| 15              | 64QAM | 1  | 0  | 23.15  | 23.88  | 23.93 | 23.44  | 23.22  |                     |          |
| 15              | 64QAM | 1  | 37 | 23.50  | 23.95  | 23.88 | 23.34  | 23.33  | 24.8                | 0        |
| 15              | 64QAM | 1  | 74 | 23.70  | 23.79  | 23.76 | 23.21  | 23.38  |                     |          |
| 15              | 64QAM | 36 | 0  | 22.22  | 23.09  | 22.91 | 22.41  | 22.32  |                     |          |
| 15              | 64QAM | 36 | 20 | 22.41  | 23.18  | 22.91 | 22.42  | 22.38  | 23.3                | 1.5      |
| 15              | 64QAM | 36 | 39 | 22.58  | 23.11  | 22.84 | 22.29  | 22.40  |                     |          |
| 15              | 64QAM | 75 | 0  | 22.32  | 23.12  | 22.90 | 22.32  | 22.36  |                     |          |
| Channel         |       |    |    | 39700  | 40160  | 40620 | 41080  | 41540  | Tune-up limit (dBm) | MPR (dB) |
| Frequency (MHz) |       |    |    | 2501   | 2547   | 2593  | 2639   | 2685   |                     |          |
| 10              | QPSK  | 1  | 0  | 23.95  | 24.23  | 24.04 | 23.48  | 23.42  | 24.8                | 0        |
| 10              | QPSK  | 1  | 25 | 24.03  | 24.26  | 23.96 | 23.50  | 23.41  |                     |          |
| 10              | QPSK  | 1  | 49 | 24.01  | 24.28  | 23.93 | 23.44  | 23.41  |                     |          |
| 10              | QPSK  | 25 | 0  | 24.22  | 24.20  | 24.24 | 23.68  | 23.65  | 24.8                | 0        |
| 10              | QPSK  | 25 | 12 | 24.25  | 24.23  | 24.23 | 23.70  | 23.63  |                     |          |
| 10              | QPSK  | 25 | 25 | 24.19  | 24.20  | 24.15 | 23.68  | 23.63  |                     |          |
| 10              | QPSK  | 50 | 0  | 24.21  | 24.24  | 24.20 | 23.71  | 23.65  | 24.8                | 0        |
| 10              | 16QAM | 1  | 0  | 24.28  | 24.23  | 24.30 | 23.77  | 23.70  |                     |          |
| 10              | 16QAM | 1  | 25 | 24.23  | 24.25  | 24.25 | 23.74  | 23.66  |                     |          |
| 10              | 16QAM | 1  | 49 | 24.26  | 24.18  | 24.20 | 23.65  | 23.67  | 24.8                | 0        |
| 10              | 16QAM | 25 | 0  | 23.79  | 24.02  | 23.80 | 23.24  | 23.20  |                     |          |
| 10              | 16QAM | 25 | 12 | 23.79  | 24.07  | 23.79 | 23.21  | 23.23  |                     |          |
| 10              | 16QAM | 25 | 25 | 23.75  | 24.02  | 23.71 | 23.20  | 23.17  | 24.8                | 0        |
| 10              | 16QAM | 50 | 0  | 23.71  | 24.06  | 23.75 | 23.22  | 23.18  |                     |          |
| 10              | 64QAM | 1  | 0  | 22.97  | 23.80  | 23.79 | 23.14  | 23.11  |                     |          |
| 10              | 64QAM | 1  | 25 | 23.39  | 23.73  | 23.65 | 23.16  | 23.10  | 24.8                | 0        |
| 10              | 64QAM | 1  | 49 | 23.62  | 23.77  | 23.62 | 23.08  | 23.12  |                     |          |
| 10              | 64QAM | 25 | 0  | 21.94  | 22.89  | 22.84 | 22.26  | 22.24  |                     |          |
| 10              | 64QAM | 25 | 12 | 22.33  | 22.90  | 22.82 | 22.28  | 22.25  | 23.3                | 1.5      |
| 10              | 64QAM | 25 | 25 | 22.55  | 22.87  | 22.75 | 22.24  | 22.25  |                     |          |
| 10              | 64QAM | 50 | 0  | 22.23  | 23.05  | 22.75 | 22.20  | 22.2   |                     |          |



| Channel         |       |    |    | 39675  | 40148  | 40620 | 41093   | 41565  | Tune-up<br>limit<br>(dBm) | MPR<br>(dB) |
|-----------------|-------|----|----|--------|--------|-------|---------|--------|---------------------------|-------------|
| Frequency (MHz) |       |    |    | 2498.5 | 2545.8 | 2593  | 2640.30 | 2687.5 |                           |             |
| 5               | QPSK  | 1  | 0  | 24.03  | 24.29  | 24.04 | 23.48   | 23.47  | 24.8                      | 0           |
| 5               | QPSK  | 1  | 12 | 24.07  | 24.31  | 24.02 | 23.51   | 23.50  |                           |             |
| 5               | QPSK  | 1  | 24 | 24.08  | 24.31  | 24.04 | 23.52   | 23.46  |                           |             |
| 5               | QPSK  | 12 | 0  | 24.25  | 24.23  | 24.18 | 23.63   | 23.61  | 24.8                      | 0           |
| 5               | QPSK  | 12 | 7  | 24.26  | 24.30  | 24.30 | 23.74   | 23.67  |                           |             |
| 5               | QPSK  | 12 | 13 | 24.25  | 24.27  | 24.24 | 23.67   | 23.67  |                           |             |
| 5               | QPSK  | 25 | 0  | 24.22  | 24.23  | 24.20 | 23.68   | 23.67  | 24.8                      | 0           |
| 5               | 16QAM | 1  | 0  | 24.33  | 24.22  | 24.29 | 23.69   | 23.71  |                           |             |
| 5               | 16QAM | 1  | 12 | 24.33  | 24.29  | 24.33 | 23.77   | 23.74  |                           |             |
| 5               | 16QAM | 1  | 24 | 24.34  | 24.29  | 24.30 | 23.73   | 23.73  | 24.8                      | 0           |
| 5               | 16QAM | 12 | 0  | 23.81  | 24.04  | 23.73 | 23.16   | 23.14  |                           |             |
| 5               | 16QAM | 12 | 7  | 23.84  | 24.11  | 23.80 | 23.25   | 23.19  |                           |             |
| 5               | 16QAM | 12 | 13 | 23.80  | 24.07  | 23.76 | 23.18   | 23.19  | 24.8                      | 0           |
| 5               | 16QAM | 25 | 0  | 23.74  | 24.08  | 23.74 | 23.24   | 23.23  |                           |             |
| 5               | 64QAM | 1  | 0  | 22.97  | 23.79  | 23.74 | 23.18   | 23.21  |                           |             |
| 5               | 64QAM | 1  | 12 | 23.16  | 23.85  | 23.77 | 23.21   | 23.18  | 24.8                      | 0           |
| 5               | 64QAM | 1  | 24 | 23.37  | 23.87  | 23.74 | 23.25   | 23.19  |                           |             |
| 5               | 64QAM | 12 | 0  | 21.95  | 22.91  | 22.78 | 22.19   | 22.19  |                           |             |
| 5               | 64QAM | 12 | 7  | 22.20  | 22.92  | 22.85 | 22.29   | 22.29  | 23.3                      | 1.5         |
| 5               | 64QAM | 12 | 13 | 22.27  | 22.91  | 22.81 | 22.23   | 22.25  |                           |             |
| 5               | 64QAM | 25 | 0  | 22.12  | 22.93  | 22.78 | 22.32   | 22.28  |                           |             |

**<LTE Band 41 Power Class 3>**

| BW [MHz]        | Modulation | RB Size | RB Offset | Power Low Ch. / Freq. | Power Low Middle Ch. / Freq. | Power Middle Ch. / Freq. | Power High Middle Ch. / Freq. | Power High Ch. / Freq. | Tune-up limit (dBm) | MPR (dB) |
|-----------------|------------|---------|-----------|-----------------------|------------------------------|--------------------------|-------------------------------|------------------------|---------------------|----------|
| Channel         |            |         |           | 39750                 | 40185                        | 40620                    | 41055                         | 41490                  |                     |          |
| Frequency (MHz) |            |         |           | 2506                  | 2549.5                       | 2593                     | 2636.5                        | 2680                   |                     |          |
| 20              | QPSK       | 1       | 0         | 21.13                 | 21.11                        | 21.07                    | 20.63                         | 20.54                  | 21.3                | 0        |
| 20              | QPSK       | 1       | 49        | 21.13                 | 21.01                        | 21.04                    | 20.58                         | 20.60                  |                     |          |
| 20              | QPSK       | 1       | 99        | 21.11                 | 21.06                        | 21.15                    | 20.63                         | 20.71                  |                     |          |
| 20              | QPSK       | 50      | 0         | 21.05                 | 21.05                        | 21.08                    | 20.67                         | 20.53                  | 21.3                | 0        |
| 20              | QPSK       | 50      | 24        | 21.02                 | 21.04                        | 21.13                    | 20.77                         | 20.66                  |                     |          |
| 20              | QPSK       | 50      | 50        | 21.12                 | 21.11                        | 21.12                    | 20.54                         | 20.77                  |                     |          |
| 20              | QPSK       | 100     | 0         | 21.09                 | 21.10                        | 21.06                    | 20.66                         | 20.53                  | 21.3                | 0        |
| 20              | 16QAM      | 1       | 0         | 21.04                 | 20.91                        | 21.08                    | 20.59                         | 20.42                  |                     |          |
| 20              | 16QAM      | 1       | 49        | 21.11                 | 21.03                        | 21.05                    | 20.52                         | 20.45                  |                     |          |
| 20              | 16QAM      | 1       | 99        | 20.94                 | 21.01                        | 21.03                    | 20.47                         | 20.59                  | 21.3                | 0        |
| 20              | 16QAM      | 50      | 0         | 21.05                 | 21.06                        | 21.06                    | 20.68                         | 20.51                  |                     |          |
| 20              | 16QAM      | 50      | 24        | 20.97                 | 21.05                        | 21.13                    | 20.64                         | 20.56                  |                     |          |
| 20              | 16QAM      | 50      | 50        | 20.80                 | 21.04                        | 21.06                    | 20.62                         | 20.67                  | 21.3                | 0        |
| 20              | 16QAM      | 100     | 0         | 21.05                 | 21.04                        | 21.05                    | 20.62                         | 20.51                  |                     |          |
| 20              | 64QAM      | 1       | 0         | 20.54                 | 20.70                        | 20.58                    | 20.17                         | 19.94                  |                     |          |
| 20              | 64QAM      | 1       | 49        | 20.65                 | 20.72                        | 20.62                    | 20.05                         | 20.03                  | 21.3                | 0        |
| 20              | 64QAM      | 1       | 99        | 20.68                 | 20.69                        | 20.40                    | 19.83                         | 20.21                  |                     |          |
| 20              | 64QAM      | 50      | 0         | 20.40                 | 20.55                        | 20.45                    | 20.01                         | 19.87                  |                     |          |
| 20              | 64QAM      | 50      | 24        | 20.47                 | 20.56                        | 20.43                    | 19.92                         | 19.91                  | 21.3                | 0        |
| 20              | 64QAM      | 50      | 50        | 20.49                 | 20.49                        | 20.39                    | 19.83                         | 20.00                  |                     |          |
| 20              | 64QAM      | 100     | 0         | 20.46                 | 20.50                        | 20.41                    | 19.92                         | 19.96                  |                     |          |



# FCC SAR Test Report

Report No. : FA970213-03

| Channel         |       |    |    | 39725  | 40173  | 40620 | 41068  | 41515  | Tune-up limit (dBm) | MPR (dB) |
|-----------------|-------|----|----|--------|--------|-------|--------|--------|---------------------|----------|
| Frequency (MHz) |       |    |    | 2503.5 | 2548.3 | 2593  | 2637.8 | 2682.5 |                     |          |
| 15              | QPSK  | 1  | 0  | 20.74  | 20.75  | 20.77 | 20.28  | 20.07  | 21.3                | 0        |
| 15              | QPSK  | 1  | 37 | 20.72  | 20.71  | 20.75 | 20.20  | 20.18  |                     |          |
| 15              | QPSK  | 1  | 74 | 20.82  | 20.79  | 20.64 | 20.02  | 20.27  |                     |          |
| 15              | QPSK  | 36 | 0  | 20.87  | 20.76  | 20.84 | 20.35  | 20.22  | 21.3                | 0        |
| 15              | QPSK  | 36 | 20 | 20.93  | 20.73  | 20.83 | 20.35  | 20.32  |                     |          |
| 15              | QPSK  | 36 | 39 | 20.93  | 20.73  | 20.83 | 20.24  | 20.34  |                     |          |
| 15              | QPSK  | 75 | 0  | 20.90  | 20.73  | 20.87 | 20.37  | 20.33  | 21.3                | 0        |
| 15              | 16QAM | 1  | 0  | 20.87  | 20.80  | 20.85 | 20.33  | 20.09  |                     |          |
| 15              | 16QAM | 1  | 37 | 20.81  | 20.74  | 20.83 | 20.24  | 20.19  |                     |          |
| 15              | 16QAM | 1  | 74 | 20.86  | 20.78  | 20.73 | 20.06  | 20.26  | 21.3                | 0        |
| 15              | 16QAM | 36 | 0  | 20.76  | 20.80  | 20.81 | 20.30  | 20.18  |                     |          |
| 15              | 16QAM | 36 | 20 | 20.87  | 20.78  | 20.79 | 20.30  | 20.30  |                     |          |
| 15              | 16QAM | 36 | 39 | 20.92  | 20.79  | 20.80 | 20.19  | 20.28  | 21.3                | 0        |
| 15              | 16QAM | 75 | 0  | 20.93  | 20.73  | 20.87 | 20.34  | 20.31  |                     |          |
| 15              | 64QAM | 1  | 0  | 20.51  | 20.69  | 20.57 | 20.07  | 19.90  |                     |          |
| 15              | 64QAM | 1  | 37 | 20.60  | 20.74  | 20.59 | 19.99  | 19.94  | 21.3                | 0        |
| 15              | 64QAM | 1  | 74 | 20.60  | 20.63  | 20.46 | 19.82  | 20.08  |                     |          |
| 15              | 64QAM | 36 | 0  | 20.30  | 20.43  | 20.40 | 19.82  | 19.77  |                     |          |
| 15              | 64QAM | 36 | 20 | 20.40  | 20.49  | 20.43 | 19.84  | 19.90  | 21.3                | 0        |
| 15              | 64QAM | 36 | 39 | 20.38  | 20.47  | 20.34 | 19.73  | 19.88  |                     |          |
| 15              | 64QAM | 75 | 0  | 20.38  | 20.48  | 20.37 | 19.84  | 19.89  |                     |          |
| Channel         |       |    |    | 39700  | 40160  | 40620 | 41080  | 41540  | Tune-up limit (dBm) | MPR (dB) |
| Frequency (MHz) |       |    |    | 2501   | 2547   | 2593  | 2639   | 2685   |                     |          |
| 10              | QPSK  | 1  | 0  | 20.54  | 20.70  | 20.65 | 20.07  | 19.93  | 21.3                | 0        |
| 10              | QPSK  | 1  | 25 | 20.52  | 20.75  | 20.55 | 19.99  | 19.99  |                     |          |
| 10              | QPSK  | 1  | 49 | 20.61  | 20.75  | 20.51 | 20.02  | 19.89  |                     |          |
| 10              | QPSK  | 25 | 0  | 20.65  | 20.70  | 20.73 | 20.15  | 20.18  | 21.3                | 0        |
| 10              | QPSK  | 25 | 12 | 20.70  | 20.72  | 20.73 | 20.18  | 20.18  |                     |          |
| 10              | QPSK  | 25 | 25 | 20.67  | 20.79  | 20.63 | 20.11  | 20.16  |                     |          |
| 10              | QPSK  | 50 | 0  | 20.67  | 20.71  | 20.73 | 20.18  | 20.20  | 21.3                | 0        |
| 10              | 16QAM | 1  | 0  | 20.66  | 20.77  | 20.70 | 20.18  | 20.04  |                     |          |
| 10              | 16QAM | 1  | 25 | 20.62  | 20.80  | 20.65 | 20.08  | 20.00  |                     |          |
| 10              | 16QAM | 1  | 49 | 20.61  | 20.71  | 20.60 | 20.05  | 19.94  | 21.3                | 0        |
| 10              | 16QAM | 25 | 0  | 20.65  | 20.71  | 20.74 | 20.21  | 20.14  |                     |          |
| 10              | 16QAM | 25 | 12 | 20.74  | 20.73  | 20.72 | 20.23  | 20.15  |                     |          |
| 10              | 16QAM | 25 | 25 | 20.66  | 20.79  | 20.63 | 20.17  | 20.15  | 21.3                | 0        |
| 10              | 16QAM | 50 | 0  | 20.69  | 20.71  | 20.75 | 20.24  | 20.18  |                     |          |
| 10              | 64QAM | 1  | 0  | 20.38  | 20.51  | 20.40 | 19.88  | 19.78  |                     |          |
| 10              | 64QAM | 1  | 25 | 20.32  | 20.56  | 20.34 | 19.79  | 19.80  | 21.3                | 0        |
| 10              | 64QAM | 1  | 49 | 20.36  | 20.52  | 20.28 | 19.78  | 19.80  |                     |          |
| 10              | 64QAM | 25 | 0  | 20.16  | 20.48  | 20.30 | 19.69  | 19.73  |                     |          |
| 10              | 64QAM | 25 | 12 | 20.19  | 20.42  | 20.29 | 19.72  | 19.80  | 21.3                | 0        |
| 10              | 64QAM | 25 | 25 | 20.19  | 20.45  | 20.20 | 19.63  | 19.72  |                     |          |
| 10              | 64QAM | 50 | 0  | 20.15  | 20.42  | 20.22 | 19.66  | 19.65  |                     |          |



| Channel         |       |    |    | 39675  | 40148  | 40620 | 41093   | 41565  | Tune-up limit (dBm) | MPR (dB) |
|-----------------|-------|----|----|--------|--------|-------|---------|--------|---------------------|----------|
| Frequency (MHz) |       |    |    | 2498.5 | 2545.8 | 2593  | 2640.30 | 2687.5 |                     |          |
| 5               | QPSK  | 1  | 0  | 20.54  | 20.74  | 20.64 | 19.99   | 19.99  | 21.3                | 0        |
| 5               | QPSK  | 1  | 12 | 20.57  | 20.75  | 20.61 | 20.03   | 20.02  |                     |          |
| 5               | QPSK  | 1  | 24 | 20.56  | 20.76  | 20.57 | 20.00   | 19.99  |                     |          |
| 5               | QPSK  | 12 | 0  | 20.65  | 20.78  | 20.70 | 20.07   | 20.14  | 21.3                | 0        |
| 5               | QPSK  | 12 | 7  | 20.72  | 20.72  | 20.77 | 20.16   | 20.15  |                     |          |
| 5               | QPSK  | 12 | 13 | 20.70  | 20.75  | 20.74 | 20.12   | 20.09  |                     |          |
| 5               | QPSK  | 25 | 0  | 20.65  | 20.71  | 20.68 | 20.17   | 20.09  | 21.3                | 0        |
| 5               | 16QAM | 1  | 0  | 20.64  | 20.78  | 20.65 | 20.07   | 20.08  |                     |          |
| 5               | 16QAM | 1  | 12 | 20.67  | 20.71  | 20.70 | 20.13   | 20.08  |                     |          |
| 5               | 16QAM | 1  | 24 | 20.68  | 20.76  | 20.66 | 20.11   | 20.08  | 21.3                | 0        |
| 5               | 16QAM | 12 | 0  | 20.63  | 20.75  | 20.65 | 20.13   | 20.10  |                     |          |
| 5               | 16QAM | 12 | 7  | 20.68  | 20.78  | 20.69 | 20.21   | 20.16  |                     |          |
| 5               | 16QAM | 12 | 13 | 20.67  | 20.79  | 20.67 | 20.15   | 20.07  | 21.3                | 0        |
| 5               | 16QAM | 25 | 0  | 20.69  | 20.73  | 20.69 | 20.22   | 20.13  |                     |          |
| 5               | 64QAM | 1  | 0  | 20.40  | 20.57  | 20.45 | 19.85   | 19.87  |                     |          |
| 5               | 64QAM | 1  | 12 | 20.39  | 20.61  | 20.48 | 19.86   | 19.82  | 21.3                | 0        |
| 5               | 64QAM | 1  | 24 | 20.44  | 20.66  | 20.48 | 19.89   | 19.85  |                     |          |
| 5               | 64QAM | 12 | 0  | 20.23  | 20.43  | 20.30 | 19.62   | 19.73  |                     |          |
| 5               | 64QAM | 12 | 7  | 20.16  | 20.46  | 20.39 | 19.72   | 19.77  | 21.3                | 0        |
| 5               | 64QAM | 12 | 13 | 20.18  | 20.47  | 20.33 | 19.67   | 19.77  |                     |          |
| 5               | 64QAM | 25 | 0  | 20.21  | 20.48  | 20.29 | 19.71   | 19.75  |                     |          |

**<LTE Carrier Aggregation>**
**General Note:**

1. This device supports Carrier Aggregation on downlink for inter and intra band. For the device supports bands and bandwidths and configurations are provided as follow table was according to 3GPP.
2. In applying the existing power measurement procedures of KDB 941225 D05A for DL CA SAR test exclusion, only the subset with the largest number of combinations of frequency bands and CCs in each row need combination, and for this device that all the configurations were choose to power measurement.
3. All permutations exist. No restrictions on Pcell & SCell combinations. Only LTE Band 29/46 is limited to SCell.
4. CA combinations at following gray table are covered by other subset CA, no need to verify power.

| Index   | 2CC        | 4X4 MIMO | Restriction  | Index   | 3CC            | 4X4 MIMO | Restriction  |
|---------|------------|----------|--------------|---------|----------------|----------|--------------|
| 2CC #1  | CA_12A-30A |          |              | 3CC #1  | CA_12A-30A-66A |          |              |
| 2CC #2  | CA_12A-66A | B66      |              | 3CC #2  | CA_12A-66A-66A | B66      |              |
| 2CC #3  | CA_13A-66A | B66      |              | 3CC #3  | CA_12A-66C     | B66      |              |
| 2CC #4  | CA_25A-26A |          |              | 3CC #4  | CA_13A-66A-66A | B66      |              |
| 2CC #5  | CA_29A-30A |          | B29 SCC Only | 3CC #5  | CA_2A-12A-30A  |          |              |
| 2CC #6  | CA_2A-12A  | B2       |              | 3CC #6  | CA_2A-12A-66A  | B2,B66   |              |
| 2CC #7  | CA_2A-13A  | B2       |              | 3CC #7  | CA_2A-13A-66A  | B2,B66   |              |
| 2CC #8  | CA_2A-29A  | B2       | B29 SCC Only | 3CC #8  | CA_2A-29A-30A  |          | B29 SCC Only |
| 2CC #9  | CA_2A-2A   | B2       |              | 3CC #9  | CA_2A-2A-12A   | B2       |              |
| 2CC #10 | CA_2A-30A  |          |              | 3CC #10 | CA_2A-2A-13A   | B2       |              |
| 2CC #11 | CA_2A-48A  | B2       |              | 3CC #11 | CA_2A-2A-4A    | B2,B4    |              |
| 2CC #12 | CA_2A-4A   | B2,B4    |              | 3CC #12 | CA_2A-2A-5A    | B2       |              |
| 2CC #13 | CA_2A-5A   | B2       |              | 3CC #13 | CA_2A-2A-66A   | B2,B66   |              |
| 2CC #14 | CA_2A-66A  | B2,B66   |              | 3CC #14 | CA_2A-2A-71A   | B2       |              |
| 2CC #15 | CA_2A-71A  | B2       |              | 3CC #15 | CA_2A-48A-48A  | B2       |              |
| 2CC #16 | CA_2A-7A   |          |              | 3CC #16 | CA_2A-48A-66A  | B2,B66   |              |
| 2CC #17 | CA_2C      | B2       |              | 3CC #17 | CA_2A-48C      | B2       |              |
| 2CC #18 | CA_38C     |          |              | 3CC #18 | CA_2A-4A-12A   | B2,B4    |              |
| 2CC #19 | CA_41A-41A |          |              | 3CC #19 | CA_2A-4A-13A   | B2,B4    |              |
| 2CC #20 | CA_41C     |          |              | 3CC #20 | CA_2A-4A-29A   | B2,B4    |              |
| 2CC #21 | CA_48A-48A | B48      |              | 3CC #21 | CA_2A-4A-4A    | B2,B4    |              |
| 2CC #22 | CA_48A-66A | B48,B66  |              | 3CC #22 | CA_2A-4A-5A    | B2,B4    |              |
| 2CC #23 | CA_48C     | B48      |              | 3CC #23 | CA_2A-4A-71A   | B2,B4    |              |
| 2CC #24 | CA_4A-12A  | B4       |              | 3CC #24 | CA_2A-4A-7A    | B2       |              |
| 2CC #25 | CA_4A-13A  | B4       |              | 3CC #25 | CA_2A-5A-30A   |          |              |
| 2CC #26 | CA_4A-29A  | B4       | B29 SCC Only | 3CC #26 | CA_2A-5A-66A   | B2,B66   |              |
| 2CC #27 | CA_4A-30A  |          |              | 3CC #27 | CA_2A-66A-66A  | B2,B66   |              |
| 2CC #28 | CA_4A-4A   | B4       |              | 3CC #28 | CA_2A-66A-71A  | B2,B66   |              |
| 2CC #29 | CA_4A-5A   | B4       |              | 3CC #29 | CA_2A-66C      | B2,B66   |              |
| 2CC #30 | CA_4A-71A  | B4       |              | 3CC #30 | CA_2A-7A-7A    |          |              |
| 2CC #31 | CA_4A-7A   | B4,B7    |              | 3CC #31 | CA_2C-66A      | B2,B66   |              |
| 2CC #32 | CA_5A-30A  |          |              | 3CC #32 | CA_41A-41C     | B41      |              |
| 2CC #33 | CA_5A-66A  | B66      |              | 3CC #33 | CA_41D         | B41      |              |
| 2CC #34 | CA_5B      |          |              | 3CC #34 | CA_48A-48A-66A | B48, B66 |              |
| 2CC #35 | CA_66A-66A | B66      |              | 3CC #35 | CA_48C-48A     | B48      |              |
| 2CC #36 | CA_66A-71A | B66      |              | 3CC #36 | CA_48C-66A     | B48,B66  |              |



|         |            |         |              |         |                |        |              |
|---------|------------|---------|--------------|---------|----------------|--------|--------------|
| 2CC #37 | CA_66B     | B66     |              | 3CC #37 | CA_48D         | B48    |              |
| 2CC #38 | CA_66C     | B66     |              | 3CC #38 | CA_4A-12A-30A  |        |              |
| 2CC #39 | CA_7A-12A  |         |              | 3CC #39 | CA_4A-29A-30A  |        |              |
| 2CC #40 | CA_7A-7A   |         |              | 3CC #40 | CA_4A-4A-12A   | B4     |              |
| 2CC #41 | CA_7C      |         |              | 3CC #41 | CA_4A-4A-13A   | B4     |              |
| 2CC #42 | CA_2A-46A  | B2      | B46 SCC Only | 3CC #42 | CA_4A-4A-5A    | B4     |              |
| 2CC #43 | CA_4A-46A  | B4      | B46 SCC Only | 3CC #43 | CA_4A-4A-71A   | B4     |              |
| 2CC #44 | CA_46A-66A | B66     | B46 SCC Only | 3CC #44 | CA_4A-4A-7A    |        |              |
| 2CC #45 | CA_5A-48A  |         |              | 3CC #45 | CA_4A-5A-30A   |        |              |
| 2CC #46 | CA_25A-41A |         |              | 3CC #46 | CA_4A-7A-12A   |        |              |
| 2CC #47 | CA_25A-25A | B25     |              | 3CC #47 | CA_4A-7A-7A    |        |              |
| 2CC #48 | CA_25A-26A | B25     |              | 3CC #48 | CA_5A-30A-66A  |        |              |
| 2CC #49 | CA_25A-46A | B25     |              | 3CC #49 | CA_5A-66A-66A  | B66    |              |
| 2CC #50 | CA_41A-48A | B41,B48 |              | 3CC #50 | CA_5A-66C      | B66    |              |
| 2CC #51 | CA_26A-41A | B41     |              | 3CC #51 | CA_66A-66A-71A | B66    |              |
| 2CC #52 | CA_30A-66A | B66     |              | 3CC #52 | CA_66A-66C     | B66    |              |
|         |            |         |              | 3CC #53 | CA_66C-71A     | B66    |              |
|         |            |         |              | 3CC #54 | CA_2A-46C      | B2     | B46 SCC Only |
|         |            |         |              | 3CC #55 | CA_4A-46C      | B4     | B46 SCC Only |
|         |            |         |              | 3CC #56 | CA_46C-66A     | B66    | B46 SCC Only |
|         |            |         |              | 3CC #57 | CA_4A-46A-46A  | B4     | B46 SCC Only |
|         |            |         |              | 3CC #58 | CA_2A-46A-46A  | B2     | B46 SCC Only |
|         |            |         |              | 3CC #59 | CA_2A-46A-66A  | B2,B66 | B46 SCC Only |
|         |            |         |              | 3CC #60 | CA_46A-46A-66A | B66    | B46 SCC Only |
|         |            |         |              | 3CC #61 | CA_25A-41C     |        |              |
|         |            |         |              | 3CC #62 | CA_25A-25A-26A | B25    |              |
|         |            |         |              | 3CC #63 | CA_25A-46C     | B25    | B46 SCC Only |
|         |            |         |              | 3CC #64 | CA_13A-66B     | B66    |              |
|         |            |         |              | 3CC #65 | CA_13A-66C     | B66    |              |
|         |            |         |              | 3CC #66 | CA_2A-66B      | B2,B66 |              |
|         |            |         |              | 3CC #67 | CA_5A-66B      | B66    |              |
|         |            |         |              | 3CC #68 | CA_2A-2A-46A   | B2     | B46 SCC Only |
|         |            |         |              |         |                |        |              |



| Index   | 4CC               | 4X4 MIMO | Restriction  | Index   | 5CC               | 4X4 MIMO | Restriction  |
|---------|-------------------|----------|--------------|---------|-------------------|----------|--------------|
| 4CC #1  | CA_2A-66C-71A     | B2,B66   |              | 5CC #1  | CA_2A-46E         | B2       | B46 SCC Only |
| 4CC #2  | CA_2A-66A-66A-71A | B2,B66   |              | 5CC #2  | CA_2A-2A-46D      | B2       | B46 SCC Only |
| 4CC #3  | CA_2A-2A-66A-71A  | B2,B66   |              | 5CC #3  | CA_48E-66A        | B66      |              |
| 4CC #4  | CA_48E            |          |              | 5CC #4  | CA_46A-46D-66A    | B66      | B46 SCC Only |
| 4CC #5  | CA_48D-66A        | B66      |              | 5CC #5  | CA_4A-46A-46D     | B4       | B46 SCC Only |
| 4CC #6  | CA_2A-2A-46C      | B2       | B46 SCC Only | 5CC #6  | CA_2A-46A-46D     | B2       | B46 SCC Only |
| 4CC #7  | CA_2A-4A-7A-7A    |          |              | 5CC #7  | CA_2A-46A-46C-66A | B2,B66   | B46 SCC Only |
| 4CC #8  | CA_2A-46D         | B2       | B46 SCC Only | 5CC #8  | CA_2A-46D-66A     | B2,B66   | B46 SCC Only |
| 4CC #9  | CA_4A-46D         | B4       | B46 SCC Only | 5CC #9  | CA_41C-41D        |          |              |
| 4CC #10 | CA_46D-66A        | B66      | B46 SCC Only | 5CC #10 | CA_41F            |          |              |
| 4CC #11 | CA_2A-46A-46A-66A | B2,B66   | B46 SCC Only | 5CC #11 | CA_46E-66A        | B66      | B46 SCC Only |
| 4CC #12 | CA_4A-46A-46C     | B4       | B46 SCC Only |         |                   |          |              |
| 4CC #13 | CA_2A-46A-46C     | B2       | B46 SCC Only |         |                   |          |              |
| 4CC #14 | CA_46A-46C-66A    | B66      | B46 SCC Only |         |                   |          |              |
| 4CC #15 | CA_2A-46C-66A     | B2,B66   | B46 SCC Only |         |                   |          |              |
| 4CC #16 | CA_2A-2A-66C      | B2,B66   |              |         |                   |          |              |
| 4CC #17 | CA_2A-12A-66C     | B2,B66   |              |         |                   |          |              |
| 4CC #18 | CA_2C-66A-66A     | B2,B66   |              |         |                   |          |              |
| 4CC #19 | CA_2A-2A-5A-66A   |          |              |         |                   |          |              |
| 4CC #20 | CA_2A-2A-13A-66A  |          |              |         |                   |          |              |
| 4CC #21 | CA_2A-5A-66A-66A  |          |              |         |                   |          |              |
| 4CC #22 | CA_2A-5A-66B      | B2,B66   |              |         |                   |          |              |
| 4CC #23 | CA_2A-5A-66C      | B2,B66   |              |         |                   |          |              |
| 4CC #24 | CA_2A-13A-66A-66A |          |              |         |                   |          |              |
| 4CC #25 | CA_2A-13A-66B     | B2,B66   |              |         |                   |          |              |
| 4CC #26 | CA_2A-13A-66C     | B2,B66   |              |         |                   |          |              |
| 4CC #27 | CA_2A-12A-66A-66A |          |              |         |                   |          |              |
| 4CC #28 | CA_2A-2A-66A-66A  |          |              |         |                   |          |              |
| 4CC #29 | CA_2A-2A-12A-66A  |          |              |         |                   |          |              |
| 4CC #30 | CA_25A-41D        |          |              |         |                   |          |              |
| 4CC #31 | CA_41C-41C        |          |              |         |                   |          |              |
| 4CC #32 | CA_41A-41D        | B41      |              |         |                   |          |              |
| 4CC #33 | CA_41E            |          |              |         |                   |          |              |
| 4CC #34 | CA_25A-46D        | B25      | B46 SCC Only |         |                   |          |              |
| 4CC #35 | CA_2A-2A-4A-12A   | B2,B4    |              |         |                   |          |              |

**LTE Carrier Aggregation Conducted Power (Downlink)**

- i. This device supports downlink 4x4 MIMO operations. Uplink transmission is limited to a single output stream. Power measurements were performed with downlink 4x4 MIMO active for the configuration with highest measured maximum conducted power with 4x4 downlink MIMO inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band. Per FCC Guidance, SAR for downlink 4x4 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 4x4 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 4x4 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.
- ii. According to KDB941225 D05A v01r02, Uplink maximum output power measurement with downlink carrier aggregation active should be measured, using the highest output channel measured without downlink carrier aggregation, to confirm that uplink maximum output power with downlink carrier aggregation active remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output measured without downlink carrier aggregation active.
- iii. Uplink maximum output power with downlink carrier aggregation active does not show more than ¼ dB higher than the maximum output power without downlink carrier aggregation active, therefore SAR evaluation with downlink carrier aggregation active can be excluded.
- iv. For power measurement were control and acknowledge data is sent on uplink channels that operate identical to specifications when downlink carrier aggregation is inactive.
- v. Selected highest measured power when downlink carrier aggregation is inactive for conducted power comparison with downlink carrier aggregation is active, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive.
- vi. For inter-band CA, the SCC selected highest bandwidth and near the middle of its transmission band. For SCC DL RB size and offset will base on the PCC corresponding RB allocation.
- vii. For non-contiguous intra-band CA, the SCC selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band.
- viii. For Intra-band, contiguous CA, the downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements.

$$\text{Nominal channel spacing} = \left\lceil \frac{BW_{\text{Channel}(1)} + BW_{\text{Channel}(2)} - 0.1|BW_{\text{Channel}(1)} - BW_{\text{Channel}(2)}|}{0.6} \right\rceil 0.3 \text{ [MHz]}$$



**<Top Antenna--Full Power Mode>**

**<Two Carrier power verification>**

| Configure  |                | CA List    | PCC              |       |                |         |      |     |              | SCC     |       |                |         | Power              |                    |
|------------|----------------|------------|------------------|-------|----------------|---------|------|-----|--------------|---------|-------|----------------|---------|--------------------|--------------------|
|            |                |            | LTE              | BW    | UL             | UL      | Mod. | UL# | UL           | LTE     | BW    | DL             | DL      | With CA            | Without CA         |
|            |                |            | Band             | (MHz) | Freq.<br>(MHz) | Channel |      | RB  | RB<br>Offset | Band    | (MHz) | Freq.<br>(MHz) | Channel | Tx. Power<br>(dBm) | Tx. Power<br>(dBm) |
| Inter-Band |                | CA_4A-30A  | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 9820    | 21.85              | 21.87              |
|            |                |            | Band 30          | 10M   | 2310           | 27710   | QPSK | 1   | 25           | Band 4  | 20M   | 2132.5         | 2175    | 20.82              | 21.12              |
|            |                | CA_5A-48A  | Band 5           | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | 22.95              | 22.96              |
|            |                | CA_25A-46A | Band 25          | 20M   | 1860           | 26140   | QPSK | 1   | 0            | Band 46 | 20M   | 5905           | 54340   | 21.75              | 21.79              |
|            |                |            | Band 25(4*4MIMO) | 20M   | 1860           | 26140   | QPSK | 1   | 0            | Band 46 | 20M   | 5905           | 54340   | 21.72              | 21.79              |
|            |                | CA_26A-41A | Band 26          | 15M   | 831.5          | 26865   | QPSK | 1   | 0            | Band 41 | 20M   | 2593           | 40620   | 22.91              | 22.99              |
|            |                | CA_41A-48A | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 48 | 20M   | 3560           | 55340   | 21.30              | 21.68              |
|            |                |            | Band 41(4*4MIMO) | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 48 | 20M   | 3560           | 55340   | 21.29              | 21.68              |
|            |                |            | Band 48          | 20M   | 3609           | 55830   | QPSK | 1   | 99           | Band 41 | 20M   | 2593           | 40620   | 23.45              | 23.53              |
|            |                |            | Band 48(4*4MIMO) | 20M   | 3609           | 55830   | QPSK | 1   | 99           | Band 41 | 20M   | 2593           | 40620   | 23.42              | 23.53              |
| Intra-Band | Contiguous     | CA_5B      | Band 5           | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 5  | 10M   | 883.9          | 2549    | 22.85              | 22.96              |
|            |                | CA_7C      | Band 7           | 20M   | 2560           | 21350   | QPSK | 1   | 0            | Band 7  | 20M   | 2660.2         | 3152    | 21.23              | 21.30              |
|            | Non-Contiguous | CA_38C     | Band 38          | 20M   | 2580           | 37850   | QPSK | 1   | 99           | Band 38 | 20M   | 2599.8         | 38048   | 21.40              | 21.47              |
|            |                | CA_41A-41A | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 41 | 5M    | 2687.5         | 41565   | 21.31              | 21.68              |



## &lt;Three Carrier power verification&gt;

| Configure  |                | PCC             |       |             |        |      |        |    | SCC1    |       |             |         | SCC2    |       |             |         | Power           |                 |
|------------|----------------|-----------------|-------|-------------|--------|------|--------|----|---------|-------|-------------|---------|---------|-------|-------------|---------|-----------------|-----------------|
|            |                | LTE             | BW    | UL          | Mod.   | UL#  | UL     | RB | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | With CA         | Without CA      |
|            |                | Band            | (MHz) | Freq. (MHz) |        | RB   | Offset |    | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |
| Inter-Band | CA_2A-4A-5A    | Band 2          | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 5  | 10M   | 881.5       | 2525    | 21.69           | 21.72           |
|            |                | Band 2(4*4MIMO) | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 5  | 10M   | 881.5       | 2525    | 21.62           | 21.72           |
|            |                | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 5  | 10M   | 881.5       | 2525    | Band 2  | 20M   | 1960        | 900     | 21.82           | 21.87           |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 5  | 10M   | 881.5       | 2525    | Band 2  | 20M   | 1960        | 900     | 21.8            | 21.87           |
|            | CA_2A-4A-12A   | Band 5          | 10M   | 829         | 20450  | QPSK | 1      | 0  | Band 2  | 20M   | 1960        | 900     | Band 4  | 20M   | 2132.5      | 2175    | 22.82           | 22.96           |
|            |                | Band 2          | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 12 | 10M   | 737.5       | 5095    | 21.67           | 21.72           |
|            |                | Band 2(4*4MIMO) | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 12 | 10M   | 737.5       | 5095    | 21.62           | 21.72           |
|            |                | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 12 | 10M   | 737.5       | 5095    | Band 2  | 20M   | 1960        | 900     | 21.84           | 21.87           |
|            | CA_2A-4A-13A   | Band 4(4*4MIMO) | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 12 | 10M   | 737.5       | 5095    | Band 2  | 20M   | 1960        | 900     | 21.81           | 21.87           |
|            |                | Band 12         | 10M   | 707.5       | 23095  | QPSK | 1      | 0  | Band 2  | 20M   | 1960        | 900     | Band 4  | 20M   | 2132.5      | 2175    | 22.83           | 22.91           |
|            |                | Band 2          | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 13 | 10M   | 751         | 5230    | 21.69           | 21.72           |
|            |                | Band 2(4*4MIMO) | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 13 | 10M   | 751         | 5230    | 21.65           | 21.72           |
|            | CA_2A-4A-29A   | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 13 | 10M   | 751         | 5230    | Band 2  | 20M   | 1960        | 900     | 21.78           | 21.87           |
|            |                | Band 13         | 10M   | 782         | 23230  | QPSK | 1      | 0  | Band 2  | 20M   | 1960        | 900     | Band 4  | 20M   | 2132.5      | 2175    | 22.87           | 22.95           |
|            |                | Band 2          | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 29 | 10M   | 722.5       | 9715    | 21.72           | 21.72           |
|            |                | Band 2(4*4MIMO) | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 29 | 10M   | 722.5       | 9715    | 21.71           | 21.72           |
|            | CA_2A-4A-71A   | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 29 | 10M   | 722.5       | 9715    | Band 2  | 20M   | 1960        | 900     | 21.82           | 21.87           |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 29 | 10M   | 722.5       | 9715    | Band 2  | 20M   | 1960        | 900     | 21.78           | 21.87           |
|            |                | Band 2          | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 71 | 20M   | 637         | 68786   | 21.66           | 21.72           |
|            |                | Band 2(4*4MIMO) | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 71 | 20M   | 637         | 68786   | 21.61           | 21.72           |
|            | CA_2A-5A-30A   | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 2  | 20M   | 1960        | 900     | Band 71 | 20M   | 637         | 68786   | 21.81           | 21.87           |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 2  | 20M   | 1960        | 900     | Band 71 | 20M   | 637         | 68786   | 21.78           | 21.87           |
|            |                | Band 71         | 20M   | 683         | 133322 | QPSK | 1      | 0  | Band 2  | 20M   | 1960        | 900     | Band 4  | 20M   | 2132.5      | 2175    | 23.32           | 23.47           |
|            |                | Band 2          | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 5  | 10M   | 881.5       | 2525    | Band 30 | 10M   | 2355        | 9820    | 21.7            | 21.72           |
|            | CA_2A-12A-30A  | Band 5          | 10M   | 829         | 20450  | QPSK | 1      | 0  | Band 30 | 10M   | 2355        | 9820    | Band 2  | 20M   | 1960        | 900     | 22.91           | 22.96           |
|            |                | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 2  | 20M   | 1960        | 900     | Band 5  | 10M   | 881.5       | 2525    | 20.99           | 21.12           |
|            | CA_2A-29A-30A  | Band 2          | 20M   | 1860        | 18700  | QPSK | 1      | 0  | Band 12 | 10M   | 737.5       | 5095    | Band 30 | 10M   | 2355        | 9820    | 21.7            | 21.72           |
|            |                | Band 12         | 10M   | 707.5       | 23095  | QPSK | 1      | 0  | Band 30 | 10M   | 2355        | 9820    | Band 2  | 20M   | 1960        | 900     | 22.86           | 22.91           |
|            | CA_4A-5A-30A   | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 2  | 20M   | 1960        | 900     | Band 12 | 10M   | 737.5       | 5095    | 20.99           | 21.12           |
|            |                | Band 2          | 20M   | 18700       | 1860   | QPSK | 1      | 0  | Band 29 | 10M   | 722.5       | 9715    | Band 30 | 10M   | 2355        | 9820    | 21.7            | 21.72           |
|            | CA_4A-7A-12A   | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 2  | 20M   | 1960        | 900     | Band 29 | 10M   | 722.5       | 9715    | 21              | 21.12           |
|            |                | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 5  | 10M   | 881.5       | 2525    | Band 30 | 10M   | 2355        | 9820    | 21.86           | 21.87           |
|            | CA_4A-12A-30A  | Band 5          | 10M   | 829         | 20450  | QPSK | 1      | 0  | Band 30 | 10M   | 2355        | 9820    | Band 4  | 20M   | 2132.5      | 2175    | 22.92           | 22.96           |
|            |                | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 4  | 20M   | 2132.5      | 2175    | Band 5  | 10M   | 881.5       | 2525    | 20.79           | 21.12           |
|            | CA_4A-29A-30A  | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 7  | 20M   | 2655        | 3100    | Band 12 | 5M    | 737.5       | 5095    | 21.73           | 21.87           |
|            |                | Band 7          | 20M   | 2560        | 21350  | QPSK | 1      | 0  | Band 12 | 5M    | 737.5       | 5095    | Band 4  | 20M   | 2132.5      | 2175    | 21.26           | 21.3            |
|            | CA_5A-30A-66A  | Band 12         | 10M   | 707.5       | 23095  | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5      | 2175    | Band 7  | 20M   | 2655        | 3100    | 22.87           | 22.91           |
|            |                | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 12 | 10M   | 737.5       | 5095    | Band 30 | 10M   | 2355        | 9820    | 21.81           | 21.87           |
|            | CA_12A-30A-66A | Band 12         | 10M   | 707.5       | 23095  | QPSK | 1      | 0  | Band 30 | 10M   | 2355        | 2355    | 2355    | 2355  | 2132.5      | 2175    | 22.83           | 22.91           |
|            |                | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 4  | 20M   | 2132.5      | 2175    | Band 12 | 10M   | 737.5       | 5095    | 20.81           | 21.12           |
|            |                | Band 4          | 20M   | 1732.5      | 20175  | QPSK | 1      | 0  | Band 29 | 10M   | 722.5       | 9715    | Band 30 | 10M   | 2355        | 9820    | 21.79           | 21.87           |
|            |                | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 4  | 20M   | 2132.5      | 2175    | Band 29 | 10M   | 722.5       | 9715    | 21.03           | 21.12           |
|            |                | Band 5          | 10M   | 829         | 20450  | QPSK | 1      | 0  | Band 30 | 10M   | 2355        | 9820    | Band 66 | 20M   | 2155        | 66886   | 22.88           | 22.96           |
|            |                | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 66 | 20M   | 2155        | 66886   | Band 5  | 10M   | 881.5       | 2525    | 20.98           | 21.12           |
|            |                | Band 66         | 20M   | 1745        | 132322 | QPSK | 1      | 0  | Band 5  | 10M   | 881.5       | 2525    | Band 30 | 10M   | 2355        | 9820    | 23.21           | 23.47           |
|            |                | Band 12         | 10M   | 707.5       | 23095  | QPSK | 1      | 0  | Band 30 | 10M   | 2355        | 9820    | Band 66 | 20M   | 2155        | 66886   | 22.88           | 22.91           |
|            |                | Band 30         | 10M   | 2310        | 27710  | QPSK | 1      | 25 | Band 66 | 20M   | 2155        | 66886   | Band 12 | 10M   | 737.5       | 5095    | 20.83           | 21.12           |
|            |                | Band 66         | 20M   | 1745        | 132322 | QPSK | 1      | 0  | Band 30 | 10M   | 2355        | 9820    | Band 12 | 10M   | 737.5       | 5095    | 21.89           | 21.93           |



# FCC SAR Test Report

Report No. : FA970213-03

| Configure       |                |                  | PCC              |        |                |         |      |        | SCC1    |         |        |                | SCC2    |         |        |                | Power   |                    |                    |
|-----------------|----------------|------------------|------------------|--------|----------------|---------|------|--------|---------|---------|--------|----------------|---------|---------|--------|----------------|---------|--------------------|--------------------|
|                 |                |                  | LTE              | BW     | UL             | UL      | Mod. | UL#    | UL      | LTE     | BW     | DL             | DL      | LTE     | BW     | DL             | DL      | With CA            | Without CA         |
|                 |                |                  | Band             | (MHz)  | Freq.<br>(MHz) | Channel |      | RB     | Offset  | Band    | (MHz)  | Freq.<br>(MHz) | Channel | Band    | (MHz)  | Freq.<br>(MHz) | Channel | Tx. Power<br>(dBm) | Tx. Power<br>(dBm) |
| Inter-Band      | CA_2A-2A-4A    | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 2  | 20M     | 1980   | 1100           | Band 4  | 20M     | 2132.5 | 2175           | 21.66   | 21.72              |                    |
|                 |                | Band 2(4*4MIMO)  | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 2  | 20M     | 1980   | 1100           | Band 4  | 20M     | 2132.5 | 2175           | 21.62   | 21.72              |                    |
|                 |                | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 2  | 20M     | 1960   | 900            | Band 2  | 5M      | 1987.5 | 1175           | 21.83   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 2  | 20M     | 1960   | 900            | Band 2  | 5M      | 1987.5 | 1175           | 21.81   | 21.87              |                    |
|                 | CA_2A-4A-4A    | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 4  | 20M     | 2132.5 | 2175           | Band 4  | 5M      | 2152.5 | 2375           | 21.71   | 21.72              |                    |
|                 |                | Band 2(4*4MIMO)  | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 4  | 20M     | 2132.5 | 2175           | Band 4  | 5M      | 2152.5 | 2375           | 21.69   | 21.72              |                    |
|                 |                | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 2  | 20M     | 1960   | 900            | 21.85   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 2  | 20M     | 1960   | 900            | 21.81   | 21.87              |                    |
|                 | CA_2A-2A-71A   | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 2  | 20M     | 1980   | 1100           | Band 71 | 20M     | 637    | 68786          | 21.64   | 21.72              |                    |
|                 |                | Band 71          | 20M              | 683    | 133322         | QPSK    | 1    | 0      | Band 2  | 20M     | 1960   | 900            | Band 2  | 5M      | 1987.5 | 1175           | 23.41   | 23.47              |                    |
|                 | CA_2A-46A-46A  | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 46 | 20M     | 5160   | 46890          | Band 46 | 20M     | 5905   | 54340          | 21.68   | 21.72              |                    |
|                 | CA_2A-48A-48A  | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 48 | 20M     | 3579.8 | 55538          | 21.71   | 21.72              |                    |
|                 |                | Band 2(4*4MIMO)  | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 48 | 20M     | 3579.8 | 55538          | 21.69   | 21.72              |                    |
|                 | CA_2A-48A-66A  | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 66 | 5M      | 2197.5 | 67311          | 21.68   | 21.72              |                    |
|                 |                | Band 2(4*4MIMO)  | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 66 | 5M      | 2197.5 | 67311          | 21.62   | 21.72              |                    |
|                 |                | Band 66          | 20M              | 1745   | 132322         | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 2  | 20M     | 1960   | 900            | 21.91   | 21.93              |                    |
|                 |                | Band 66(4*4MIMO) | 20M              | 1745   | 132322         | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 2  | 20M     | 1960   | 900            | 21.88   | 21.93              |                    |
|                 | CA_4A-4A-5A    | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 5  | 10M     | 881.5  | 2525           | 21.84   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 5  | 10M     | 881.5  | 2525           | 21.78   | 21.87              |                    |
|                 |                | Band 5           | 10M              | 829    | 20450          | QPSK    | 1    | 0      | Band 4  | 20M     | 2132.5 | 2175           | Band 4  | 5M      | 2152.5 | 2375           | 22.85   | 22.96              |                    |
|                 | CA_4A-4A-7A    | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 7  | 20M     | 2655   | 3100           | 21.86   | 21.87              |                    |
|                 | CA_4A-4A-71A   | Band 7           | 20M              | 2560   | 21350          | QPSK    | 1    | 0      | Band 4  | 20M     | 2120   | 2050           | Band 4  | 5M      | 2152.5 | 2375           | 21.26   | 21.3               |                    |
|                 |                | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 71 | 20M     | 637    | 68786          | 21.82   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 71 | 20M     | 637    | 68786          | 21.77   | 21.87              |                    |
|                 |                | Band 71          | 20M              | 683    | 133322         | QPSK    | 1    | 0      | Band 4  | 20M     | 2132.5 | 2175           | Band 4  | 5M      | 2152.5 | 2375           | 23.29   | 23.47              |                    |
|                 | CA_4A-4A-12A   | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 12 | 10M     | 737.5  | 5095           | 21.82   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 12 | 10M     | 737.5  | 5095           | 21.79   | 21.87              |                    |
|                 |                | Band 12          | 10M              | 707.5  | 23095          | QPSK    | 1    | 0      | Band 4  | 20M     | 2132.5 | 2175           | Band 4  | 5M      | 2152.5 | 2375           | 22.86   | 22.91              |                    |
|                 | CA_4A-4A-13A   | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 13 | 10M     | 751    | 5230           | 21.83   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 4  | 5M      | 2152.5 | 2375           | Band 13 | 10M     | 751    | 5230           | 21.82   | 21.87              |                    |
|                 | CA_4A-46A-46A  | Band 13          | 10M              | 782    | 23230          | QPSK    | 1    | 0      | Band 4  | 20M     | 2132.5 | 2175           | Band 4  | 5M      | 2152.5 | 2375           | 22.85   | 22.95              |                    |
|                 |                | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 46 | 20M     | 5160   | 46890          | Band 46 | 20M     | 5905   | 54340          | 21.72   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 46 | 20M     | 5160   | 46890          | Band 46 | 20M     | 5905   | 54340          | 21.71   | 21.87              |                    |
|                 | CA_2A-48C      | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 48 | 20M     | 3615.1 | 55891          | Band 48 | 20M     | 3634.9 | 56089          | 21.69   | 21.72              |                    |
|                 | CA_4A-46C      | Band 4           | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 46 | 20M     | 5540.2 | 50692          | Band 46 | 20M     | 5560   | 50890          | 21.82   | 21.87              |                    |
|                 |                | Band 4(4*4MIMO)  | 20M              | 1732.5 | 20175          | QPSK    | 1    | 0      | Band 46 | 20M     | 5540.2 | 50692          | Band 46 | 20M     | 5560   | 50890          | 21.77   | 21.87              |                    |
|                 | CA_48A-48A-66A | Band 66          | 20M              | 1745   | 132322         | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 48 | 20M     | 3690   | 56640          | 21.87   | 21.93              |                    |
|                 |                | Band 66(4*4MIMO) | 20M              | 1745   | 132322         | QPSK    | 1    | 0      | Band 48 | 20M     | 3560   | 55340          | Band 48 | 20M     | 3690   | 56640          | 21.82   | 21.93              |                    |
|                 | CA_48C-66A     | Band 66          | 20M              | 1745   | 132322         | QPSK    | 1    | 0      | Band 48 | 20M     | 3670.2 | 56442          | Band 48 | 20M     | 3690   | 56640          | 21.89   | 21.93              |                    |
|                 |                | Band 66(4*4MIMO) | 20M              | 1745   | 132322         | QPSK    | 1    | 0      | Band 48 | 20M     | 3670.2 | 56442          | Band 48 | 20M     | 3690   | 56640          | 21.82   | 21.93              |                    |
|                 | CA_48C-48A     | Band 48          | 20M              | 3609   | 55830          | QPSK    | 1    | 99     | Band 48 | 20M     | 3628.8 | 56028          | Band 48 | 20M     | 3560   | 55340          | 23.48   | 23.53              |                    |
|                 | CA_25A-25A-26A | Band 25          | 20M              | 1860   | 26140          | QPSK    | 1    | 0      | Band 25 | 5M      | 1992.5 | 8665           | Band 26 | 5M      | 876.5  | 8865           | 21.66   | 21.79              |                    |
|                 |                | Band 25(4*4MIMO) | 20M              | 1860   | 26140          | QPSK    | 1    | 0      | Band 25 | 5M      | 1992.5 | 8665           | Band 26 | 5M      | 876.5  | 8865           | 21.61   | 21.79              |                    |
|                 | CA_25A-46C     | Band 25          | 20M              | 1860   | 26140          | QPSK    | 1    | 0      | Band 46 | 20M     | 5585.2 | 54142          | Band 46 | 20M     | 5095   | 54340          | 21.76   | 21.79              |                    |
|                 |                | Band 25(4*4MIMO) | 20M              | 1860   | 26140          | QPSK    | 1    | 0      | Band 46 | 20M     | 5585.2 | 54142          | Band 46 | 20M     | 5095   | 54340          | 21.71   | 21.79              |                    |
|                 | CA_2A-2A-46A   | Band 2           | 20M              | 1860   | 18700          | QPSK    | 1    | 0      | Band 2  | 5M      | 1987.5 | 1175           | Band 46 | 20M     | 5540   | 50690          | 21.71   | 21.72              |                    |
| Band 2(4*4MIMO) |                | 20M              | 1860             | 18700  | QPSK           | 1       | 0    | Band 2 | 5M      | 1987.5  | 1175   | Band 46        | 20M     | 5540    | 50690  | 21.68          | 21.72   |                    |                    |
| Intra-Band      | Non-Contiguous | CA_66A-66C       | Band 66          | 20M    | 1745           | 132322  | QPSK | 1      | 0       | Band 66 | 20M    | 2185           | 67186   | Band 66 | 5M     | 2196.7         | 67303   | 21.82              | 21.93              |
|                 |                |                  | Band 66(4*4MIMO) | 20M    | 1745           | 132322  | QPSK | 1      | 0       | Band 66 | 20M    | 2185           | 67186   | Band 66 | 5M     | 2196.7         | 67303   | 21.81              | 21.93              |
|                 |                |                  | Band 66          | 20M    | 1745           | 132322  | QPSK | 1      | 0       | Band 66 | 20M    | 2178.3         | 67119   | Band 66 | 5M     | 2190           | 67236   | 21.87              | 21.93              |
|                 |                | CA_41A-41C       | Band 66(4*4MIMO) | 20M    | 1745           | 132322  | QPSK | 1      | 0       | Band 66 | 20M    | 2178.3         | 67119   | Band 66 | 5M     | 2190           | 67236   | 21.85              | 21.93              |
|                 |                |                  | Band 41          | 20M    | 2593           | 40620   | QPSK | 1      | 99      | Band 41 | 5M     | 2687.5         | 41565   | Band 41 | 20M    | 2675.8         | 41448   | 21.47              | 21.68              |
|                 |                |                  | Band 41(4*4MIMO) | 20M    | 2593           | 40620   | QPSK | 1      | 99      | Band 41 | 5M     | 2687.5         | 41565   | Band 41 | 20M    | 2675.8         | 41448   | 21.42              | 21.68              |
|                 |                |                  | Band 41          | 20M    | 2593           | 40620   | QPSK | 1      | 99      | Band 41 | 20M    | 2612.8         | 40818   | Band 41 | 5M     | 2687.5         | 41565   | 21.44              | 21.68              |
|                 |                |                  | Band 41(4*4MIMO) | 20M    | 2593           | 40620   | QPSK | 1      | 99      | Band 41 | 20M    | 2612.8         | 40818   | Band 41 | 5M     | 2687.5         | 41565   | 21.39              | 21.68              |

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## &lt;Four Carrier power verification&gt;

| Configure  |                   | PCC              |       |             |         |      |     |        | SCC1    |       |             |         | SCC2    |       |             |         | SCC3    |       |             |         | Power   |            |
|------------|-------------------|------------------|-------|-------------|---------|------|-----|--------|---------|-------|-------------|---------|---------|-------|-------------|---------|---------|-------|-------------|---------|---------|------------|
|            |                   | LTE              | BW    | UL          | UL      |      | UL# | UL     | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | With CA | Without CA |
|            |                   | Band             | (MHz) | Freq. (MHz) | Channel | Mod. | RB  | Offset | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | (dBm)   | (dBm)      |
| Inter-Band | CA_2A-2A-5A-66A   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 5M    | 2197.5      | 67311   | 21.71   | 21.72      |
|            |                   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 66 | 5M    | 2197.5      | 67311   | 22.93   | 22.96      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | 21.84   | 21.93      |
|            | CA_2A-2A-13A-66A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5      | 1175    | Band 13 | 10M   | 751         | 5230    | Band 66 | 5M    | 2197.5      | 67311   | 21.67   | 21.72      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 13 | 10M   | 751         | 5230    | 21.90   | 21.93      |
|            |                   | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0      | Band 66 | 5M    | 2197.5      | 67311   | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 22.93   | 22.95      |
|            | CA_2A-4A-7A-7A    | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5      | 2175    | Band 7  | 20M   | 2655        | 3100    | Band 7  | 5M    | 2687.5      | 3425    | 21.62   | 21.72      |
|            |                   | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 7  | 20M   | 2655        | 3100    | Band 7  | 5M    | 2687.5      | 3425    | 21.80   | 21.87      |
|            |                   | Band 7           | 20M   | 2560        | 21350   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 4  | 20M   | 2132.5      | 2175    | Band 7  | 5M    | 2622.5      | 2775    | 21.23   | 21.3       |
|            | CA_2A-5A-66A-66A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 21.64   | 21.72      |
|            |                   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 22.93   | 22.96      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 5M    | 2197.5      | 67311   | 21.83   | 21.93      |
|            | CA_2A-5A-66B      | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 21.71   | 21.72      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 21.71   | 21.72      |
|            |                   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0      | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | 22.94   | 22.96      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | Band 5  | 10M   | 881.5       | 2525    | 21.85   | 21.93      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | Band 5  | 10M   | 881.5       | 2525    | 21.83   | 21.93      |
|            | CA_2A-13A-66B     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751         | 5230    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 21.7    | 21.72      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751         | 5230    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 21.64   | 21.72      |
|            |                   | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0      | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | 22.89   | 22.95      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | 21.91   | 21.93      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | 21.92   | 21.93      |
|            | CA_2A-12A-66A-66A | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 21.63   | 21.72      |
|            |                   | Band 12          | 10M   | 707.5       | 23095   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 22.81   | 22.91      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 5M    | 2197.5      | 67311   | 21.93   | 21.93      |
|            | CA_2A-13A-66A-66A | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 21.72   | 21.72      |
|            |                   | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 22.91   | 22.95      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | Band 66 | 5M    | 2197.5      | 67311   | 21.88   | 21.93      |
|            | CA_2A-2A-66C      | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5      | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 21.65   | 21.72      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 66 | 20M   | 2174.8      | 67084   | 21.92   | 21.93      |
|            |                   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5      | 900     | Band 46 | 20M   | 5585.5      | 54142   | Band 46 | 20M   | 5605.3      | 54340   | 21.66   | 21.72      |
|            | CA_2A-2A-46C      | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5      | 900     | Band 46 | 20M   | 5585.5      | 54142   | Band 46 | 20M   | 5605.3      | 54340   | 21.69   | 21.72      |
|            |                   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5      | 900     | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 20M   | 2174.8      | 67084   | 21.66   | 21.72      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5      | 900     | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 20M   | 2174.8      | 67084   | 21.7    | 21.72      |
|            | CA_2A-5A-66C      | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0      | Band 66 | 20M   | 2174.8      | 67084   | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 22.94   | 22.96      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | 21.86   | 21.93      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | 21.85   | 21.93      |
|            | CA_2A-12A-66C     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 21.72   | 21.72      |
|            |                   | Band 12          | 20M   | 707.5       | 23095   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 22.85   | 22.91      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 20M   | 2174.8      | 67084   | 21.85   | 21.93      |
|            | CA_2A-13A-66C     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 21.69   | 21.72      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 21.65   | 21.72      |
|            |                   | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 22.89   | 22.95      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2174.8      | 67084   | 21.85   | 21.93      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2174.8      | 67084   | 21.93   | 21.93      |
|            | CA_2A-66C-71A     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | Band 71 | 20M   | 637         | 68786   | 21.67   | 21.72      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | Band 71 | 20M   | 637         | 68786   | 21.7    | 21.72      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2174.8      | 67084   | Band 71 | 20M   | 637         | 68786   | 21.92   | 21.93      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2174.8      | 67084   | Band 71 | 20M   | 637         | 68786   | 21.84   | 21.93      |
|            |                   | Band 71          | 20M   | 683         | 133322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 23.43   | 23.47      |
|            | CA_2A-66A-66A-71A | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | Band 71 | 20M   | 637         | 68786   | 21.69   | 21.72      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | Band 71 | 20M   | 637         | 68786   | 21.71   | 21.72      |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 5M    | 2197.5      | 67311   | Band 71 | 20M   | 637         | 68786   | 21.87   | 21.93      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 5M    | 2197.5      | 67311   | Band 71 | 20M   | 637         | 68786   | 21.89   | 21.93      |
|            |                   | Band 71          | 20M   | 1900        | 19100   | QPSK | 1   | 0      | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 23.43   | 23.47      |
|            | CA_2A-2A-66A-71A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band    |       |             |         |         |            |



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|  |                   |                  |     |        |        |      |   |    |         |     |        |       |         |     |        |       |         |     |        |       |       |       |
|--|-------------------|------------------|-----|--------|--------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
|  |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 71 | 20M | 637    | 68786 | 21.7  | 21.72 |
|  |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 21.91 | 21.93 |
|  |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 21.93 | 21.93 |
|  |                   | Band 71          | 20M | 683    | 133322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 20M | 2155   | 66886 | 23.37 | 23.47 |
|  | CA_CA_4A-46D      | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 21.78 | 21.87 |
|  |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 21.83 | 21.87 |
|  | CA_2A-2A-12A-66A  | Band 2           | 20M | 1900   | 19100  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 12 | 10M | 737.5  | 5095  | Band 66 | 20M | 2155   | 66886 | 21.7  | 21.72 |
|  |                   | Band 12          | 10M | 707.5  | 23095  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 20M | 2155   | 66886 | 22.95 | 22.95 |
|  | CA_2A-2A-66A-66A  | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 21.89 | 21.93 |
|  |                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 21.68 | 21.72 |
|  | CA_2C-66A-66A     | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 5M  | 2197.5 | 67311 | 21.92 | 21.93 |
|  |                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 21.63 | 21.72 |
|  | CA_25A-41D        | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 21.92 | 21.93 |
|  |                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 21.63 | 21.72 |
|  | CA_41A-41D        | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.76 | 21.79 |
|  |                   | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 25 | 20M | 1985   | 8590  | 21.64 | 21.68 |
|  | CA_41A-41D        | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.62 | 21.68 |
|  |                   | Band 41(4*4MIMO) | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.58 | 21.68 |
|  | CA_41C-41C        | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.61 | 21.68 |
|  | CA_41E            | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 41 | 20M | 2652.4 | 41214 | 21.67 | 21.68 |
|  | CA_4A-46A-46C     | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.77 | 21.87 |
|  |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.78 | 21.87 |
|  | CA_2A-46A-46A-66A | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 21.62 | 21.72 |
|  |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 21.68 | 21.72 |
|  |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 21.89 | 21.93 |
|  |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 21.85 | 21.93 |
|  | CA_2A-46C-66A     | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.86 | 21.93 |
|  |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.92 | 21.93 |
|  |                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 21.64 | 21.72 |
|  |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 21.64 | 21.72 |
|  | CA_25A-46D        | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 21.79 | 21.79 |
|  |                   | Band 25(4*4MIMO) | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 21.78 | 21.79 |
|  | CA_48D-66A        | Band 48          | 20M | 3609   | 55830  | QPSK | 1 | 0  | Band 66 | 20M | 2155   | 66886 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 23.5  | 23.53 |
|  |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 21.9  | 21.93 |
|  |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 21.9  | 21.93 |
|  | CA_2A-2A-4A-12A   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 21.68 | 21.72 |
|  |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 21.66 | 21.72 |
|  |                   | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 21.82 | 21.87 |
|  |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 21.81 | 21.87 |
|  |                   | Band 12          | 10M | 707.5  | 23095  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | 22.9  | 22.95 |



## &lt;Five Carrier power verification&gt;

| Configure  |                   | PCC              |         |             |         |       |      |           | SCC1    |         |             |         | SCC2    |         |             |         | SCC3    |         |             |         | SCC4    |         |             |         | Power           |                 |       |
|------------|-------------------|------------------|---------|-------------|---------|-------|------|-----------|---------|---------|-------------|---------|---------|---------|-------------|---------|---------|---------|-------------|---------|---------|---------|-------------|---------|-----------------|-----------------|-------|
|            |                   | LTE              | BW      | UL          | UL      | Mod.  | UL#  | UL        | LTE     | BW      | DL          | DL      | LTE     | BW      | DL          | DL      | LTE     | BW      | DL          | DL      | LTE     | BW      | DL          | DL      | With CA         | Without CA      |       |
|            |                   | Band             | (MHz)   | Freq. (MHz) | Channel |       | RB   | RB Offset | Band    | (MHz)   | Freq. (MHz) | Channel | Band    | (MHz)   | Freq. (MHz) | Channel | Band    | (MHz)   | Freq. (MHz) | Channel | Band    | (MHz)   | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |       |
| Inter-Band | CA_2A-46A-46C-66A | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5885.2      | 54142   | Band 46 | 20M     | 5905        | 54340   | 21.67           | 21.72           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5885.2      | 54142   | Band 46 | 20M     | 5905        | 54340   | 21.69           | 21.72           |       |
|            |                   | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5540.2      | 50692   | Band 46 | 20M     | 5560        | 50890   | 21.9            | 21.93           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5540.2      | 50692   | Band 46 | 20M     | 5560        | 50890   | 21.92           | 21.93           |       |
|            | CA_2A-2A-46D      | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 2  | 5M      | 1932.5      | 625     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.62           | 21.72           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 2  | 5M      | 1932.5      | 625     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.64           | 21.72           |       |
|            | CA_2A-46E         | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 21.71           | 21.72           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 21.63           | 21.72           |       |
|            | CA_2A-46A-46D     | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.7            | 21.72           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.64           | 21.72           |       |
|            | CA_4A-46A-46D     | Band 4           | 20M     | 1732.5      | 20175   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.87           | 21.87           |       |
|            |                   | Band 4(4*4MIMO)  | 20M     | 1732.5      | 20175   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.78           | 21.87           |       |
|            | CA_46A-46D-66A    | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.89           | 21.93           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.89           | 21.93           |       |
|            | CA_2A-46D-66A     | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.71           | 21.72           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.67           | 21.72           |       |
|            |                   | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.83           | 21.93           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 21.88           | 21.93           |       |
|            | CA_48E-66A        | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 48 | 20M     | 3609        | 55830   | Band 48 | 20M     | 3628.8      | 56028   | Band 48 | 20M     | 3648.6      | 56226   | Band 48 | 20M     | 3668.4      | 56424   | 21.9            | 21.93           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 48 | 20M     | 3609        | 55830   | Band 48 | 20M     | 3628.8      | 56028   | Band 48 | 20M     | 3648.6      | 56226   | Band 48 | 20M     | 3668.4      | 56424   | 21.88           | 21.93           |       |
|            | CA_46E-66A        | Band 48          | 20M     | 3609        | 55830   | QPSK  | 1    | 99        | Band 66 | 20M     | 2155        | 66886   | Band 48 | 20M     | 3628.8      | 56028   | Band 48 | 20M     | 3648.6      | 56226   | Band 48 | 20M     | 3668.4      | 56424   | 23.5            | 23.53           |       |
|            |                   | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 21.85           | 21.93           |       |
|            | CA_46E-66A        | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 21.84           | 21.93           |       |
| Intra-Band | Non-Contiguous    | CA_41C-41D       | Band 41 | 20M         | 2593    | 40620 | QPSK | 1         | 99      | Band 41 | 20M         | 2612.8  | 40818   | Band 41 | 20M         | 2640.4  | 41094   | Band 41 | 20M         | 2660.2  | 41292   | Band 41 | 20M         | 2680    | 41490           | 21.59           | 21.68 |
|            | Contiguous        | CA_41F           | Band 41 | 20M         | 2593    | 40620 | QPSK | 1         | 99      | Band 41 | 20M         | 2612.8  | 40818   | Band 41 | 20M         | 2632.6  | 41016   | Band 41 | 20M         | 2652.4  | 41214   | Band 41 | 20M         | 2672.2  | 41412           | 21.68           | 21.68 |



**<Top Antenna--Reduced Power Mode for Receiver On>**

**<Two Carrier power verification>**

| Configure  |                | CA List    | PCC              |       |                |         |      |     |              | SCC     |       |                |         | Power              |                    |
|------------|----------------|------------|------------------|-------|----------------|---------|------|-----|--------------|---------|-------|----------------|---------|--------------------|--------------------|
|            |                |            | LTE              | BW    | UL             | UL      | Mod. | UL# | UL           | LTE     | BW    | DL             | DL      | With CA            | Without CA         |
|            |                |            | Band             | (MHz) | Freq.<br>(MHz) | Channel |      | RB  | RB<br>Offset | Band    | (MHz) | Freq.<br>(MHz) | Channel | Tx. Power<br>(dBm) | Tx. Power<br>(dBm) |
| Inter-Band |                | CA_4A-30A  | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 9820    | 18.65              | 18.69              |
|            |                |            | Band 30          | 10M   | 2310           | 27710   | QPSK | 1   | 25           | Band 4  | 20M   | 2132.5         | 2175    | 15.06              | 15.12              |
|            |                | CA_5A-48A  | Band 5           | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | 19.09              | 19.14              |
|            |                | CA_25A-46A | Band 25          | 20M   | 1860           | 26140   | QPSK | 1   | 0            | Band 46 | 20M   | 5905           | 54340   | 18.92              | 18.99              |
|            |                |            | Band 25(4*4MIMO) | 20M   | 1860           | 26140   | QPSK | 1   | 0            | Band 46 | 20M   | 5905           | 54340   | 18.89              | 18.99              |
|            |                | CA_26A-41A | Band 26          | 15M   | 831.5          | 26865   | QPSK | 1   | 0            | Band 41 | 20M   | 2593           | 40620   | 19.07              | 19.15              |
|            |                | CA_41A-48A | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 48 | 20M   | 3560           | 55340   | 17.62              | 17.65              |
|            |                |            | Band 41(4*4MIMO) | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 48 | 20M   | 3560           | 55340   | 17.60              | 17.65              |
|            |                |            | Band 48          | 20M   | 3609           | 55830   | QPSK | 1   | 99           | Band 41 | 20M   | 2593           | 40620   | 16.51              | 16.56              |
|            |                |            | Band 48(4*4MIMO) | 20M   | 3609           | 55830   | QPSK | 1   | 99           | Band 41 | 20M   | 2593           | 40620   | 16.46              | 16.56              |
| Intra-Band | Contiguous     | CA_5B      | Band 5           | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 5  | 10M   | 883.9          | 2549    | 19.12              | 19.14              |
|            |                | CA_7C      | Band 7           | 20M   | 2560           | 21350   | QPSK | 1   | 0            | Band 7  | 20M   | 2660.2         | 3152    | 14.82              | 14.87              |
|            |                | CA_38C     | Band 38          | 20M   | 2580           | 37850   | QPSK | 1   | 99           | Band 38 | 20M   | 2599.8         | 38048   | 17.59              | 17.65              |
|            | Non-Contiguous | CA_41A-41A | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 41 | 5M    | 2687.5         | 41565   | 17.62              | 17.65              |



## &lt;Three Carrier power verification&gt;

| Configure  |                | PCC             |       |        |         |      |        |    | SCC1    |       |        |         | SCC2    |       |        |         | Power     |            |
|------------|----------------|-----------------|-------|--------|---------|------|--------|----|---------|-------|--------|---------|---------|-------|--------|---------|-----------|------------|
|            |                | LTE             | BW    | UL     | UL      | Mod. | UL#    | UL | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|            |                | Band            | (MHz) | Freq.  | Channel |      | RB     | RB | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|            |                |                 |       | (MHz)  |         |      | Offset |    |         |       | (MHz)  |         |         |       | (MHz)  |         | (dBm)     | (dBm)      |
| Inter-Band | CA_2A-4A-5A    | Band 2          | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 18.79     | 18.91      |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 18.72     | 18.91      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 2  | 20M   | 1960   | 900     | 18.63     | 18.69      |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 2  | 20M   | 1960   | 900     | 18.55     | 18.69      |
|            |                | Band 5          | 10M   | 829    | 20450   | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 4  | 20M   | 2132.5 | 2175    | 19.12     | 19.14      |
|            | CA_2A-4A-12A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 18.86     | 18.91      |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 18.81     | 18.91      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 12 | 10M   | 737.5  | 5095    | Band 2  | 20M   | 1960   | 900     | 18.56     | 18.69      |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 12 | 10M   | 737.5  | 5095    | Band 2  | 20M   | 1960   | 900     | 18.52     | 18.69      |
|            |                | Band 12         | 10M   | 707.5  | 23095   | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 4  | 20M   | 2132.5 | 2175    | 19.88     | 19.94      |
|            | CA_2A-4A-13A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 13 | 10M   | 751    | 5230    | 18.9      | 18.91      |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 13 | 10M   | 751    | 5230    | 18.78     | 18.91      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 13 | 10M   | 751    | 5230    | Band 2  | 20M   | 1960   | 900     | 18.62     | 18.69      |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 13 | 10M   | 751    | 5230    | Band 2  | 20M   | 1960   | 900     | 18.6      | 18.69      |
|            |                | Band 13         | 10M   | 782    | 23230   | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 4  | 20M   | 2132.5 | 2175    | 20.62     | 20.68      |
|            | CA_2A-4A-29A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 18.81     | 18.91      |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 18.77     | 18.91      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 29 | 10M   | 722.5  | 9715    | Band 2  | 20M   | 1960   | 900     | 18.62     | 18.69      |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 29 | 10M   | 722.5  | 9715    | Band 2  | 20M   | 1960   | 900     | 18.6      | 18.69      |
|            |                | Band 2          | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 71 | 20M   | 637    | 68786   | 18.65     | 18.69      |
|            | CA_2A-4A-71A   | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 71 | 20M   | 637    | 68786   | 18.62     | 18.69      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 71 | 20M   | 637    | 68786   | 18.62     | 18.69      |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 71 | 20M   | 637    | 68786   | 18.55     | 18.69      |
|            |                | Band 71         | 20M   | 683    | 133322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 4  | 20M   | 2132.5 | 2175    | 22.44     | 22.47      |
|            |                | Band 2          | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 18.81     | 18.91      |
|            | CA_2A-5A-30A   | Band 5          | 10M   | 829    | 20450   | QPSK | 1      | 0  | Band 30 | 10M   | 2355   | 9820    | Band 2  | 20M   | 1960   | 900     | 19.11     | 19.14      |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 15.08     | 15.12      |
|            |                | Band 2          | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 12 | 10M   | 737.5  | 5095    | Band 30 | 10M   | 2355   | 9820    | 18.86     | 18.91      |
|            | CA_2A-12A-30A  | Band 12         | 10M   | 707.5  | 23095   | QPSK | 1      | 0  | Band 30 | 10M   | 2355   | 9820    | Band 2  | 20M   | 1960   | 900     | 19.85     | 19.94      |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | 15.11     | 15.12      |
|            | CA_2A-29A-30A  | Band 2          | 20M   | 18700  | 1860    | QPSK | 1      | 0  | Band 29 | 10M   | 722.5  | 9715    | Band 30 | 10M   | 2355   | 9820    | 18.85     | 18.91      |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 2  | 20M   | 1960   | 900     | Band 29 | 10M   | 722.5  | 9715    | 15.08     | 15.12      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 18.58     | 18.69      |
|            | CA_4A-5A-30A   | Band 5          | 10M   | 829    | 20450   | QPSK | 1      | 0  | Band 30 | 10M   | 2355   | 9820    | Band 4  | 20M   | 2132.5 | 2175    | 19.1      | 19.14      |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 15.09     | 15.12      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 7  | 20M   | 2655   | 3100    | Band 12 | 5M    | 737.5  | 5095    | 15.07     | 15.12      |
|            | CA_4A-7A-12A   | Band 7          | 20M   | 2560   | 21350   | QPSK | 1      | 0  | Band 12 | 5M    | 737.5  | 5095    | Band 4  | 20M   | 2132.5 | 2175    | 14.82     | 14.87      |
|            |                | Band 12         | 10M   | 707.5  | 23095   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 7  | 20M   | 2655   | 3100    | 19.87     | 19.94      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 12 | 10M   | 737.5  | 5095    | Band 30 | 10M   | 2355   | 9820    | 18.66     | 18.69      |
|            | CA_4A-12A-30A  | Band 12         | 10M   | 707.5  | 23095   | QPSK | 1      | 0  | Band 30 | 10M   | 2355   | 2355    | 2355    | 2355  | 2132.5 | 2175    | 19.85     | 19.94      |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 15.09     | 15.12      |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 29 | 10M   | 722.5  | 9715    | Band 30 | 10M   | 2355   | 9820    | 18.54     | 18.69      |
|            | CA_4A-29A-30A  | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 15.07     | 15.12      |
|            |                | Band 5          | 10M   | 829    | 20450   | QPSK | 1      | 0  | Band 30 | 10M   | 2355   | 9820    | Band 66 | 20M   | 2155   | 66886   | 19.12     | 19.14      |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 66 | 20M   | 2155   | 66886   | Band 5  | 10M   | 881.5  | 2525    | 15.08     | 15.12      |
|            | CA_5A-30A-66A  | Band 66         | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 18.71     | 18.75      |
|            |                | Band 12         | 10M   | 707.5  | 23095   | QPSK | 1      | 0  | Band 30 | 10M   | 2355   | 9820    | Band 66 | 20M   | 2155   | 66886   | 19.89     | 19.94      |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 66 | 20M   | 2155   | 66886   | Band 12 | 10M   | 737.5  | 5095    | 15.05     | 15.12      |
|            | CA_12A-30A-66A | Band 30         | 10M   | 2310   | 27710   | QPSK | 1      | 25 | Band 30 | 10M   | 2355   | 9820    | Band 12 | 10M   | 737.5  | 5095    | 18.71     | 18.75      |
|            |                | Band 66         | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 30 | 10M   | 2355   | 9820    | Band 12 | 10M   | 737.5  | 5095    | 18.71     | 18.75      |



# FCC SAR Test Report

Report No. : FA970213-03

| Configure            |                | PCC              |       |             |         |      |     |           | SCC1    |       |             |         | SCC2    |       |             |         | Power           |                 |
|----------------------|----------------|------------------|-------|-------------|---------|------|-----|-----------|---------|-------|-------------|---------|---------|-------|-------------|---------|-----------------|-----------------|
|                      |                | LTE              | BW    | UL          | UL      |      | UL# | UL        | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | With CA         | Without CA      |
|                      |                | Band             | (MHz) | Freq. (MHz) | Channel | Mod. | RB  | RB Offset | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |
| Inter-Band           | CA_2A-2A-4A    | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 20M   | 1980        | 1100    | Band 4  | 20M   | 2132.5      | 2175    | 18.85           | 18.91           |
|                      |                | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 20M   | 1980        | 1100    | Band 4  | 20M   | 2132.5      | 2175    | 18.82           | 18.91           |
|                      |                | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 18.62           | 18.69           |
|                      |                | Band 2(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 18.56           | 18.69           |
|                      | CA_2A-4A-4A    | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 4  | 5M    | 2152.5      | 2375    | 18.88           | 18.91           |
|                      |                | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 4  | 5M    | 2152.5      | 2375    | 18.82           | 18.91           |
|                      |                | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 2  | 20M   | 1960        | 900     | 18.65           | 18.69           |
|                      |                | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 2  | 20M   | 1960        | 900     | 18.62           | 18.69           |
|                      | CA_2A-2A-71A   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 20M   | 1980        | 1100    | Band 71 | 20M   | 637         | 68786   | 18.87           | 18.91           |
|                      |                | Band 71          | 20M   | 683         | 133322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 22.46           | 22.47           |
|                      | CA_2A-46A-46A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 46 | 20M   | 5160        | 46890   | Band 46 | 20M   | 5905        | 54340   | 18.89           | 18.91           |
|                      | CA_2A-48A-48A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 48 | 20M   | 3579.8      | 55538   | 18.88           | 18.91           |
|                      |                | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 48 | 20M   | 3579.8      | 55538   | 18.82           | 18.91           |
|                      | CA_2A-48A-66A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 66 | 5M    | 2197.5      | 67311   | 18.89           | 18.91           |
|                      |                | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 66 | 5M    | 2197.5      | 67311   | 18.83           | 18.91           |
|                      |                | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 2  | 20M   | 1960        | 900     | 18.66           | 18.75           |
|                      |                | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 2  | 20M   | 1960        | 900     | 18.61           | 18.75           |
|                      | CA_4A-4A-5A    | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 5  | 10M   | 881.5       | 2525    | 18.62           | 18.69           |
|                      |                | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 5  | 10M   | 881.5       | 2525    | 18.56           | 18.69           |
|                      |                | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 4  | 5M    | 2152.5      | 2375    | 19.11           | 19.14           |
|                      | CA_4A-4A-7A    | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 7  | 20M   | 2655        | 3100    | 18.64           | 18.69           |
|                      |                | Band 7           | 20M   | 2560        | 21350   | QPSK | 1   | 0         | Band 4  | 20M   | 2120        | 2050    | Band 4  | 5M    | 2152.5      | 2375    | 14.79           | 14.87           |
|                      | CA_4A-4A-71A   | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 71 | 20M   | 637         | 68786   | 18.67           | 18.69           |
|                      |                | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 71 | 20M   | 637         | 68786   | 18.63           | 18.69           |
|                      |                | Band 71          | 20M   | 683         | 133322  | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 4  | 5M    | 2152.5      | 2375    | 22.42           | 22.47           |
|                      | CA_4A-4A-12A   | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 12 | 10M   | 737.5       | 5095    | 18.58           | 18.69           |
|                      |                | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 12 | 10M   | 737.5       | 5095    | 18.53           | 18.69           |
|                      |                | Band 12          | 10M   | 707.5       | 23095   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 4  | 5M    | 2152.5      | 2375    | 19.88           | 19.94           |
|                      | CA_4A-4A-13A   | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 13 | 10M   | 751         | 5230    | 18.66           | 18.69           |
|                      |                | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 4  | 5M    | 2152.5      | 2375    | Band 13 | 10M   | 751         | 5230    | 18.61           | 18.69           |
|                      | CA_4A-46A-46A  | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 4  | 5M    | 2152.5      | 2375    | 20.59           | 20.68           |
|                      |                | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 46 | 20M   | 5160        | 46890   | Band 46 | 20M   | 5905        | 54340   | 18.66           | 18.69           |
|                      | CA_4A-46A-46A  | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 46 | 20M   | 5160        | 46890   | Band 46 | 20M   | 5905        | 54340   | 18.62           | 18.69           |
|                      |                | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 46 | 20M   | 5160        | 46890   | Band 46 | 20M   | 5905        | 54340   | 18.62           | 18.69           |
|                      | CA_2A-48C      | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 48 | 20M   | 3615.1      | 55891   | Band 48 | 20M   | 3634.9      | 56089   | 18.85           | 18.91           |
|                      |                | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 46 | 20M   | 5540.2      | 50692   | Band 46 | 20M   | 5560        | 50890   | 18.63           | 18.69           |
|                      | CA_4A-46C      | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 46 | 20M   | 5540.2      | 50692   | Band 46 | 20M   | 5560        | 50890   | 18.61           | 18.69           |
|                      |                | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 46 | 20M   | 5540.2      | 50692   | Band 46 | 20M   | 5560        | 50890   | 18.61           | 18.69           |
|                      | CA_48A-48A-66A | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 48 | 20M   | 3690        | 56640   | 18.7            | 18.75           |
|                      |                | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 48 | 20M   | 3560        | 55340   | Band 48 | 20M   | 3690        | 56640   | 18.62           | 18.75           |
|                      | CA_48C-66A     | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 48 | 20M   | 3670.2      | 56442   | Band 48 | 20M   | 3690        | 56640   | 18.72           | 18.75           |
|                      |                | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 48 | 20M   | 3670.2      | 56442   | Band 48 | 20M   | 3690        | 56640   | 18.69           | 18.75           |
|                      | CA_48C-48A     | Band 48          | 20M   | 3609        | 55830   | QPSK | 1   | 99        | Band 48 | 20M   | 3628.8      | 56028   | Band 48 | 20M   | 3560        | 55340   | 16.52           | 16.56           |
|                      | CA_25A-25A-26A | Band 25          | 20M   | 1860        | 26140   | QPSK | 1   | 0         | Band 25 | 5M    | 1992.5      | 8665    | Band 26 | 5M    | 876.5       | 8865    | 18.88           | 18.99           |
|                      |                | Band 25(4*4MIMO) | 20M   | 1860        | 26140   | QPSK | 1   | 0         | Band 25 | 5M    | 1992.5      | 8665    | Band 26 | 5M    | 876.5       | 8865    | 18.81           | 18.99           |
|                      | CA_25A-46C     | Band 25          | 20M   | 1860        | 26140   | QPSK | 1   | 0         | Band 46 | 20M   | 5585.2      | 54142   | Band 46 | 20M   | 5095        | 54340   | 18.92           | 18.99           |
|                      |                | Band 25(4*4MIMO) | 20M   | 1860        | 26140   | QPSK | 1   | 0         | Band 46 | 20M   | 5585.2      | 54142   | Band 46 | 20M   | 5095        | 54340   | 18.88           | 18.99           |
|                      | CA_2A-2A-46A   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 1175    | Band 46 | 20M   | 5540        | 50690   | 18.84           | 18.91           |
|                      |                | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 1175    | Band 46 | 20M   | 5540        | 50690   | 18.82           | 18.91           |
| Intra-Non-Contiguous | CA_66A-66C     | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 66 | 20M   | 2185        | 67186   | Band 66 | 5M    | 2196.7      | 67303   | 18.71           | 18.75           |
|                      |                | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 66 | 20M   | 2185        | 67186   | Band 66 | 5M    | 2196.7      | 67303   | 18.69           | 18.75           |
|                      |                | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 66 | 20M   | 2178.3      | 67119   | Band 66 | 5M    | 2190        | 67236   | 18.7            | 18.75           |
|                      |                | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 66 | 20M   | 2178.3      | 67119   | Band 66 | 5M    | 2190        | 67236   | 18.62           | 18.75           |
|                      | CA_41A-41C     | Band 41          | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 5M    | 2687.5      | 41565   | Band 41 | 20M   | 2675.8      | 41448   | 17.59           | 17.65           |
|                      |                | Band 41(4*4MIMO) | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 5M    | 2687.5      | 41565   | Band 41 | 20M   | 2675.8      | 41448   | 17.53           | 17.65           |
|                      | CA_41A-41C     | Band 41          | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 20M   | 2612.8      | 40818   | Band 41 | 5M    | 2687.5      | 41565   | 17.57           | 17.65           |
|                      |                | Band 41          | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 20M   | 2612.8      | 40818   | Band 41 | 5M    | 2687.5      | 41565   | 17.57           | 17.65           |

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|  |  |  |                  |     |      |       |      |   |    |         |     |        |       |         |    |        |       |       |       |
|--|--|--|------------------|-----|------|-------|------|---|----|---------|-----|--------|-------|---------|----|--------|-------|-------|-------|
|  |  |  | Band 41(4*4MIMO) | 20M | 2593 | 40620 | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 5M | 2687.5 | 41565 | 17.56 | 17.65 |
|--|--|--|------------------|-----|------|-------|------|---|----|---------|-----|--------|-------|---------|----|--------|-------|-------|-------|

## &lt;Four Carrier power verification&gt;

| Configure  |                   | PCC              |       |             |         |      |     |           | SCC1    |       |             |         | SCC2    |       |             |         | SCC3    |       |             |         | Power           |                 |
|------------|-------------------|------------------|-------|-------------|---------|------|-----|-----------|---------|-------|-------------|---------|---------|-------|-------------|---------|---------|-------|-------------|---------|-----------------|-----------------|
|            |                   | LTE              | BW    | UL          | UL      |      | UL# | UL        | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | With CA         | Without CA      |
|            |                   | Band             | (MHz) | Freq. (MHz) | Channel | Mod. | RB  | RB Offset | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |
| Inter-Band | CA_2A-2A-5A-66A   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 5M    | 2197.5      | 67311   | 18.9            | 18.91           |
|            |                   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 66 | 5M    | 2197.5      | 67311   | 19.14           | 19.17           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | 18.65           | 18.75           |
|            | CA_2A-2A-13A-66A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 1175    | Band 13 | 10M   | 751         | 5230    | Band 66 | 5M    | 2197.5      | 67311   | 18.86           | 18.91           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 13 | 10M   | 751         | 5230    | 18.66           | 18.75           |
|            |                   | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 66 | 5M    | 2197.5      | 67311   | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 20.60           | 20.68           |
|            | CA_2A-4A-7A-7A    | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 7  | 20M   | 2655        | 3100    | Band 7  | 5M    | 2687.5      | 3425    | 18.84           | 18.91           |
|            |                   | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 7  | 20M   | 2655        | 3100    | Band 7  | 5M    | 2687.5      | 3425    | 18.69           | 18.69           |
|            |                   | Band 7           | 20M   | 2560        | 21350   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 4  | 20M   | 2132.5      | 2175    | Band 7  | 5M    | 2622.5      | 2775    | 14.85           | 14.87           |
|            | CA_2A-5A-66A-66A  | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 18.86           | 18.91           |
|            |                   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 19.11           | 19.17           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 5M    | 2197.5      | 67311   | 18.75           | 18.75           |
|            | CA_2A-5A-66B      | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 18.86           | 18.91           |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 18.87           | 18.91           |
|            |                   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | 19.09           | 19.17           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | Band 5  | 10M   | 881.5       | 2525    | 18.72           | 18.75           |
|            | CA_2A-13A-66B     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 13 | 10M   | 751         | 5230    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 18.86           | 18.91           |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 13 | 10M   | 751         | 5230    | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | 18.9            | 18.91           |
|            |                   | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | 20.62           | 20.68           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | 18.66           | 18.75           |
|            | CA_2A-12A-66A-66A | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 18.89           | 18.91           |
|            |                   | Band 12          | 10M   | 707.5       | 23095   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 19.93           | 19.94           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 5M    | 2197.5      | 67311   | 18.74           | 18.75           |
|            |                   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 18.86           | 18.91           |
|            | CA_2A-13A-66A-66A | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 20.61           | 20.68           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | Band 66 | 5M    | 2197.5      | 67311   | 18.67           | 18.75           |
|            |                   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 18.83           | 18.91           |
|            | CA_2A-2A-66C      | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 66 | 20M   | 2174.8      | 67084   | 18.73           | 18.75           |
|            |                   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 900     | Band 46 | 20M   | 5585.5      | 54142   | Band 46 | 20M   | 5605.3      | 54340   | 18.9            | 18.91           |
|            | CA_2A-2A-46C      | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 900     | Band 46 | 20M   | 5585.5      | 54142   | Band 46 | 20M   | 5605.3      | 54340   | 18.89           | 18.91           |
|            |                   | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 900     | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 20M   | 2174.8      | 67084   | 18.87           | 18.91           |
|            | CA_2A-5A-66C      | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 2  | 5M    | 1987.5      | 900     | Band 5  | 10M   | 881.5       | 2525    | Band 66 | 20M   | 2174.8      | 67084   | 18.86           | 18.91           |
|            |                   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 66 | 20M   | 2174.8      | 67084   | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 19.16           | 19.17           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | 18.72           | 18.75           |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 5  | 10M   | 881.5       | 2525    | 18.75           | 18.75           |
|            | CA_2A-12A-66C     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 18.84           | 18.91           |
|            |                   | Band 12          | 20M   | 707.5       | 23095   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 19.88           | 19.94           |
|            |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 12 | 10M   | 737.5       | 5095    | Band 66 | 20M   | 2174.8      | 67084   | 18.75           | 18.75           |
|            | CA_2A-13A-66C     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 18.90           | 18.91           |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1   | 0         | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 18.90           | 18.91           |
|            |                   | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 20.62           | 20.68           |
|            | CA_2A-13A-66C     | Band 66          | 20M   | 1745        | 132322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 13 | 10M   | 751         | 5230    | Band 66 | 20M   | 2174.8      | 67084   | 18.65           | 18.75           |



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|                   |                  |     |        |        |      |   |    |         |     |        |       |         |     |        |       |         |     |        |       |       |       |
|-------------------|------------------|-----|--------|--------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
| CA_2A-66C-71A     | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 13 | 10M | 751    | 5230  | Band 66 | 20M | 2174.8 | 67084 | 18.67 | 18.75 |
|                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 66 | 20M | 2155   | 66886 | Band 66 | 20M | 2174.8 | 67084 | Band 71 | 20M | 637    | 68786 | 18.87 | 18.91 |
|                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 66 | 20M | 2155   | 66886 | Band 66 | 20M | 2174.8 | 67084 | Band 71 | 20M | 637    | 68786 | 18.83 | 18.91 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 66 | 20M | 2174.8 | 67084 | Band 71 | 20M | 637    | 68786 | 18.68 | 18.75 |
|                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 66 | 20M | 2174.8 | 67084 | Band 71 | 20M | 637    | 68786 | 18.75 | 18.75 |
| CA_2A-66A-66A-71A | Band 71          | 20M | 683    | 133322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 20M | 2174.8 | 67084 | 22.39 | 22.47 |
|                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | Band 71 | 20M | 637    | 68786 | 18.84 | 18.91 |
|                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | Band 71 | 20M | 637    | 68786 | 18.84 | 18.91 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 66 | 5M  | 2197.5 | 67311 | Band 71 | 20M | 637    | 68786 | 18.69 | 18.75 |
|                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 66 | 5M  | 2197.5 | 67311 | Band 71 | 20M | 637    | 68786 | 18.66 | 18.75 |
| CA_2A-2A-66A-71A  | Band 71          | 20M | 1900   | 19100  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 22.42 | 22.47 |
|                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 71 | 20M | 637    | 68786 | 18.83 | 18.91 |
|                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 71 | 20M | 637    | 68786 | 18.84 | 18.91 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 18.68 | 18.75 |
|                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 18.75 | 18.75 |
| CA_CA_4A-46D      | Band 71          | 20M | 683    | 133322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 20M | 2155   | 66886 | 22.47 | 22.47 |
|                   | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 18.67 | 18.69 |
|                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 18.66 | 18.69 |
|                   | Band 2           | 20M | 1900   | 19100  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 12 | 10M | 737.5  | 5095  | Band 66 | 20M | 2155   | 66886 | 18.83 | 18.91 |
|                   | Band 12          | 10M | 707.5  | 23095  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 20M | 2155   | 66886 | 20.6  | 20.68 |
| CA_2A-2A-12A-66A  | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 18.74 | 18.75 |
|                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 18.81 | 18.91 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 5M  | 2197.5 | 67311 | 18.71 | 18.75 |
| CA_2A-2A-66A-66A  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 18.86 | 18.91 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 18.67 | 18.75 |
| CA_2C-66A-66A     | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 18.86 | 18.91 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 18.67 | 18.75 |
| CA_25A-41D        | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 18.89 | 18.99 |
|                   | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 25 | 20M | 1985   | 8590  | 17.56 | 17.65 |
| CA_4A-46A-46C     | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 18.69 | 18.69 |
|                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 18.61 | 18.69 |
|                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 18.82 | 18.91 |
| CA_2A-46A-46A-66A | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 18.88 | 18.91 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 18.65 | 18.75 |
|                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 18.71 | 18.75 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 18.71 | 18.75 |
| CA_2A-46C-66A     | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 18.71 | 18.75 |
|                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 18.86 | 18.91 |
|                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 18.81 | 18.91 |
|                   | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 18.92 | 18.99 |
| CA_25A-46D        | Band 25(4*4MIMO) | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 18.9  | 18.99 |
|                   | Band 48          | 20M | 3609   | 55830  | QPSK | 1 | 0  | Band 66 | 20M | 2155   | 66886 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 16.5  | 16.56 |
|                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 18.7  | 18.75 |
| CA_48D-66A        | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 18.69 | 18.75 |
|                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 18.85 | 18.91 |
|                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 18.82 | 18.91 |
| CA_2A-2A-4A-12A   | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 18.66 | 18.69 |
|                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 18.63 | 18.69 |
|                   | Band 12          | 10M | 707.5  | 23095  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | 19.92 | 19.94 |
|                   | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 17.64 | 17.65 |
| CA_41A-41D        | Band 41(4*4MIMO) | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 17.60 | 17.68 |
|                   | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 17.59 | 17.68 |
| CA_41C-41C        | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 17.59 | 17.68 |

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|            |        |         |     |      |       |      |   |    |         |     |        |       |         |     |        |       |         |     |        |       |       |       |
|------------|--------|---------|-----|------|-------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
| Contiguous | CA_41E | Band 41 | 20M | 2593 | 40620 | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 41 | 20M | 2652.4 | 41214 | 17.65 | 17.68 |
|------------|--------|---------|-----|------|-------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|

## <Five Carrier power verification>

| Configure  |                   | PCC              |         |             |         |       |      | SCC1      |         |         |             | SCC2    |         |         |             | SCC3    |         |         |             | SCC4    |         |         |             | Power   |                 |                 |       |
|------------|-------------------|------------------|---------|-------------|---------|-------|------|-----------|---------|---------|-------------|---------|---------|---------|-------------|---------|---------|---------|-------------|---------|---------|---------|-------------|---------|-----------------|-----------------|-------|
|            |                   | LTE              | BW      | UL          | UL      | Mod.  | UL#  | UL        | LTE     | BW      | DL          | DL      | LTE     | BW      | DL          | DL      | LTE     | BW      | DL          | DL      | LTE     | BW      | DL          | DL      | With CA         | Without CA      |       |
|            |                   | Band             | (MHz)   | Freq. (MHz) | Channel |       | RB   | RB Offset | Band    | (MHz)   | Freq. (MHz) | Channel | Band    | (MHz)   | Freq. (MHz) | Channel | Band    | (MHz)   | Freq. (MHz) | Channel | Band    | (MHz)   | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |       |
| Inter-Band | CA_2A-46A-46C-66A | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5885.2      | 54142   | Band 46 | 20M     | 5905        | 54340   | 18.88           | 18.91           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5885.2      | 54142   | Band 46 | 20M     | 5905        | 54340   | 18.89           | 18.91           |       |
|            |                   | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5540.2      | 50692   | Band 46 | 20M     | 5560        | 50890   | 18.7            | 18.75           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5540.2      | 50692   | Band 46 | 20M     | 5560        | 50890   | 18.69           | 18.75           |       |
|            | CA_2A-2A-46D      | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 2  | 5M      | 1932.5      | 625     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.81           | 18.91           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 2  | 5M      | 1932.5      | 625     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.91           | 18.91           |       |
|            | CA_2A-46E         | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 18.83           | 18.91           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 18.81           | 18.91           |       |
|            | CA_2A-46A-46D     | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.91           | 18.91           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.83           | 18.91           |       |
|            | CA_4A-46A-46D     | Band 4           | 20M     | 1732.5      | 20175   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.68           | 18.69           |       |
|            |                   | Band 4(4*4MIMO)  | 20M     | 1732.5      | 20175   | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.63           | 18.69           |       |
|            | CA_46A-46D-66A    | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.68           | 18.75           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5160        | 46890   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.72           | 18.75           |       |
|            | CA_2A-46D-66A     | Band 2           | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.9            | 18.91           |       |
|            |                   | Band 2(4*4MIMO)  | 20M     | 1860        | 18700   | QPSK  | 1    | 0         | Band 66 | 20M     | 2155        | 66886   | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.91           | 18.91           |       |
|            |                   | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.7            | 18.75           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 2  | 20M     | 1960        | 900     | Band 46 | 20M     | 5520.2      | 50492   | Band 46 | 20M     | 5540        | 50690   | Band 46 | 20M     | 5559.8      | 50888   | 18.72           | 18.75           |       |
|            | CA_46E-66A        | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 21.66           | 18.75           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 46 | 20M     | 5520        | 50490   | Band 46 | 20M     | 5539.8      | 50688   | Band 46 | 20M     | 5559.9      | 50889   | Band 46 | 20M     | 5580        | 50190   | 21.63           | 18.75           |       |
|            | CA_48E-66A        | Band 66          | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 48 | 20M     | 3609        | 55830   | Band 48 | 20M     | 3628.8      | 56028   | Band 48 | 20M     | 3648.6      | 56226   | Band 48 | 20M     | 3668.4      | 56424   | 18.7            | 18.75           |       |
|            |                   | Band 66(4*4MIMO) | 20M     | 1745        | 132322  | QPSK  | 1    | 0         | Band 48 | 20M     | 3609        | 55830   | Band 48 | 20M     | 3628.8      | 56028   | Band 48 | 20M     | 3648.6      | 56226   | Band 48 | 20M     | 3668.4      | 56424   | 18.69           | 18.75           |       |
|            |                   | Band 48          | 20M     | 3609        | 55830   | QPSK  | 1    | 99        | Band 66 | 20M     | 2155        | 66886   | Band 48 | 20M     | 3628.8      | 56028   | Band 48 | 20M     | 3648.6      | 56226   | Band 48 | 20M     | 3668.4      | 56424   | 16.55           | 16.56           |       |
| Intra-Band | Non-Contiguous    | CA_41C-41D       | Band 41 | 20M         | 2593    | 40620 | QPSK | 1         | 99      | Band 41 | 20M         | 2612.8  | 40818   | Band 41 | 20M         | 2640.4  | 41094   | Band 41 | 20M         | 2660.2  | 41292   | Band 41 | 20M         | 2680    | 41490           | 17.65           | 17.65 |
|            | Contiguous        | CA_41F           | Band 41 | 20M         | 2593    | 40620 | QPSK | 1         | 99      | Band 41 | 20M         | 2612.8  | 40818   | Band 41 | 20M         | 2632.6  | 41016   | Band 41 | 20M         | 2652.4  | 41214   | Band 41 | 20M         | 2672.2  | 41412           | 17.58           | 17.65 |



**<Top Antenna--Reduced Power Mode for Hotspot On>**

**<Two Carrier power verification>**

| Configure  |                | CA List    | PCC              |       |                |         |      |     |              | SCC     |       |                |         | Power              |                    |
|------------|----------------|------------|------------------|-------|----------------|---------|------|-----|--------------|---------|-------|----------------|---------|--------------------|--------------------|
|            |                |            | LTE              | BW    | UL             | UL      | Mod. | UL# | UL           | LTE     | BW    | DL             | DL      | With CA            | Without CA         |
|            |                |            | Band             | (MHz) | Freq.<br>(MHz) | Channel |      | RB  | RB<br>Offset | Band    | (MHz) | Freq.<br>(MHz) | Channel | Tx. Power<br>(dBm) | Tx. Power<br>(dBm) |
| Inter-Band |                | CA_5A-48A  | Band 5           | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | 21.55              | 21.61              |
|            |                | CA_26A-41A | Band 26          | 15M   | 831.5          | 26865   | QPSK | 1   | 0            | Band 41 | 20M   | 2593           | 40620   | 20.69              | 20.78              |
|            |                | CA_41A-48A | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 48 | 20M   | 3560           | 55340   | 18.25              | 18.29              |
|            |                |            | Band 41(4*4MIMO) | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 48 | 20M   | 3560           | 55340   | 18.21              | 18.29              |
|            |                |            | Band 48          | 20M   | 3609           | 55830   | QPSK | 1   | 99           | Band 41 | 20M   | 2593           | 40620   | 22.39              | 22.43              |
| Intra-Band | Contiguous     | CA_5B      | Band 5           | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 5  | 10M   | 883.9          | 2549    | 21.56              | 21.61              |
|            |                | CA_7C      | Band 7           | 20M   | 2560           | 21350   | QPSK | 1   | 0            | Band 7  | 20M   | 2660.2         | 3152    | 16.26              | 16.35              |
|            |                | CA_38C     | Band 38          | 20M   | 2580           | 37850   | QPSK | 1   | 99           | Band 38 | 20M   | 2599.8         | 38048   | 18.13              | 18.18              |
|            | Non-Contiguous | CA_41A-41A | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 41 | 5M    | 2687.5         | 41565   | 18.21              | 18.29              |

**<Three Carrier power verification>**

| Configure  |                | PCC     |       |                |         |      |     |              | SCC1    |       |                |         | SCC2    |       |                |         | Power              |                    |
|------------|----------------|---------|-------|----------------|---------|------|-----|--------------|---------|-------|----------------|---------|---------|-------|----------------|---------|--------------------|--------------------|
|            |                | LTE     | BW    | UL             | UL      | Mod. | UL# | UL           | LTE     | BW    | DL             | DL      | LTE     | BW    | DL             | DL      | With CA            | Without CA         |
|            |                | Band    | (MHz) | Freq.<br>(MHz) | Channel |      | RB  | RB<br>Offset | Band    | (MHz) | Freq.<br>(MHz) | Channel | Band    | (MHz) | Freq.<br>(MHz) | Channel | Tx. Power<br>(dBm) | Tx. Power<br>(dBm) |
| Inter-Band | CA_2A-4A-5A    | Band 5  | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 2  | 20M   | 1960           | 900     | Band 4  | 20M   | 2132.5         | 2175    | 21.56              | 21.61              |
|            | CA_2A-4A-12A   | Band 12 | 10M   | 707.5          | 23095   | QPSK | 1   | 0            | Band 2  | 20M   | 1960           | 900     | Band 4  | 20M   | 2132.5         | 2175    | 20.44              | 20.46              |
|            | CA_2A-4A-13A   | Band 13 | 10M   | 782            | 23230   | QPSK | 1   | 0            | Band 2  | 20M   | 1960           | 900     | Band 4  | 20M   | 2132.5         | 2175    | 20.11              | 20.12              |
|            | CA_2A-4A-71A   | Band 71 | 20M   | 683            | 133322  | QPSK | 1   | 0            | Band 2  | 20M   | 1960           | 900     | Band 4  | 20M   | 2132.5         | 2175    | 22.42              | 22.47              |
|            | CA_2A-5A-30A   | Band 5  | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 9820    | Band 2  | 20M   | 1960           | 900     | 21.6               | 21.61              |
|            | CA_2A-12A-30A  | Band 12 | 10M   | 707.5          | 23095   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 9820    | Band 2  | 20M   | 1960           | 900     | 20.39              | 20.46              |
|            | CA_4A-5A-30A   | Band 5  | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 9820    | Band 4  | 20M   | 2132.5         | 2175    | 21.55              | 21.61              |
|            | CA_4A-7A-12A   | Band 12 | 10M   | 707.5          | 23095   | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 7  | 20M   | 2655           | 3100    | 20.33              | 20.46              |
|            | CA_4A-12A-30A  | Band 12 | 10M   | 707.5          | 23095   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 2355    | 2355    | 2355  | 2132.5         | 2175    | 20.36              | 20.46              |
|            | CA_5A-30A-66A  | Band 5  | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 9820    | Band 66 | 20M   | 2155           | 66886   | 21.45              | 21.61              |
|            | CA_12A-30A-66A | Band 12 | 10M   | 707.5          | 23095   | QPSK | 1   | 0            | Band 30 | 10M   | 2355           | 9820    | Band 66 | 20M   | 2155           | 66886   | 20.41              | 20.46              |

| Configure            |              | PCC              |       |                |         |      |     |              | SCC1    |       |                |         | SCC2    |       |                |         | Power              |                    |
|----------------------|--------------|------------------|-------|----------------|---------|------|-----|--------------|---------|-------|----------------|---------|---------|-------|----------------|---------|--------------------|--------------------|
|                      |              | LTE              | BW    | UL             | UL      | Mod. | UL# | UL           | LTE     | BW    | DL             | DL      | LTE     | BW    | DL             | DL      | With CA            | Without CA         |
|                      |              | Band             | (MHz) | Freq.<br>(MHz) | Channel |      | RB  | RB<br>Offset | Band    | (MHz) | Freq.<br>(MHz) | Channel | Band    | (MHz) | Freq.<br>(MHz) | Channel | Tx. Power<br>(dBm) | Tx. Power<br>(dBm) |
| Inter-Band           | CA_2A-2A-71A | Band 71          | 20M   | 683            | 133322  | QPSK | 1   | 0            | Band 2  | 20M   | 1960           | 900     | Band 2  | 5M    | 1987.5         | 1175    | 22.41              | 22.47              |
|                      | CA_4A-4A-5A  | Band 5           | 10M   | 829            | 20450   | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 4  | 5M    | 2152.5         | 2375    | 21.53              | 21.61              |
|                      | CA_4A-4A-71A | Band 71          | 20M   | 683            | 133322  | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 4  | 5M    | 2152.5         | 2375    | 22.41              | 22.47              |
|                      | CA_4A-4A-12A | Band 12          | 10M   | 707.5          | 23095   | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 4  | 5M    | 2152.5         | 2375    | 20.4               | 20.46              |
|                      | CA_4A-4A-13A | Band 13          | 10M   | 782            | 23230   | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 4  | 5M    | 2152.5         | 2375    | 20.06              | 20.12              |
| Intra-Non-Contiguous | CA_48C-48A   | Band 48          | 20M   | 3609           | 55830   | QPSK | 1   | 99           | Band 48 | 20M   | 3628.8         | 56028   | Band 48 | 20M   | 3560           | 55340   | 22.41              | 22.43              |
|                      | CA_41A-41C   | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 41 | 5M    | 2687.5         | 41565   | Band 41 | 20M   | 2675.8         | 41448   | 18.16              | 18.29              |
|                      |              | Band 41(4*4MIMO) | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 41 | 5M    | 2687.5         | 41565   | Band 41 | 20M   | 2675.8         | 41448   | 18.19              | 18.29              |
|                      |              | Band 41          | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 41 | 20M   | 2612.8         | 40818   | Band 41 | 5M    | 2687.5         | 41565   | 18.22              | 18.29              |
|                      |              | Band 41(4*4MIMO) | 20M   | 2593           | 40620   | QPSK | 1   | 99           | Band 41 | 20M   | 2612.8         | 40818   | Band 41 | 5M    | 2687.5         | 41565   | 18.21              | 18.29              |



<Four Carrier power verification>

| Configure  |                |                   | PCC              |       |             |         |      |     |           | SCC1    |       |             |         | SCC2    |       |             |         | SCC3    |       |             |         | Power           |                 |
|------------|----------------|-------------------|------------------|-------|-------------|---------|------|-----|-----------|---------|-------|-------------|---------|---------|-------|-------------|---------|---------|-------|-------------|---------|-----------------|-----------------|
|            |                |                   | LTE              | BW    | UL          | UL      |      | UL# | UL        | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | With CA         | Without CA      |
|            |                |                   | Band             | (MHz) | Freq. (MHz) | Channel | Mod. | RB  | RB Offset | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |
| Inter-Band |                | CA_2A-2A-5A-66A   | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 66 | 5M    | 2197.5      | 67311   | 19.08           | 19.17           |
|            |                | CA_2A-2A-13A-66A  | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 66 | 5M    | 2197.5      | 67311   | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 20.63           | 20.68           |
|            |                | CA_2A-4A-7A-7A    | Band 7           | 20M   | 2560        | 21350   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 4  | 20M   | 2132.5      | 2175    | Band 7  | 5M    | 2622.5      | 2775    | 14.80           | 14.87           |
|            |                | CA_2A-5A-66A-66A  | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 19.15           | 19.17           |
|            |                | CA_2A-5A-66B      | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | 19.08           | 19.17           |
|            |                | CA_2A-13A-66B     | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 66 | 15M   | 2155        | 66886   | Band 66 | 5M    | 2164.3      | 66979   | Band 2  | 20M   | 1960        | 900     | 20.64           | 20.68           |
|            |                | CA_2A-12A-66A-66A | Band 12          | 10M   | 707.5       | 23095   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 19.89           | 19.94           |
|            |                | CA_2A-13A-66A-66A | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 20.68           | 20.68           |
|            |                | CA_2A-5A-66C      | Band 5           | 10M   | 829         | 20450   | QPSK | 1   | 0         | Band 66 | 20M   | 2174.8      | 67084   | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | 19.16           | 19.17           |
|            |                | CA_2A-12A-66C     | Band 12          | 20M   | 707.5       | 23095   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 19.85           | 19.94           |
|            |                | CA_2A-13A-66C     | Band 13          | 10M   | 782         | 23230   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 20.64           | 20.68           |
|            |                | CA_2A-66C-71A     | Band 71          | 20M   | 683         | 133322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 20M   | 2174.8      | 67084   | 22.39           | 22.47           |
|            |                | CA_2A-66A-66A-71A | Band 71          | 20M   | 1900        | 19100   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 66 | 20M   | 2155        | 66886   | Band 66 | 5M    | 2197.5      | 67311   | 22.39           | 22.47           |
|            |                | CA_2A-2A-66A-71A  | Band 71          | 20M   | 683         | 133322  | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 66 | 20M   | 2155        | 66886   | 22.43           | 22.47           |
|            |                | CA_2A-2A-12A-66A  | Band 12          | 10M   | 707.5       | 23095   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 2  | 5M    | 1987.5      | 1175    | Band 66 | 20M   | 2155        | 66886   | 20.68           | 20.68           |
|            |                | CA_25A-41D        | Band 41          | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 20M   | 2612.8      | 40818   | Band 41 | 20M   | 2632.6      | 41016   | Band 25 | 20M   | 1985        | 8590    | 21.12           | 21.17           |
| Intra-Band | Non-Contiguous | CA_41A-41D        | Band 41          | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 20M   | 2462.2      | 41094   | Band 41 | 20M   | 2660.2      | 41292   | Band 41 | 20M   | 2680        | 41490   | 21.14           | 21.17           |
|            |                |                   | Band 41(4*4MIMO) | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 20M   | 2462.2      | 41094   | Band 41 | 20M   | 2660.2      | 41292   | Band 41 | 20M   | 2680        | 41490   | 21.15           | 21.17           |
|            |                | CA_41C-41C        | Band 41          | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 20M   | 2612.8      | 40818   | Band 41 | 20M   | 2660.2      | 41292   | Band 41 | 20M   | 2680        | 41490   | 21.14           | 21.17           |
|            | Contiguous     | CA_41E            | Band 41          | 20M   | 2593        | 40620   | QPSK | 1   | 99        | Band 41 | 20M   | 2612.8      | 40818   | Band 41 | 20M   | 2632.6      | 41016   | Band 41 | 20M   | 2652.4      | 41214   | 21.16           | 21.17           |

<Five Carrier power verification>

| Configure  |                |            | PCC     |       |       |       |      |         | SCC1  |         |      |        | SCC2  |         |      |        | SCC3  |         |      |        | SCC4  |         |      |        | Power |         |            |           |
|------------|----------------|------------|---------|-------|-------|-------|------|---------|-------|---------|------|--------|-------|---------|------|--------|-------|---------|------|--------|-------|---------|------|--------|-------|---------|------------|-----------|
|            |                |            | LTE     | BW    | UL    | UL    | Mod. | UL#     | UL    | LTE     | BW   | DL     | DL    | LTE     | BW   | DL     | DL    | LTE     | BW   | DL     | DL    | LTE     | BW   | DL     | DL    | With CA | Without CA |           |
|            |                |            | Band    | (MHz) | Freq. |       |      | Channel | RB    | Channel | Band | (MHz)  | Freq. | Channel | Band | (MHz)  | Freq. | Channel | Band | (MHz)  | Freq. | Channel | Band | (MHz)  | Freq. | Channel | Tx. Power  | Tx. Power |
|            |                |            |         |       | (MHz) |       |      | Offset  | (MHz) |         |      |        | (MHz) |         |      |        | (MHz) |         |      |        | (MHz) |         |      |        | (MHz) |         |            |           |
| Intra-Band | Non-Contiguous | CA_41C-41D | Band 41 | 20M   | 2593  | 40620 | QPSK | 1       | 99    | Band 41 | 20M  | 2612.8 | 40818 | Band 41 | 20M  | 2640.4 | 41094 | Band 41 | 20M  | 2660.2 | 41292 | Band 41 | 20M  | 2680   | 41490 | 21.15   | 21.17      |           |
|            |                | CA_41F     | Band 41 | 20M   | 2593  | 40620 | QPSK | 1       | 99    | Band 41 | 20M  | 2612.8 | 40818 | Band 41 | 20M  | 2632.6 | 41016 | Band 41 | 20M  | 2652.4 | 41214 | Band 41 | 20M  | 2672.2 | 41412 | 21.1    | 21.17      |           |
| Inter-Band |                | CA_48E-66A | Band 48 | 20M   | 3609  | 55830 | QPSK | 1       | 99    | Band 66 | 20M  | 2155   | 66886 | Band 48 | 20M  | 3628.8 | 56028 | Band 48 | 20M  | 3648.6 | 56226 | Band 48 | 20M  | 3668.4 | 56424 | 22.43   | 22.43      |           |



<Bottom Antenna--Full Power Mode>

<Two Carrier power verification>

| Configure  |                | CA List    | PCC              |       |        |         |      |     |        | SCC     |       |        |         | Power     |            |
|------------|----------------|------------|------------------|-------|--------|---------|------|-----|--------|---------|-------|--------|---------|-----------|------------|
|            |                |            | LTE              | BW    | UL     | UL      | Mod. | UL# | UL     | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|            |                |            | Band             | (MHz) | Freq.  | Channel |      | RB  | Offset | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|            |                |            |                  |       | (MHz)  |         |      |     |        |         |       | (MHz)  |         | (dBm)     | (dBm)      |
| Inter-Band |                | CA_4A-30A  | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 30 | 10M   | 2355   | 9820    | 22.96     | 23.12      |
|            |                |            | Band 30          | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 4  | 20M   | 2132.5 | 2175    | 22.47     | 22.68      |
|            |                | CA_25A-41A | Band 25          | 20M   | 1860   | 26140   | QPSK | 1   | 0      | Band 41 | 20M   | 2680   | 41490   | 23.03     | 23.09      |
|            |                | CA_25A-46A | Band 25          | 20M   | 1860   | 26140   | QPSK | 1   | 0      | Band 46 | 20M   | 5905   | 54340   | 22.96     | 23.09      |
|            |                |            | Band 25(4*4MIMO) | 20M   | 1860   | 26140   | QPSK | 1   | 0      | Band 46 | 20M   | 5905   | 54340   | 22.93     | 23.09      |
|            |                | CA_41A-48A | Band 41          | 20M   | 2593   | 40620   | QPSK | 1   | 99     | Band 48 | 20M   | 3560   | 55340   | 23.45     | 23.67      |
|            |                |            | Band 41(4*4MIMO) | 20M   | 2593   | 40620   | QPSK | 1   | 99     | Band 48 | 20M   | 3560   | 55340   | 23.41     | 23.67      |
| Intra-Band | Contiguous     | CA_7C      | Band 7           | 20M   | 2560   | 21350   | QPSK | 1   | 0      | Band 7  | 20M   | 2660.2 | 3152    | 23.37     | 23.45      |
|            |                | CA_38C     | Band 38          | 20M   | 2580   | 37850   | QPSK | 1   | 99     | Band 38 | 20M   | 2599.8 | 38048   | 23.42     | 23.50      |
|            | Non-Contiguous | CA_41A-41A | Band 41          | 20M   | 2593   | 40620   | QPSK | 1   | 99     | Band 41 | 5M    | 2687.5 | 41565   | 23.39     | 23.67      |



## &lt;Three Carrier power verification&gt;

| Configure  |                | PCC             |       |        |         |      |     |           | SCC1    |       |             |         | SCC2    |       |             |         | Power           |                 |  |
|------------|----------------|-----------------|-------|--------|---------|------|-----|-----------|---------|-------|-------------|---------|---------|-------|-------------|---------|-----------------|-----------------|--|
|            |                | LTE             | BW    | UL     | UL      | Mod. | UL# | UL        | LTE     | BW    | DL          | DL      | LTE     | BW    | DL          | DL      | With CA         | Without CA      |  |
|            |                | Band            | (MHz) | Freq.  | Channel |      | RB  | RB Offset | Band    | (MHz) | Freq. (MHz) | Channel | Band    | (MHz) | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |  |
|            |                |                 |       | (MHz)  |         |      |     |           |         |       |             |         |         |       |             |         |                 |                 |  |
| Inter-Band | CA_2A-4A-5A    | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 5  | 10M   | 881.5       | 2525    | 22.72           | 22.75           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 5  | 10M   | 881.5       | 2525    | 22.66           | 22.75           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 2  | 20M   | 1960        | 900     | 23.02           | 23.12           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 2  | 20M   | 1960        | 900     | 23.01           | 23.12           |  |
|            | CA_2A-4A-12A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 12 | 10M   | 737.5       | 5095    | 22.7            | 22.75           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 12 | 10M   | 737.5       | 5095    | 22.62           | 22.75           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 12 | 10M   | 737.5       | 5095    | Band 2  | 20M   | 1960        | 900     | 22.97           | 23.12           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 12 | 10M   | 737.5       | 5095    | Band 2  | 20M   | 1960        | 900     | 22.92           | 23.12           |  |
|            | CA_2A-4A-13A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 13 | 10M   | 751         | 5230    | 22.73           | 22.75           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 13 | 10M   | 751         | 5230    | 22.71           | 22.75           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 13 | 10M   | 751         | 5230    | Band 2  | 20M   | 1960        | 900     | 22.92           | 23.12           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 13 | 10M   | 751         | 5230    | Band 2  | 20M   | 1960        | 900     | 22.89           | 23.12           |  |
|            | CA_2A-4A-29A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 29 | 10M   | 722.5       | 9715    | 22.69           | 22.75           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 29 | 10M   | 722.5       | 9715    | 22.65           | 22.75           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 29 | 10M   | 722.5       | 9715    | Band 2  | 20M   | 1960        | 900     | 23.04           | 23.12           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 29 | 10M   | 722.5       | 9715    | Band 2  | 20M   | 1960        | 900     | 23.02           | 23.12           |  |
|            | CA_2A-4A-71A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 71 | 20M   | 637         | 68786   | 22.68           | 22.75           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 4  | 20M   | 2132.5      | 2175    | Band 71 | 20M   | 637         | 68786   | 22.62           | 22.75           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 71 | 20M   | 637         | 68786   | 23.01           | 23.12           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 2  | 20M   | 1960        | 900     | Band 71 | 20M   | 637         | 68786   | 22.98           | 23.12           |  |
|            | CA_2A-5A-30A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 30 | 10M   | 2355        | 9820    | 22.72           | 22.75           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 2  | 20M   | 1960        | 900     | Band 5  | 10M   | 881.5       | 2525    | 22.56           | 22.68           |  |
|            | CA_2A-12A-30A  | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 12 | 10M   | 737.5       | 5095    | Band 30 | 10M   | 2355        | 9820    | 22.71           | 22.75           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 2  | 20M   | 1960        | 900     | Band 12 | 10M   | 737.5       | 5095    | 22.63           | 22.68           |  |
|            | CA_2A-29A-30A  | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0         | Band 29 | 10M   | 722.5       | 9715    | Band 30 | 10M   | 2355        | 9820    | 22.74           | 22.75           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 2  | 20M   | 1960        | 900     | Band 29 | 10M   | 722.5       | 9715    | 22.63           | 22.68           |  |
|            | CA_4A-5A-30A   | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 30 | 10M   | 2355        | 9820    | 22.96           | 23.12           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 4  | 20M   | 2132.5      | 2175    | Band 5  | 10M   | 881.5       | 2525    | 22.66           | 22.68           |  |
|            | CA_4A-7A-12A   | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 7  | 20M   | 2655        | 3100    | Band 12 | 5M    | 737.5       | 5095    | 23.1            | 23.12           |  |
|            |                | Band 7          | 20M   | 2560   | 21350   | QPSK | 1   | 0         | Band 12 | 5M    | 737.5       | 5095    | Band 4  | 20M   | 2132.5      | 2175    | 23.14           | 23.45           |  |
|            | CA_4A-12A-30A  | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 12 | 10M   | 737.5       | 5095    | Band 30 | 10M   | 2355        | 9820    | 22.99           | 23.12           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 4  | 20M   | 2132.5      | 2175    | Band 12 | 10M   | 737.5       | 5095    | 22.64           | 22.68           |  |
|            | CA_4A-29A-30A  | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0         | Band 29 | 10M   | 722.5       | 9715    | Band 30 | 10M   | 2355        | 9820    | 22.96           | 23.12           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 4  | 20M   | 2132.5      | 2175    | Band 29 | 10M   | 722.5       | 9715    | 22.63           | 22.68           |  |
|            | CA_5A-30A-66A  | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 66 | 20M   | 2155        | 66886   | Band 5  | 10M   | 881.5       | 2525    | 22.65           | 22.68           |  |
|            |                | Band 66         | 20M   | 1745   | 132322  | QPSK | 1   | 0         | Band 5  | 10M   | 881.5       | 2525    | Band 30 | 10M   | 2355        | 9820    | 23              | 23.13           |  |
|            | CA_12A-30A-66A | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25        | Band 66 | 20M   | 2155        | 66886   | Band 12 | 10M   | 737.5       | 5095    | 22.59           | 22.68           |  |
|            |                | Band 66         | 20M   | 1745   | 132322  | QPSK | 1   | 0         | Band 30 | 10M   | 2355        | 9820    | Band 12 | 10M   | 737.5       | 5095    | 22.99           | 23.13           |  |

| Configure  |               | PCC              |       |        |         |      |        |        | SCC1    |       |        |         | SCC2    |       |        |         | Power     |            |
|------------|---------------|------------------|-------|--------|---------|------|--------|--------|---------|-------|--------|---------|---------|-------|--------|---------|-----------|------------|
|            |               | LTE              | BW    | UL     | UL      | Mod. | UL#    | UL     | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|            |               | Band             | (MHz) | Freq.  | Channel |      | RB     | RB     | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|            |               |                  |       | (MHz)  |         |      | Offset | Offset |         |       | (MHz)  |         |         |       |        |         | (dBm)     | (dBm)      |
| Inter-Band | CA_2A-2A-4A   | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 2  | 20M   | 1980   | 1100    | Band 4  | 20M   | 2132.5 | 2175    | 22.71     | 22.75      |
|            |               | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 2  | 20M   | 1980   | 1100    | Band 4  | 20M   | 2132.5 | 2175    | 22.71     | 22.75      |
|            |               | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | 22.98     | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | 22.98     | 23.12      |
|            | CA_2A-4A-4A   | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 4  | 5M    | 2152.5 | 2375    | 22.73     | 22.75      |
|            |               | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 4  | 5M    | 2152.5 | 2375    | 22.71     | 22.75      |
|            |               | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 2  | 20M   | 1960   | 900     | 22.94     | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 2  | 20M   | 1960   | 900     | 22.92     | 23.12      |
|            | CA_2A-2A-71A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 2  | 20M   | 1980   | 1100    | Band 71 | 20M   | 637    | 68786   | 22.72     | 22.75      |
|            |               | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 2  | 20M   | 1980   | 1100    | Band 71 | 20M   | 637    | 68786   | 22.69     | 22.75      |
|            | CA_2A-7A-7A   | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 22.62     | 22.75      |
|            |               | Band 7           | 20M   | 2560   | 21350   | QPSK | 1      | 0      | Band 7  | 5M    | 2622.5 | 2775    | Band 2  | 20M   | 1960   | 900     | 23.11     | 23.45      |
|            | CA_2A-46A-46A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5905   | 54340   | 22.69     | 22.75      |
|            | CA_2A-48A-48A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 48 | 20M   | 3560   | 55340   | Band 48 | 20M   | 3690   | 56640   | 22.71     | 22.75      |
|            |               | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 48 | 20M   | 3560   | 55340   | Band 48 | 20M   | 3690   | 56640   | 22.66     | 22.75      |
|            | CA_2A-48A-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 48 | 20M   | 3560   | 55340   | Band 66 | 5M    | 2197.5 | 67311   | 22.71     | 22.75      |
|            |               | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 48 | 20M   | 3560   | 55340   | Band 66 | 5M    | 2197.5 | 67311   | 22.69     | 22.75      |
|            |               | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0      | Band 48 | 20M   | 3560   | 55340   | Band 2  | 20M   | 1960   | 900     | 22.97     | 23.13      |
|            |               | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0      | Band 48 | 20M   | 3560   | 55340   | Band 2  | 20M   | 1960   | 900     | 22.91     | 23.13      |
|            | CA_25A-41C    | Band 25          | 20M   | 1860   | 26140   | QPSK | 1      | 0      | Band 41 | 20M   | 2660.2 | 41292   | Band 41 | 20M   | 2680   | 41490   | 23.02     | 23.09      |
|            | CA_4A-4A-5A   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 5  | 10M   | 881.5  | 2525    | 23.05     | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 5  | 10M   | 881.5  | 2525    | 23.01     | 23.12      |
|            | CA_4A-4A-7A   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 7  | 20M   | 2655   | 3100    | 23.01     | 23.12      |
|            |               | Band 7           | 20M   | 2560   | 21350   | QPSK | 1      | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 4  | 5M    | 2152.5 | 2375    | 23.31     | 23.45      |
|            | CA_4A-4A-71A  | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 71 | 20M   | 637    | 68786   | 22.98     | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 71 | 20M   | 637    | 68786   | 22.95     | 23.12      |
|            | CA_4A-4A-12A  | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 12 | 10M   | 737.5  | 5095    | 23        | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 12 | 10M   | 737.5  | 5095    | 22.95     | 23.12      |
|            | CA_4A-4A-13A  | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 13 | 10M   | 751    | 5230    | 23.04     | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 13 | 10M   | 751    | 5230    | 23.02     | 23.12      |
|            | CA_4A-46A-46A | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5905   | 54340   | 23        | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5905   | 54340   | 22.95     | 23.12      |
|            | CA_2A-48C     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 48 | 20M   | 3615.1 | 55891   | Band 48 | 20M   | 3634.9 | 56089   | 22.69     | 22.75      |
|            |               | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0      | Band 48 | 20M   | 3615.1 | 55891   | Band 48 | 20M   | 3634.9 | 56089   | 22.61     | 22.75      |
|            | CA_4A-46C     | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 46 | 20M   | 5540.2 | 50692   | Band 46 | 20M   | 5560   | 50890   | 23.06     | 23.12      |
|            |               | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0      | Band 46 | 20M   | 5540.2 | 50692   | Band 46 | 20M   | 5560   | 50890   | 23.01     | 23.12      |



|            |                |                  |                  |      |        |        |      |   |         |         |        |        |         |         |        |        |       |       |       |
|------------|----------------|------------------|------------------|------|--------|--------|------|---|---------|---------|--------|--------|---------|---------|--------|--------|-------|-------|-------|
| Inter-Band | CA_48A-48A-66A | Band 66          | 20M              | 1745 | 132322 | QPSK   | 1    | 0 | Band 48 | 20M     | 3560   | 55340  | Band 48 | 20M     | 3690   | 56640  | 23.07 | 23.13 |       |
|            |                | Band 66(4*4MIMO) | 20M              | 1745 | 132322 | QPSK   | 1    | 0 | Band 48 | 20M     | 3560   | 55340  | Band 48 | 20M     | 3690   | 56640  | 23.01 | 23.13 |       |
|            | CA_48C-66A     | Band 66          | 20M              | 1745 | 132322 | QPSK   | 1    | 0 | Band 48 | 20M     | 3670.2 | 56442  | Band 48 | 20M     | 3690   | 56640  | 23.11 | 23.13 |       |
|            |                | Band 66(4*4MIMO) | 20M              | 1745 | 132322 | QPSK   | 1    | 0 | Band 48 | 20M     | 3670.2 | 56442  | Band 48 | 20M     | 3690   | 56640  | 23.08 | 23.13 |       |
|            | CA_25A-25A-26A | Band 25          | 20M              | 1860 | 26140  | QPSK   | 1    | 0 | Band 25 | 5M      | 1992.5 | 8665   | Band 26 | 5M      | 876.5  | 8865   | 22.91 | 23.09 |       |
|            |                | Band 25(4*4MIMO) | 20M              | 1860 | 26140  | QPSK   | 1    | 0 | Band 25 | 5M      | 1992.5 | 8665   | Band 26 | 5M      | 876.5  | 8865   | 22.89 | 23.09 |       |
|            | CA_25A-46C     | Band 25          | 20M              | 1860 | 26140  | QPSK   | 1    | 0 | Band 46 | 20M     | 5585.5 | 54142  | Band 46 | 20M     | 5605.3 | 54340  | 22.92 | 23.09 |       |
|            |                | Band 25(4*4MIMO) | 20M              | 1860 | 26140  | QPSK   | 1    | 0 | Band 46 | 20M     | 5585.5 | 54142  | Band 46 | 20M     | 5605.3 | 54340  | 22.88 | 23.09 |       |
|            | CA_2A-2A-46A   | Band 2           | 20M              | 1860 | 18700  | QPSK   | 1    | 0 | Band 2  | 5M      | 1987.5 | 1175   | Band 46 | 20M     | 5540   | 50690  | 22.64 | 22.75 |       |
|            |                | Band 2(4*4MIMO)  | 20M              | 1860 | 18700  | QPSK   | 1    | 0 | Band 2  | 5M      | 1987.5 | 1175   | Band 46 | 20M     | 5540   | 50690  | 22.61 | 22.75 |       |
| Intra-Band | Non-Contiguous | CA_66A-66C       | Band 66          | 20M  | 1745   | 132322 | QPSK | 1 | 0       | Band 66 | 20M    | 2185   | 67186   | Band 66 | 5M     | 2196.7 | 67303 | 22.89 | 23.13 |
|            |                |                  | Band 66(4*4MIMO) | 20M  | 1745   | 132322 | QPSK | 1 | 0       | Band 66 | 20M    | 2185   | 67186   | Band 66 | 5M     | 2196.7 | 67303 | 22.85 | 23.13 |
|            |                |                  | Band 66          | 20M  | 1745   | 132322 | QPSK | 1 | 0       | Band 66 | 20M    | 2178.3 | 67119   | Band 66 | 5M     | 2190   | 67236 | 22.99 | 23.13 |
|            |                |                  | Band 66(4*4MIMO) | 20M  | 1745   | 132322 | QPSK | 1 | 0       | Band 66 | 20M    | 2178.3 | 67119   | Band 66 | 5M     | 2190   | 67236 | 22.94 | 23.13 |
|            |                | CA_41A-41C       | Band 41          | 20M  | 2593   | 40620  | QPSK | 1 | 99      | Band 41 | 5M     | 2687.5 | 41565   | Band 41 | 20M    | 2675.8 | 41448 | 23.49 | 23.67 |
|            |                |                  | Band 41(4*4MIMO) | 20M  | 2593   | 40620  | QPSK | 1 | 99      | Band 41 | 5M     | 2687.5 | 41565   | Band 41 | 20M    | 2675.8 | 41448 | 23.42 | 23.67 |
|            |                |                  | Band 41          | 20M  | 2593   | 40620  | QPSK | 1 | 99      | Band 41 | 20M    | 2612.8 | 40818   | Band 41 | 5M     | 2687.5 | 41565 | 23.58 | 23.67 |
|            |                |                  | Band 41(4*4MIMO) | 20M  | 2593   | 40620  | QPSK | 1 | 99      | Band 41 | 20M    | 2612.8 | 40818   | Band 41 | 5M     | 2687.5 | 41565 | 23.55 | 23.67 |
|            |                |                  |                  |      |        |        |      |   |         |         |        |        |         |         |        |        |       |       |       |



## &lt;Four Carrier power verification&gt;

| Configure  |                   | PCC              |       |        |         |      |     |        | SCC1    |       |        |         | SCC2    |       |        |         | SCC3    |       |        |         | Power     |            |
|------------|-------------------|------------------|-------|--------|---------|------|-----|--------|---------|-------|--------|---------|---------|-------|--------|---------|---------|-------|--------|---------|-----------|------------|
|            |                   | LTE              | BW    | UL     | UL      | Mod. | UL# | UL     | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|            |                   | Band             | (MHz) | Freq.  | Channel |      | RB  | Offset | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|            |                   |                  |       | (MHz)  |         |      |     |        |         |       | (MHz)  |         |         |       | (MHz)  |         |         |       | (MHz)  |         | (dBm)     | (dBm)      |
| Inter-Band | CA_2A-2A-5A-66A   | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 5M    | 2197.5 | 67311   | 22.65     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | 23.06     | 23.13      |
|            | CA_2A-2A-13A-66A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 1175    | Band 13 | 10M   | 751    | 5230    | Band 66 | 5M    | 2197.5 | 67311   | 22.73     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 13 | 10M   | 751    | 5230    | 23.11     | 23.13      |
|            | CA_2A-4A-7A-7A    | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 22.70     | 22.75      |
|            |                   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 23.03     | 23.12      |
|            |                   | Band 7           | 20M   | 2560   | 21350   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 4  | 20M   | 2132.5 | 2175    | Band 7  | 5M    | 2622.5 | 2775    | 23.37     | 23.45      |
|            | CA_2A-5A-66A-66A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 22.71     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 5M    | 2197.5 | 67311   | 23.03     | 23.13      |
|            | CA_2A-5A-66B      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 22.68     | 22.75      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 22.71     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 23.11     | 23.13      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 23.12     | 23.13      |
|            | CA_2A-13A-66B     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 22.72     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | 23.05     | 23.13      |
|            | CA_2A-12A-66A-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 22.72     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 5M    | 2197.5 | 67311   | 23.03     | 23.13      |
|            | CA_2A-13A-66A-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 22.69     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 5M    | 2197.5 | 67311   | 23.04     | 23.13      |
|            | CA_2A-2A-66C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 22.66     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 66 | 20M   | 2174.8 | 67084   | 23.06     | 23.13      |
|            | CA_2A-2A-46C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 46 | 20M   | 5585.5 | 54142   | Band 46 | 20M   | 5605.3 | 54340   | 22.65     | 22.75      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 46 | 20M   | 5585.5 | 54142   | Band 46 | 20M   | 5605.3 | 54340   | 22.69     | 22.75      |
|            | CA_2A-5A-66C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 20M   | 2174.8 | 67084   | 22.66     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | 23.1      | 23.13      |
|            | CA_2A-12A-66C     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 22.68     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2174.8 | 67084   | 23.09     | 23.13      |
|            | CA_2A-13A-66C     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 22.75     | 22.75      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 22.69     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2174.8 | 67084   | 23.04     | 23.13      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2174.8 | 67084   | 23.07     | 23.13      |
|            | CA_2A-66C-71A     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 22.75     | 22.75      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 22.66     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 23.05     | 23.13      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 23.06     | 23.13      |
|            | CA_2A-66A-66A-71A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 22.7      | 22.75      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 22.72     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 23.07     | 23.13      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 23.08     | 23.13      |
|            | CA_2A-2A-66A-71A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1960   | 900     | Band 66 | 20M   | 2155   | 66886   | Band 71 | 20M   | 637    | 68786   | 22.66     | 22.75      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1960   | 900     | Band 66 | 20M   | 2155   | 66886   | Band 71 | 20M   | 637    | 68786   | 22.71     | 22.75      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 71 | 20M   | 637    | 68786   | 23.06     | 23.13      |



# FCC SAR Test Report

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|                          |                  |                  |     |        |        |      |   |    |         |     |        |       |         |     |        |       |         |     |        |       |       |       |
|--------------------------|------------------|------------------|-----|--------|--------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
| Intra-Band<br>Contiguous | CA_CA_4A-46D     | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 23.05 | 23.13 |
|                          |                  | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 23.04 | 23.12 |
|                          | CA_2A-2A-12A-66A | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 23.04 | 23.12 |
|                          |                  | Band 2           | 20M | 1900   | 19100  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 12 | 10M | 737.5  | 5095  | Band 66 | 20M | 2155   | 66886 | 22.68 | 22.75 |
|                          | CA_2A-2A-66A-66A | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 23.08 | 23.13 |
|                          |                  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 22.69 | 22.75 |
|                          |                  | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 5M  | 2197.5 | 67311 | 23.05 | 23.13 |
|                          |                  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 22.71 | 22.75 |
|                          |                  | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 22.72 | 22.75 |
|                          |                  | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 23.06 | 23.13 |
|                          |                  | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 23.07 | 23.13 |
|                          |                  | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 23.07 | 23.09 |
|                          | CA_25A-41D       | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 25 | 20M | 1985   | 8590  | 23.63 | 23.67 |
|                          |                  | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 23.66 | 23.67 |
|                          | CA_41A-41D       | Band 41(4*4MIMO) | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 23.60 | 23.67 |
|                          |                  | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 23.67 | 23.67 |
|                          | CA_41C-41C       | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 23.1  | 23.12 |
|                          |                  | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 23.06 | 23.12 |
|                          |                  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 22.67 | 22.75 |
|                          |                  | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 22.65 | 22.75 |
|                          |                  | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 23.11 | 23.13 |
|                          |                  | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 23.08 | 23.13 |
|                          |                  | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 23.12 | 23.13 |
|                          |                  | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 23.09 | 23.13 |
|                          |                  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 22.66 | 22.75 |
|                          |                  | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 22.71 | 22.75 |
|                          | CA_25A-46D       | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 22.99 | 23.09 |
|                          |                  | Band 25(4*4MIMO) | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 23    | 23.09 |
|                          | CA_48D-66A       | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 23.1  | 23.13 |
|                          |                  | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 23.11 | 23.13 |
|                          |                  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 22.74 | 22.75 |
|                          |                  | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 22.72 | 22.75 |
|                          |                  | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 22.93 | 23.12 |
|                          |                  | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 22.91 | 23.12 |
|                          | CA_41E           | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 41 | 20M | 2652.4 | 41214 | 23.64 | 23.67 |



**<Five Carrier power verification>**

| Configure             |                   | PCC              |       |        |         |      |        | SCC1 |         |       |         | SCC2  |         |       |         | SCC3  |         |       |         | SCC4  |         |       |         | Power     |            |       |
|-----------------------|-------------------|------------------|-------|--------|---------|------|--------|------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-----------|------------|-------|
|                       |                   | LTE              | BW    | UL     | UL      | UL#  | UL     | LTE  | BW      | DL    | DL      | LTE   | BW      | DL    | DL      | LTE   | BW      | DL    | DL      | LTE   | BW      | DL    | DL      | With CA   | Without CA |       |
|                       |                   | Band             | (MHz) | Freq.  | Channel | Mod. | RB     | Band | (MHz)   | Freq. | Channel | Band  | (MHz)   | Freq. | Channel | Band  | (MHz)   | Freq. | Channel | Band  | (MHz)   | Freq. | Channel | Tx. Power | Tx. Power  |       |
|                       |                   |                  |       | (MHz)  |         |      | Offset |      |         | (MHz) |         |       |         | (MHz) |         |       |         | (MHz) |         |       |         |       | (MHz)   |           | (dBm)      | (dBm) |
| Inter-Band            | CA_2A-46A-46C-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 66 | 20M   | 2155    | 66886 | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5885.2  | 54142 | Band 46 | 20M   | 5905    | 54340     | 22.74      | 22.75 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 66 | 20M   | 2155    | 66886 | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5885.2  | 54142 | Band 46 | 20M   | 5905    | 54340     | 22.66      | 22.75 |
|                       |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 2  | 20M   | 1960    | 900   | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5540.2  | 50692 | Band 46 | 20M   | 5560    | 50890     | 23.08      | 23.13 |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 2  | 20M   | 1960    | 900   | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5540.2  | 50692 | Band 46 | 20M   | 5560    | 50890     | 23.05      | 23.13 |
|                       | CA_2A-2A-46D      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 2  | 5M    | 1932.5  | 625   | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 22.71      | 22.75 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 2  | 5M    | 1932.5  | 625   | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 22.7       | 22.75 |
|                       | CA_2A-46E         | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 46 | 20M   | 5520    | 50490 | Band 46 | 20M   | 5539.8  | 50688 | Band 46 | 20M   | 5559.9  | 50889 | Band 46 | 20M   | 5580    | 50190     | 22.7       | 22.75 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 46 | 20M   | 5520    | 50490 | Band 46 | 20M   | 5539.8  | 50688 | Band 46 | 20M   | 5559.9  | 50889 | Band 46 | 20M   | 5580    | 50190     | 22.66      | 22.75 |
|                       | CA_2A-46A-46D     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 22.66      | 22.75 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 22.68      | 22.75 |
|                       | CA_4A-46A-46D     | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0    | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 23.11      | 23.12 |
|                       |                   | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1      | 0    | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 23.05      | 23.12 |
|                       | CA_46A-46D-66A    | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 23.1       | 23.13 |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 46 | 20M   | 5160    | 46890 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 23.05      | 23.13 |
|                       | CA_2A-46D-66A     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 66 | 20M   | 2155    | 66886 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 22.7       | 22.75 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0    | Band 66 | 20M   | 2155    | 66886 | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 22.75      | 22.75 |
|                       |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 2  | 20M   | 1960    | 900   | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 23.12      | 23.13 |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 2  | 20M   | 1960    | 900   | Band 46 | 20M   | 5520.2  | 50492 | Band 46 | 20M   | 5540    | 50690 | Band 46 | 20M   | 5559.8  | 50888     | 23.08      | 23.13 |
|                       | CA_41C-41D        | Band 41          | 20M   | 2593   | 40620   | QPSK | 1      | 99   | Band 41 | 20M   | 2612.8  | 40818 | Band 41 | 20M   | 2640.4  | 41094 | Band 41 | 20M   | 2660.2  | 41292 | Band 41 | 20M   | 2680    | 41490     | 23.58      | 23.67 |
|                       | CA_48E-66A        | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 48 | 20M   | 3609    | 55830 | Band 48 | 20M   | 3628.8  | 56028 | Band 48 | 20M   | 3648.6  | 56226 | Band 48 | 20M   | 3668.4  | 56424     | 23.11      | 23.13 |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 48 | 20M   | 3609    | 55830 | Band 48 | 20M   | 3628.8  | 56028 | Band 48 | 20M   | 3648.6  | 56226 | Band 48 | 20M   | 3668.4  | 56424     | 23.13      | 23.13 |
|                       | CA_46E-66A        | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 46 | 20M   | 5520    | 50490 | Band 46 | 20M   | 5539.8  | 50688 | Band 46 | 20M   | 5559.9  | 50889 | Band 46 | 20M   | 5580    | 50190     | 22.99      | 23.13 |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0    | Band 46 | 20M   | 5520    | 50490 | Band 46 | 20M   | 5539.8  | 50688 | Band 46 | 20M   | 5559.9  | 50889 | Band 46 | 20M   | 5580    | 50190     | 22.96      | 23.13 |
| Intra-Band Contiguous | CA_41F            | Band 41          | 20M   | 2593   | 40620   | QPSK | 1      | 99   | Band 41 | 20M   | 2612.8  | 40818 | Band 41 | 20M   | 2632.6  | 41016 | Band 41 | 20M   | 2652.4  | 41214 | Band 41 | 20M   | 2672.2  | 41412     | 23.57      | 23.67 |



**<Bottom Antenna--Reduced Power Mode for Hotspot On>**

**<Two Carrier power verification>**

| Configure      |            | CA List    | PCC              |       |        |         |      |       |        | SCC     |       |        |         | Power     |            |
|----------------|------------|------------|------------------|-------|--------|---------|------|-------|--------|---------|-------|--------|---------|-----------|------------|
|                |            |            | LTE              | BW    | UL     | UL      | Mod. | UL#   | UL     | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|                |            |            | Band             | (MHz) | Freq.  | Channel |      | RB    | RB     | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|                |            |            |                  |       | (MHz)  |         |      |       | Offset |         |       | (MHz)  |         | (dBm)     | (dBm)      |
| Inter-Band     |            | CA_4A-30A  | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1     | 0      | Band 30 | 10M   | 2355   | 9820    | 20.56     | 20.67      |
|                |            |            | Band 30          | 10M   | 2310   | 27710   | QPSK | 1     | 25     | Band 4  | 20M   | 2132.5 | 2175    | 21.53     | 21.60      |
|                |            | CA_25A-41A | Band 25          | 20M   | 1860   | 26140   | QPSK | 1     | 0      | Band 41 | 20M   | 2680   | 41490   | 20.11     | 20.18      |
|                |            | CA_25A-46A | Band 25          | 20M   | 1860   | 26140   | QPSK | 1     | 0      | Band 46 | 20M   | 5905   | 54340   | 20.11     | 20.18      |
|                |            |            | Band 25(4*4MIMO) | 20M   | 1860   | 26140   | QPSK | 1     | 0      | Band 46 | 20M   | 5905   | 54340   | 20.09     | 20.18      |
|                |            | CA_41A-48A | Band 41          | 20M   | 2593   | 40620   | QPSK | 1     | 99     | Band 48 | 20M   | 3560   | 55340   | 21.62     | 21.65      |
|                |            |            | Band 41(4*4MIMO) | 20M   | 2593   | 40620   | QPSK | 1     | 99     | Band 48 | 20M   | 3560   | 55340   | 21.58     | 21.65      |
|                |            | Intra-Band | Contiguous       | CA_7C | Band 7 | 20M     | 2560 | 21350 | QPSK   | 1       | 0     | Band 7 | 20M     | 2660.2    | 3152       |
| CA_38C         | Band 38    |            |                  | 20M   | 2580   | 37850   | QPSK | 1     | 99     | Band 38 | 20M   | 2599.8 | 38048   | 21.51     | 21.55      |
| Non-Contiguous | CA_41A-41A |            | Band 41          | 20M   | 2593   | 40620   | QPSK | 1     | 99     | Band 41 | 5M    | 2687.5 | 41565   | 21.62     | 21.65      |



## &lt;Three Carrier power verification&gt;

| Configure  |                | PCC             |       |        |         |      |     |        | SCC1    |       |        |         | SCC2    |       |        |         | Power     |            |  |
|------------|----------------|-----------------|-------|--------|---------|------|-----|--------|---------|-------|--------|---------|---------|-------|--------|---------|-----------|------------|--|
|            |                | LTE             | BW    | UL     | UL      | Mod. | UL# | UL     | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA   | Without CA |  |
|            |                | Band            | (MHz) | Freq.  | Channel |      | RB  | Offset | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |  |
|            |                |                 |       |        |         |      |     |        |         |       |        |         |         |       |        |         | (dBm)     | (dBm)      |  |
| Inter-Band | CA_2A-4A-5A    | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 19.93     | 19.97      |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 19.91     | 19.97      |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 2  | 20M   | 1960   | 900     | 20.61     | 20.67      |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 2  | 20M   | 1960   | 900     | 20.55     | 20.67      |  |
|            | CA_2A-4A-12A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 19.9      | 19.97      |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 19.85     | 19.97      |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 2  | 20M   | 1960   | 900     | 20.62     | 20.67      |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 2  | 20M   | 1960   | 900     | 20.59     | 20.67      |  |
|            | CA_2A-4A-13A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 13 | 10M   | 751    | 5230    | 19.92     | 19.97      |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 13 | 10M   | 751    | 5230    | 19.87     | 19.97      |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 2  | 20M   | 1960   | 900     | 20.62     | 20.67      |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 2  | 20M   | 1960   | 900     | 20.56     | 20.67      |  |
|            | CA_2A-4A-29A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 19.89     | 19.97      |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 19.83     | 19.97      |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 2  | 20M   | 1960   | 900     | 20.58     | 20.67      |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 2  | 20M   | 1960   | 900     | 20.56     | 20.67      |  |
|            | CA_2A-4A-71A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 71 | 20M   | 637    | 68786   | 19.91     | 19.97      |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 71 | 20M   | 637    | 68786   | 19.88     | 19.97      |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 71 | 20M   | 637    | 68786   | 20.61     | 20.67      |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 71 | 20M   | 637    | 68786   | 20.56     | 20.67      |  |
|            | CA_2A-5A-30A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 19.93     | 19.97      |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 21.54     | 21.6       |  |
|            | CA_2A-12A-30A  | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 30 | 10M   | 2355   | 9820    | 19.94     | 19.97      |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | 21.52     | 21.6       |  |
|            | CA_2A-29A-30A  | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 30 | 10M   | 2355   | 9820    | 19.91     | 19.97      |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 2  | 20M   | 1960   | 900     | Band 29 | 10M   | 722.5  | 9715    | 21.54     | 21.6       |  |
|            | CA_4A-5A-30A   | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 20.63     | 20.67      |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 21.56     | 21.6       |  |
|            | CA_4A-7A-12A   | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 7  | 20M   | 2655   | 3100    | Band 12 | 5M    | 737.5  | 5095    | 20.63     | 20.67      |  |
|            |                | Band 7          | 20M   | 2560   | 21350   | QPSK | 1   | 0      | Band 12 | 5M    | 737.5  | 5095    | Band 4  | 20M   | 2132.5 | 2175    | 21.37     | 21.43      |  |
|            | CA_4A-12A-30A  | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 30 | 10M   | 2355   | 9820    | 20.62     | 20.67      |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 21.58     | 21.6       |  |
|            | CA_4A-29A-30A  | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 30 | 10M   | 2355   | 9820    | 20.62     | 20.67      |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 21.55     | 21.6       |  |
|            | CA_30A-66A-5A  | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 66 | 20M   | 2155   | 66886   | Band 5  | 10M   | 881.5  | 2525    | 21.56     | 21.6       |  |
|            |                | Band 66         | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 20.74     | 20.8       |  |
|            | CA_12A-30A-66A | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 66 | 20M   | 2155   | 66886   | Band 12 | 10M   | 737.5  | 5095    | 21.5      | 21.6       |  |
|            |                | Band 66         | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 30 | 10M   | 2355   | 9820    | Band 12 | 10M   | 737.5  | 5095    | 20.71     | 20.8       |  |



| Configure  |                | PCC              |       |                |         |      |     |              | SCC1    |       |                |         | SCC2    |       |                |         | Power     |            |  |
|------------|----------------|------------------|-------|----------------|---------|------|-----|--------------|---------|-------|----------------|---------|---------|-------|----------------|---------|-----------|------------|--|
|            |                | LTE              | BW    | UL             | UL      | Mod. | UL# | UL           | LTE     | BW    | DL             | DL      | LTE     | BW    | DL             | DL      | With CA   | Without CA |  |
|            |                | Band             | (MHz) | Freq.<br>(MHz) | Channel |      | RB  | RB<br>Offset | Band    | (MHz) | Freq.<br>(MHz) | Channel | Band    | (MHz) | Freq.<br>(MHz) | Channel | Tx. Power | Tx. Power  |  |
|            |                |                  |       |                |         |      |     |              |         |       |                |         |         |       |                |         | (dBm)     | (dBm)      |  |
| Inter-Band | CA_2A-2A-4A    | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 2  | 5M    | 1932.5         | 625     | Band 4  | 20M   | 2132.5         | 2175    | 19.89     | 19.97      |  |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 2  | 5M    | 1932.5         | 625     | Band 4  | 20M   | 2132.5         | 2175    | 19.82     | 19.97      |  |
|            |                | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 2  | 20M   | 1960           | 900     | Band 2  | 5M    | 1987.5         | 1175    | 20.62     | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 2  | 20M   | 1960           | 900     | Band 2  | 5M    | 1987.5         | 1175    | 20.6      | 20.67      |  |
|            | CA_2A-4A-4A    | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 4  | 5M    | 2152.5         | 2375    | 19.61     | 19.97      |  |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 4  | 5M    | 2152.5         | 2375    | 19.56     | 19.97      |  |
|            |                | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 2  | 20M   | 1960           | 900     | 20.6      | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 2  | 20M   | 1960           | 900     | 20.53     | 20.67      |  |
|            | CA_2A-2A-71A   | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 2  | 5M    | 1932.5         | 625     | Band 71 | 20M   | 637            | 68786   | 19.59     | 19.97      |  |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 2  | 5M    | 1932.5         | 625     | Band 71 | 20M   | 637            | 68786   | 19.52     | 19.97      |  |
|            | CA_2A-7A-7A    | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 7  | 20M   | 2655           | 3100    | Band 7  | 5M    | 2687.5         | 3425    | 19.61     | 19.97      |  |
|            |                | Band 7           | 20M   | 2560           | 21350   | QPSK | 1   | 0            | Band 7  | 5M    | 2622.5         | 2775    | Band 2  | 20M   | 1960           | 900     | 21.36     | 21.43      |  |
|            | CA_2A-46A-46A  | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 46 | 20M   | 5160           | 46890   | Band 46 | 20M   | 5905           | 54340   | 19.88     | 19.97      |  |
|            | CA_2A-48A-48A  | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 48 | 20M   | 3690           | 56640   | 19.85     | 19.97      |  |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 48 | 20M   | 3690           | 56640   | 19.81     | 19.97      |  |
|            | CA_2A-48A-66A  | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 66 | 5M    | 2197.5         | 67311   | 19.84     | 19.97      |  |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 66 | 5M    | 2197.5         | 67311   | 19.81     | 19.97      |  |
|            |                | Band 66          | 20M   | 1745           | 132322  | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 2  | 20M   | 1960           | 900     | 20.71     | 20.8       |  |
|            |                | Band 66(4*4MIMO) | 20M   | 1745           | 132322  | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 2  | 20M   | 1960           | 900     | 20.66     | 20.8       |  |
|            | CA_25A-41C     | Band 25          | 20M   | 1860           | 26140   | QPSK | 1   | 0            | Band 41 | 20M   | 2660.2         | 41292   | Band 41 | 20M   | 2680           | 41490   | 20.11     | 20.18      |  |
|            | CA_4A-4A-5A    | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 5  | 10M   | 881.5          | 2525    | 20.62     | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 5  | 10M   | 881.5          | 2525    | 20.58     | 20.67      |  |
|            | CA_4A-4A-7A    | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 7  | 20M   | 2655           | 3100    | 20.57     | 20.67      |  |
|            |                | Band 7           | 20M   | 2560           | 21350   | QPSK | 1   | 0            | Band 4  | 20M   | 2132.5         | 2175    | Band 4  | 5M    | 2152.5         | 2375    | 21.34     | 21.43      |  |
|            | CA_4A-4A-71A   | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 71 | 20M   | 637            | 68786   | 20.57     | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 71 | 20M   | 637            | 68786   | 20.53     | 20.67      |  |
|            | CA_4A-4A-12A   | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 12 | 10M   | 737.5          | 5095    | 20.57     | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 12 | 10M   | 737.5          | 5095    | 20.55     | 20.67      |  |
|            | CA_4A-4A-13A   | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 13 | 10M   | 751            | 5230    | 20.57     | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 4  | 5M    | 2152.5         | 2375    | Band 13 | 10M   | 751            | 5230    | 20.54     | 20.67      |  |
|            | CA_4A-46A-46A  | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 46 | 20M   | 5160           | 46890   | Band 46 | 20M   | 5905           | 54340   | 20.61     | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 46 | 20M   | 5160           | 46890   | Band 46 | 20M   | 5905           | 54340   | 20.58     | 20.67      |  |
|            | CA_2A-48C      | Band 2           | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 48 | 20M   | 3615.1         | 55891   | Band 48 | 20M   | 3634.9         | 56089   | 19.91     | 19.97      |  |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860           | 18700   | QPSK | 1   | 0            | Band 48 | 20M   | 3615.1         | 55891   | Band 48 | 20M   | 3634.9         | 56089   | 19.88     | 19.97      |  |
|            | CA_4A-46C      | Band 4           | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 46 | 20M   | 5540.2         | 50692   | Band 46 | 20M   | 5560           | 50890   | 20.6      | 20.67      |  |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5         | 20175   | QPSK | 1   | 0            | Band 46 | 20M   | 5540.2         | 50692   | Band 46 | 20M   | 5560           | 50890   | 20.58     | 20.67      |  |
|            | CA_48A-48A-66A | Band 66          | 20M   | 1745           | 132322  | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 48 | 20M   | 3690           | 56640   | 20.7      | 20.8       |  |
|            |                | Band 66(4*4MIMO) | 20M   | 1745           | 132322  | QPSK | 1   | 0            | Band 48 | 20M   | 3560           | 55340   | Band 48 | 20M   | 3690           | 56640   | 20.66     | 20.8       |  |
|            | CA_48C-66A     | Band 66          | 20M   | 1745           | 132322  | QPSK | 1   | 0            | Band 48 | 20M   | 3670.2         | 56442   | Band 48 | 20M   | 3690           | 56640   | 20.77     | 20.8       |  |
|            |                | Band 66(4*4MIMO) | 20M   | 1745           | 132322  | QPSK | 1   | 0            | Band 48 | 20M   | 3670.2         | 56442   | Band 48 | 20M   | 3690           | 56640   | 20.75     | 20.8       |  |
|            | CA_25A-25A-26A | Band 25          | 20M   | 1860           | 26140   | QPSK | 1   | 0            | Band 25 | 5M    | 1992.5         | 8665    | Band 26 | 5M    | 876.5          | 8865    | 20.09     | 20.18      |  |
|            |                | Band 25(4*4MIMO) | 20M   | 1860           | 26140   | QPSK | 1   | 0            | Band 25 | 5M    | 1992.5         | 8665    | Band 26 | 5M    | 876.5          | 8865    | 20.01     | 20.18      |  |



|            |                |            |                  |     |      |        |      |   |    |         |     |        |       |         |     |        |       |       |       |
|------------|----------------|------------|------------------|-----|------|--------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
| Intra-Band | CA_25A-46C     |            | Band 25          | 20M | 1860 | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5585.5 | 54142 | Band 46 | 20M | 5605.3 | 54340 | 20.08 | 20.18 |
|            |                |            | Band 25(4*4MIMO) | 20M | 1860 | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5585.5 | 54142 | Band 46 | 20M | 5605.3 | 54340 | 20.01 | 20.18 |
|            | CA_2A-2A-46A   |            | Band 2           | 20M | 1860 | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 46 | 20M | 5540   | 50690 | 19.91 | 19.97 |
|            |                |            | Band 2(4*4MIMO)  | 20M | 1860 | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 46 | 20M | 5540   | 50690 | 19.86 | 19.97 |
|            | Non-Contiguous | CA_66A-66C | Band 66          | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2185   | 67186 | Band 66 | 5M  | 2196.7 | 67303 | 20.7  | 20.8  |
|            |                |            | Band 66(4*4MIMO) | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2185   | 67186 | Band 66 | 5M  | 2196.7 | 67303 | 20.68 | 20.8  |
|            |                |            | Band 66          | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2178.3 | 67119 | Band 66 | 5M  | 2190   | 67236 | 20.71 | 20.8  |
|            |                |            | Band 66(4*4MIMO) | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2178.3 | 67119 | Band 66 | 5M  | 2190   | 67236 | 20.69 | 20.8  |
|            |                | CA_41A-41C | Band 41          | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 5M  | 2687.5 | 41565 | Band 41 | 20M | 2675.8 | 41448 | 21.56 | 21.65 |
|            |                |            | Band 41(4*4MIMO) | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 5M  | 2687.5 | 41565 | Band 41 | 20M | 2675.8 | 41448 | 21.52 | 21.65 |
|            |                |            | Band 41          | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 5M  | 2687.5 | 41565 | 21.55 | 21.65 |
|            |                |            | Band 41(4*4MIMO) | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 5M  | 2687.5 | 41565 | 21.51 | 21.65 |



## &lt;Four Carrier power verification&gt;

| Configure  |                   | PCC              |       |        |         |      |     |        | SCC1    |       |        |         | SCC2    |       |        |         | SCC3    |       |        |         | Power     |            |
|------------|-------------------|------------------|-------|--------|---------|------|-----|--------|---------|-------|--------|---------|---------|-------|--------|---------|---------|-------|--------|---------|-----------|------------|
|            |                   | LTE              | BW    | UL     | UL      |      | UL# | UL     | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|            |                   | Band             | (MHz) | Freq.  | Channel | Mod. | RB  | Offset | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|            |                   |                  |       | (MHz)  |         |      |     |        |         |       | (MHz)  |         |         |       | (MHz)  |         |         |       | (MHz)  |         | (dBm)     | (dBm)      |
| Inter-Band | CA_2A-2A-5A-66A   | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 5M    | 2197.5 | 67311   | 19.89     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | 20.7      | 20.8       |
|            | CA_2A-2A-13A-66A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 1175    | Band 13 | 10M   | 751    | 5230    | Band 66 | 5M    | 2197.5 | 67311   | 19.87     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 13 | 10M   | 751    | 5230    | 20.79     | 20.8       |
|            | CA_2A-4A-7A-7A    | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 19.90     | 19.97      |
|            |                   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 20.59     | 20.67      |
|            |                   | Band 7           | 20M   | 2560   | 21350   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 4  | 20M   | 2132.5 | 2175    | Band 7  | 5M    | 2622.5 | 2775    | 21.38     | 21.43      |
|            | CA_2A-5A-66A-66A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 19.88     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 5M    | 2197.5 | 67311   | 20.79     | 20.8       |
|            | CA_2A-5A-66B      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 19.87     | 19.97      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 19.94     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 20.79     | 20.8       |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 20.72     | 20.8       |
|            | CA_2A-13A-66B     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 19.97     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | 20.73     | 20.8       |
|            | CA_2A-12A-66A-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 19.92     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 5M    | 2197.5 | 67311   | 20.79     | 20.8       |
|            | CA_2A-13A-66A-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 19.97     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 5M    | 2197.5 | 67311   | 20.75     | 20.8       |
|            | CA_2A-2A-66C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.89     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 66 | 20M   | 2174.8 | 67084   | 20.77     | 20.8       |
|            | CA_2A-2A-46C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 46 | 20M   | 5585.5 | 54142   | Band 46 | 20M   | 5605.3 | 54340   | 19.88     | 19.97      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 46 | 20M   | 5585.5 | 54142   | Band 46 | 20M   | 5605.3 | 54340   | 19.91     | 19.97      |
|            | CA_2A-5A-66C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1987.5 | 900     | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 20M   | 2174.8 | 67084   | 19.87     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | 20.77     | 20.8       |
|            | CA_2A-12A-66C     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.95     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2174.8 | 67084   | 20.76     | 20.8       |
|            | CA_2A-13A-66C     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.94     | 19.97      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.87     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2174.8 | 67084   | 20.74     | 20.8       |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2174.8 | 67084   | 20.8      | 20.8       |
|            | CA_2A-66C-71A     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 19.92     | 19.97      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 19.94     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 20.74     | 20.8       |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 20.77     | 20.8       |
|            | CA_2A-66A-66A-71A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 19.96     | 19.97      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 19.89     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 20.73     | 20.8       |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 20.71     | 20.8       |
|            | CA_2A-2A-66A-71A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1960   | 900     | Band 66 | 20M   | 2155   | 66886   | Band 71 | 20M   | 637    | 68786   | 19.88     | 19.97      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1960   | 900     | Band 66 | 20M   | 2155   | 66886   | Band 71 | 20M   | 637    | 68786   | 19.92     | 19.97      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 71 | 20M   | 637    | 68786   | 20.71     | 20.8       |



# FCC SAR Test Report

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|                          |                   |                  |     |        |        |      |   |    |         |     |        |       |         |     |        |       |         |     |        |       |       |       |
|--------------------------|-------------------|------------------|-----|--------|--------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
| Intra-Band<br>Contiguous | CA_CA_4A-46D      | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 20.76 | 20.8  |
|                          |                   | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 20.64 | 20.67 |
|                          |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 20.62 | 20.67 |
|                          | CA_2A-2A-12A-66A  | Band 2           | 20M | 1900   | 19100  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 12 | 10M | 737.5  | 5095  | Band 66 | 20M | 2155   | 66886 | 19.92 | 19.97 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 20.76 | 20.8  |
|                          | CA_2A-2A-66A-66A  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 19.88 | 19.97 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 5M  | 2197.5 | 67311 | 20.78 | 20.8  |
|                          | CA_2C-66A-66A     | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 19.87 | 19.97 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 19.91 | 19.97 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 20.73 | 20.8  |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 20.8  | 20.8  |
|                          | CA_25A-41D        | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 20.18 | 20.18 |
|                          |                   | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 25 | 20M | 1985   | 8590  | 21.59 | 21.65 |
|                          | CA_41A-41D        | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.60 | 21.65 |
|                          |                   | Band 41(4*4MIMO) | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.57 | 21.65 |
|                          | CA_41C-41C        | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.64 | 21.65 |
|                          | CA_4A-46A-46C     | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 20.65 | 20.67 |
|                          |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 20.65 | 20.67 |
|                          | CA_2A-46A-46A-66A | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 19.89 | 19.97 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 19.97 | 19.97 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 20.74 | 20.8  |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 20.80 | 20.8  |
|                          | CA_2A-46C-66A     | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 20.71 | 20.8  |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 20.8  | 20.8  |
|                          |                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 19.92 | 19.97 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 19.9  | 19.97 |
|                          | CA_25A-46D        | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 20.09 | 20.18 |
|                          |                   | Band 25(4*4MIMO) | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 20.09 | 20.18 |
|                          | CA_48D-66A        | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 20.79 | 20.8  |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 20.75 | 20.8  |
|                          | CA_2A-2A-4A-12A   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 19.92 | 19.97 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 19.89 | 19.97 |
|                          |                   | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 20.64 | 20.67 |
|                          |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 20.61 | 20.67 |
| Intra-Band<br>Contiguous | CA_41E            | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 41 | 20M | 2652.4 | 41214 | 21.57 | 21.65 |



## &lt;Five Carrier power verification&gt;

| Configure             |                   | PCC              |       |             |         |      |    | SCC1 |         |             |         | SCC2  |         |             |         | SCC3  |         |             |         | SCC4  |         |             |         | Power           |                 |       |
|-----------------------|-------------------|------------------|-------|-------------|---------|------|----|------|---------|-------------|---------|-------|---------|-------------|---------|-------|---------|-------------|---------|-------|---------|-------------|---------|-----------------|-----------------|-------|
|                       |                   | LTE              | BW    | UL          | UL      | UL#  | UL | LTE  | BW      | DL          | DL      | LTE   | BW      | DL          | DL      | LTE   | BW      | DL          | DL      | LTE   | BW      | DL          | DL      | With CA         | Without CA      |       |
|                       |                   | Band             | (MHz) | Freq. (MHz) | Channel | Mod. | RB | Band | (MHz)   | Freq. (MHz) | Channel | Band  | (MHz)   | Freq. (MHz) | Channel | Band  | (MHz)   | Freq. (MHz) | Channel | Band  | (MHz)   | Freq. (MHz) | Channel | Tx. Power (dBm) | Tx. Power (dBm) |       |
| Inter-Band            | CA_2A-46A-46C-66A | Band 2           | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 66 | 20M         | 2155    | 66886 | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5885.2  | 54142 | Band 46 | 20M         | 5905    | 54340           | 19.95           | 19.97 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 66 | 20M         | 2155    | 66886 | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5885.2  | 54142 | Band 46 | 20M         | 5905    | 54340           | 19.97           | 19.97 |
|                       |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 2  | 20M         | 1960    | 900   | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5540.2  | 50692 | Band 46 | 20M         | 5560    | 50890           | 20.8            | 20.8  |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 2  | 20M         | 1960    | 900   | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5540.2  | 50692 | Band 46 | 20M         | 5560    | 50890           | 20.77           | 20.8  |
|                       | CA_2A-2A-46D      | Band 2           | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 2  | 5M          | 1932.5  | 625   | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 19.96           | 19.97 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 2  | 5M          | 1932.5  | 625   | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 19.91           | 19.97 |
|                       | CA_2A-46E         | Band 2           | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 46 | 20M         | 5520    | 50490 | Band 46 | 20M         | 5539.8  | 50688 | Band 46 | 20M         | 5559.9  | 50889 | Band 46 | 20M         | 5580    | 50190           | 19.89           | 19.97 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 46 | 20M         | 5520    | 50490 | Band 46 | 20M         | 5539.8  | 50688 | Band 46 | 20M         | 5559.9  | 50889 | Band 46 | 20M         | 5580    | 50190           | 19.94           | 19.97 |
|                       | CA_2A-46A-46D     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 19.87           | 19.97 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 19.89           | 19.97 |
|                       | CA_4A-46A-46D     | Band 4           | 20M   | 1732.5      | 20175   | QPSK | 1  | 0    | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 20.65           | 20.67 |
|                       |                   | Band 4(4*4MIMO)  | 20M   | 1732.5      | 20175   | QPSK | 1  | 0    | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 20.58           | 20.67 |
|                       | CA_46A-46D-66A    | Band 66          | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 20.74           | 20.8  |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 46 | 20M         | 5160    | 46890 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 20.8            | 20.8  |
|                       | CA_2A-46D-66A     | Band 2           | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 66 | 20M         | 2155    | 66886 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 19.94           | 19.97 |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860        | 18700   | QPSK | 1  | 0    | Band 66 | 20M         | 2155    | 66886 | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 19.97           | 19.97 |
|                       |                   | Band 66          | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 2  | 20M         | 1960    | 900   | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 20.7            | 20.8  |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 2  | 20M         | 1960    | 900   | Band 46 | 20M         | 5520.2  | 50492 | Band 46 | 20M         | 5540    | 50690 | Band 46 | 20M         | 5559.8  | 50888           | 20.73           | 20.8  |
|                       | CA_41C-41D        | Band 41          | 20M   | 2593        | 40620   | QPSK | 1  | 99   | Band 41 | 20M         | 2612.8  | 40818 | Band 41 | 20M         | 2640.4  | 41094 | Band 41 | 20M         | 2660.2  | 41292 | Band 41 | 20M         | 2680    | 41490           | 21.58           | 21.65 |
|                       | CA_48E-66A        | Band 66          | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 48 | 20M         | 3609    | 55830 | Band 48 | 20M         | 3628.8  | 56028 | Band 48 | 20M         | 3648.6  | 56226 | Band 48 | 20M         | 3668.4  | 56424           | 20.79           | 20.8  |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 48 | 20M         | 3609    | 55830 | Band 48 | 20M         | 3628.8  | 56028 | Band 48 | 20M         | 3648.6  | 56226 | Band 48 | 20M         | 3668.4  | 56424           | 20.75           | 20.8  |
|                       | CA_46E-66A        | Band 66          | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 46 | 20M         | 5520    | 50490 | Band 46 | 20M         | 5539.8  | 50688 | Band 46 | 20M         | 5559.9  | 50889 | Band 46 | 20M         | 5580    | 50190           | 20.72           | 20.8  |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745        | 132322  | QPSK | 1  | 0    | Band 46 | 20M         | 5520    | 50490 | Band 46 | 20M         | 5539.8  | 50688 | Band 46 | 20M         | 5559.9  | 50889 | Band 46 | 20M         | 5580    | 50190           | 20.71           | 20.8  |
| Intra-Band Contiguous | CA_41F            | Band 41          | 20M   | 2593        | 40620   | QPSK | 1  | 99   | Band 41 | 20M         | 2612.8  | 40818 | Band 41 | 20M         | 2632.6  | 41016 | Band 41 | 20M         | 2652.4  | 41214 | Band 41 | 20M         | 2672.2  | 41412           | 21.58           | 21.65 |



**<Bottom Antenna--Reduced Power Mode for Handheld On>**

**<Two Carrier power verification>**

| Configure      |            | CA List          | PCC     |        |       |         |       |      |         | SCC     |        |        |         | Power     |            |
|----------------|------------|------------------|---------|--------|-------|---------|-------|------|---------|---------|--------|--------|---------|-----------|------------|
|                |            |                  | LTE     | BW     | UL    | UL      | Mod.  | UL#  | UL      | LTE     | BW     | DL     | DL      | With CA   | Without CA |
|                |            |                  | Band    | (MHz)  | Freq. | Channel |       | RB   | RB      | Band    | (MHz)  | Freq.  | Channel | Tx. Power | Tx. Power  |
|                |            |                  |         |        | (MHz) |         |       |      | Offset  |         |        | (MHz)  |         | (dBm)     | (dBm)      |
| Inter-Band     | CA_4A-30A  | Band 4           | 20M     | 1732.5 | 20175 | QPSK    | 1     | 0    | Band 30 | 10M     | 2355   | 9820   | 21.21   | 21.23     |            |
|                |            | Band 30          | 10M     | 2310   | 27710 | QPSK    | 1     | 25   | Band 4  | 20M     | 2132.5 | 2175   | 19.86   | 19.98     |            |
|                | CA_25A-41A | Band 25          | 20M     | 1860   | 26140 | QPSK    | 1     | 0    | Band 41 | 20M     | 2680   | 41490  | 20.01   | 20.09     |            |
|                | CA_25A-46A | Band 25          | 20M     | 1860   | 26140 | QPSK    | 1     | 0    | Band 46 | 20M     | 5905   | 54340  | 20.01   | 20.09     |            |
|                |            | Band 25(4*4MIMO) | 20M     | 1860   | 26140 | QPSK    | 1     | 0    | Band 46 | 20M     | 5905   | 54340  | 19.98   | 20.09     |            |
|                | CA_41A-48A | Band 41          | 20M     | 2593   | 40620 | QPSK    | 1     | 99   | Band 48 | 20M     | 3560   | 55340  | 21.09   | 21.15     |            |
|                |            | Band 41(4*4MIMO) | 20M     | 2593   | 40620 | QPSK    | 1     | 99   | Band 48 | 20M     | 3560   | 55340  | 21.02   | 21.15     |            |
|                | Intra-Band | Contiguous       | CA_7C   | Band 7 | 20M   | 2560    | 21350 | QPSK | 1       | 0       | Band 7 | 20M    | 2660.2  | 3152      | 17.71      |
| CA_38C         |            |                  | Band 38 | 20M    | 2580  | 37850   | QPSK  | 1    | 99      | Band 38 | 20M    | 2599.8 | 38048   | 21.07     | 21.10      |
| Non-Contiguous |            | CA_41A-41A       | Band 41 | 20M    | 2593  | 40620   | QPSK  | 1    | 99      | Band 41 | 5M     | 2687.5 | 41565   | 21.12     | 21.15      |

**<Three Carrier power verification>**

| Configure  |                | PCC             |       |        |         |      |     |        | SCC1    |       |        |         | SCC2    |       |        |         | Power           |                 |  |
|------------|----------------|-----------------|-------|--------|---------|------|-----|--------|---------|-------|--------|---------|---------|-------|--------|---------|-----------------|-----------------|--|
|            |                | LTE             | BW    | UL     | UL      | Mod. | UL# | UL     | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA         | Without CA      |  |
|            |                | Band            | (MHz) | Freq.  | Channel |      | RB  | Offset | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power (dBm) | Tx. Power (dBm) |  |
|            |                |                 |       | (MHz)  |         |      |     |        |         |       | (MHz)  |         |         |       | (MHz)  |         |                 |                 |  |
| Inter-Band | CA_2A-4A-5A    | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 19.87           | 19.92           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 19.85           | 19.92           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 2  | 20M   | 1960   | 900     | 21.17           | 21.23           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 2  | 20M   | 1960   | 900     | 21.13           | 21.23           |  |
|            | CA_2A-4A-12A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 19.81           | 19.92           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 19.84           | 19.92           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 2  | 20M   | 1960   | 900     | 21.13           | 21.23           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 2  | 20M   | 1960   | 900     | 21.1            | 21.23           |  |
|            | CA_2A-4A-13A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 13 | 10M   | 751    | 5230    | 19.9            | 19.92           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 13 | 10M   | 751    | 5230    | 19.88           | 19.92           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 2  | 20M   | 1960   | 900     | 21.2            | 21.23           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 13 | 10M   | 751    | 5230    | Band 2  | 20M   | 1960   | 900     | 21.16           | 21.23           |  |
|            | CA_2A-4A-29A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 19.81           | 19.92           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 19.77           | 19.92           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 2  | 20M   | 1960   | 900     | 21.18           | 21.23           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 2  | 20M   | 1960   | 900     | 21.12           | 21.23           |  |
|            | CA_2A-4A-71A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 71 | 20M   | 637    | 68786   | 19.85           | 19.92           |  |
|            |                | Band 2(4*4MIMO) | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 71 | 20M   | 637    | 68786   | 19.81           | 19.92           |  |
|            |                | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 71 | 20M   | 637    | 68786   | 21.17           | 21.23           |  |
|            |                | Band 4(4*4MIMO) | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 71 | 20M   | 637    | 68786   | 21.15           | 21.23           |  |
|            | CA_2A-5A-30A   | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 19.9            | 19.92           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 19.94           | 19.98           |  |
|            | CA_2A-12A-30A  | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 30 | 10M   | 2355   | 9820    | 19.84           | 19.92           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | 19.92           | 19.98           |  |
|            | CA_2A-29A-30A  | Band 2          | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 30 | 10M   | 2355   | 9820    | 19.81           | 19.92           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 2  | 20M   | 1960   | 900     | Band 29 | 10M   | 722.5  | 9715    | 19.85           | 19.98           |  |
|            | CA_4A-5A-30A   | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 21.13           | 21.23           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 4  | 20M   | 2132.5 | 2175    | Band 5  | 10M   | 881.5  | 2525    | 19.93           | 19.98           |  |
|            | CA_4A-7A-12A   | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 7  | 20M   | 2655   | 3100    | Band 12 | 5M    | 737.5  | 5095    | 21.19           | 21.23           |  |
|            |                | Band 7          | 20M   | 2560   | 21350   | QPSK | 1   | 0      | Band 12 | 5M    | 737.5  | 5095    | Band 4  | 20M   | 2132.5 | 2175    | 17.67           | 17.74           |  |
|            | CA_4A-12A-30A  | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 12 | 10M   | 737.5  | 5095    | Band 30 | 10M   | 2355   | 9820    | 21.17           | 21.23           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 4  | 20M   | 2132.5 | 2175    | Band 12 | 10M   | 737.5  | 5095    | 19.89           | 19.98           |  |
|            | CA_4A-29A-30A  | Band 4          | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 29 | 10M   | 722.5  | 9715    | Band 30 | 10M   | 2355   | 9820    | 21.12           | 21.23           |  |
|            |                | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 4  | 20M   | 2132.5 | 2175    | Band 29 | 10M   | 722.5  | 9715    | 19.97           | 19.98           |  |
|            | CA_5A-30A-66A  | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 66 | 20M   | 2155   | 66886   | Band 5  | 10M   | 881.5  | 2525    | 19.96           | 19.98           |  |
|            |                | Band 66         | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 5  | 10M   | 881.5  | 2525    | Band 30 | 10M   | 2355   | 9820    | 21.17           | 21.26           |  |
|            | CA_12A-30A-66A | Band 30         | 10M   | 2310   | 27710   | QPSK | 1   | 25     | Band 66 | 20M   | 2155   | 66886   | Band 12 | 10M   | 737.5  | 5095    | 19.94           | 19.98           |  |
|            |                | Band 66         | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 30 | 10M   | 2355   | 9820    | Band 12 | 10M   | 737.5  | 5095    | 21.13           | 21.26           |  |



| Configure  |                | PCC              |       |        |         |      |    |        | SCC1    |       |        |         | SCC2    |       |        |         | Power     |            |
|------------|----------------|------------------|-------|--------|---------|------|----|--------|---------|-------|--------|---------|---------|-------|--------|---------|-----------|------------|
|            |                | LTE              | BW    | UL     | UL      | UL#  | UL |        | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|            |                | Band             | (MHz) | Freq.  | Channel | Mod. | RB | Offset | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|            |                |                  |       | (MHz)  |         |      |    |        |         |       | (MHz)  |         |         | (MHz) |        |         | (dBm)     | (dBm)      |
| Inter-Band | CA_2A-2A-4A    | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 2  | 5M    | 1932.5 | 625     | Band 4  | 20M   | 2132.5 | 2175    | 19.84     | 19.92      |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 2  | 5M    | 1932.5 | 625     | Band 4  | 20M   | 2132.5 | 2175    | 19.82     | 19.92      |
|            |                | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | 21.17     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | 21.13     | 21.23      |
|            | CA_2A-4A-4A    | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 4  | 5M    | 2152.5 | 2375    | 19.77     | 19.92      |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 4  | 5M    | 2152.5 | 2375    | 19.76     | 19.92      |
|            |                | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 2  | 20M   | 1960   | 900     | 21.21     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 2  | 20M   | 1960   | 900     | 21.19     | 21.23      |
|            | CA_2A-2A-71A   | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 2  | 5M    | 1932.5 | 625     | Band 71 | 20M   | 637    | 68786   | 19.89     | 19.92      |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 2  | 5M    | 1932.5 | 625     | Band 71 | 20M   | 637    | 68786   | 19.82     | 19.92      |
|            | CA_2A-7A-7A    | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 19.86     | 19.92      |
|            |                | Band 7           | 20M   | 2560   | 21350   | QPSK | 1  | 0      | Band 7  | 5M    | 2622.5 | 2775    | Band 2  | 20M   | 1960   | 900     | 17.73     | 17.74      |
|            | CA_2A-46A-46A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5905   | 54340   | 19.81     | 19.92      |
|            | CA_2A-48A-48A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 48 | 20M   | 3690   | 56640   | 19.86     | 19.92      |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 48 | 20M   | 3690   | 56640   | 19.82     | 19.92      |
|            | CA_2A-48A-66A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 66 | 5M    | 2197.5 | 67311   | 19.83     | 19.92      |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 66 | 5M    | 2197.5 | 67311   | 19.81     | 19.92      |
|            |                | Band 66          | 20M   | 1745   | 132322  | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 2  | 20M   | 1960   | 900     | 21.25     | 21.26      |
|            |                | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 2  | 20M   | 1960   | 900     | 21.22     | 21.26      |
|            | CA_25A-41C     | Band 25          | 20M   | 1860   | 26140   | QPSK | 1  | 0      | Band 41 | 20M   | 2660.2 | 41292   | Band 41 | 20M   | 2680   | 41490   | 20        | 20.09      |
|            | CA_4A-4A-5A    | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 5  | 10M   | 881.5  | 2525    | 21.12     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 5  | 10M   | 881.5  | 2525    | 21.1      | 21.23      |
|            | CA_4A-4A-7A    | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 7  | 20M   | 2655   | 3100    | 21.15     | 21.23      |
|            |                | Band 7           | 20M   | 2560   | 21350   | QPSK | 1  | 0      | Band 4  | 20M   | 2132.5 | 2175    | Band 4  | 5M    | 2152.5 | 2375    | 17.67     | 17.74      |
|            | CA_4A-4A-71A   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 71 | 20M   | 637    | 68786   | 21.17     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 71 | 20M   | 637    | 68786   | 21.15     | 21.23      |
|            | CA_4A-4A-12A   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 12 | 10M   | 737.5  | 5095    | 21.12     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 12 | 10M   | 737.5  | 5095    | 21.11     | 21.23      |
|            | CA_4A-4A-13A   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 13 | 10M   | 751    | 5230    | 21.07     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 4  | 5M    | 2152.5 | 2375    | Band 13 | 10M   | 751    | 5230    | 21.05     | 21.23      |
|            | CA_4A-46A-46A  | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5905   | 54340   | 21.13     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5905   | 54340   | 21.11     | 21.23      |
|            | CA_2A-48C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 48 | 20M   | 3615.1 | 55891   | Band 48 | 20M   | 3634.9 | 56089   | 19.88     | 19.92      |
|            |                | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1  | 0      | Band 48 | 20M   | 3615.1 | 55891   | Band 48 | 20M   | 3634.9 | 56089   | 19.85     | 19.92      |
|            | CA_4A-46C      | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 46 | 20M   | 5540.2 | 50692   | Band 46 | 20M   | 5560   | 50890   | 21.18     | 21.23      |
|            |                | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1  | 0      | Band 46 | 20M   | 5540.2 | 50692   | Band 46 | 20M   | 5560   | 50890   | 21.15     | 21.23      |
|            | CA_48A-48A-66A | Band 66          | 20M   | 1745   | 132322  | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 48 | 20M   | 3690   | 56640   | 21.16     | 21.26      |
|            |                | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1  | 0      | Band 48 | 20M   | 3560   | 55340   | Band 48 | 20M   | 3690   | 56640   | 21.12     | 21.26      |
|            | CA_48C-66A     | Band 66          | 20M   | 1745   | 132322  | QPSK | 1  | 0      | Band 48 | 20M   | 3670.2 | 56442   | Band 48 | 20M   | 3690   | 56640   | 21.21     | 21.26      |
|            |                | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1  | 0      | Band 48 | 20M   | 3670.2 | 56442   | Band 48 | 20M   | 3690   | 56640   | 21.18     | 21.26      |
|            | CA_25A-25A-26A | Band 25          | 20M   | 1860   | 26140   | QPSK | 1  | 0      | Band 25 | 5M    | 1992.5 | 8665    | Band 26 | 5M    | 876.5  | 8865    | 20.01     | 20.09      |
|            |                | Band 25(4*4MIMO) | 20M   | 1860   | 26140   | QPSK | 1  | 0      | Band 25 | 5M    | 1992.5 | 8665    | Band 26 | 5M    | 876.5  | 8865    | 19.98     | 20.09      |



|            |              |                  |     |      |        |      |   |    |         |     |        |       |         |     |        |       |       |       |
|------------|--------------|------------------|-----|------|--------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
| Intra-Band | CA_25A-46C   | Band 25          | 20M | 1860 | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5585.5 | 54142 | Band 46 | 20M | 5605.3 | 54340 | 20.03 | 20.09 |
|            |              | Band 25(4*4MIMO) | 20M | 1860 | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5585.5 | 54142 | Band 46 | 20M | 5605.3 | 54340 | 20.01 | 20.09 |
|            | CA_2A-2A-46A | Band 2           | 20M | 1860 | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 46 | 20M | 5540   | 50690 | 19.85 | 19.92 |
|            |              | Band 2(4*4MIMO)  | 20M | 1860 | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 46 | 20M | 5540   | 50690 | 19.82 | 19.92 |
|            | CA_66A-66C   | Band 66          | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2185   | 67186 | Band 66 | 5M  | 2196.7 | 67303 | 21.14 | 21.26 |
|            |              | Band 66(4*4MIMO) | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2185   | 67186 | Band 66 | 5M  | 2196.7 | 67303 | 21.12 | 21.26 |
|            |              | Band 66          | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2178.3 | 67119 | Band 66 | 5M  | 2190   | 67236 | 21.22 | 21.26 |
|            |              | Band 66(4*4MIMO) | 20M | 1745 | 132322 | QPSK | 1 | 0  | Band 66 | 20M | 2178.3 | 67119 | Band 66 | 5M  | 2190   | 67236 | 21.2  | 21.26 |
|            | CA_41A-41C   | Band 41          | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 5M  | 2687.5 | 41565 | Band 41 | 20M | 2675.8 | 41448 | 21.08 | 21.15 |
|            |              | Band 41(4*4MIMO) | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 5M  | 2687.5 | 41565 | Band 41 | 20M | 2675.8 | 41448 | 21.01 | 21.15 |
|            |              | Band 41          | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 5M  | 2687.5 | 41565 | 21.14 | 21.15 |
|            |              | Band 41(4*4MIMO) | 20M | 2593 | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 5M  | 2687.5 | 41565 | 21.13 | 21.15 |



## &lt;Four Carrier power verification&gt;

| Configure  |                   | PCC              |       |        |         |      |        |    | SCC1    |       |        |         | SCC2    |       |        |         | SCC3    |       |        |         | Power     |            |
|------------|-------------------|------------------|-------|--------|---------|------|--------|----|---------|-------|--------|---------|---------|-------|--------|---------|---------|-------|--------|---------|-----------|------------|
|            |                   | LTE              | BW    | UL     | UL      |      | UL#    | UL | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | LTE     | BW    | DL     | DL      | With CA   | Without CA |
|            |                   | Band             | (MHz) | Freq.  | Channel | Mod. | RB     | RB | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power | Tx. Power  |
|            |                   |                  |       | (MHz)  |         |      | Offset |    |         | (MHz) |        |         |         | (MHz) |        |         |         | (MHz) |        |         | (dBm)     | (dBm)      |
| Inter-Band | CA_2A-2A-5A-66A   | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 5M    | 2197.5 | 67311   | 19.9      | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | 21.17     | 21.26      |
|            | CA_2A-2A-13A-66A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1987.5 | 1175    | Band 13 | 10M   | 751    | 5230    | Band 66 | 5M    | 2197.5 | 67311   | 19.92     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 13 | 10M   | 751    | 5230    | 21.21     | 21.26      |
|            | CA_2A-4A-7A-7A    | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 4  | 20M   | 2132.5 | 2175    | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 19.88     | 19.92      |
|            |                   | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 7  | 20M   | 2655   | 3100    | Band 7  | 5M    | 2687.5 | 3425    | 21.19     | 21.23      |
|            |                   | Band 7           | 20M   | 2560   | 21350   | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 4  | 20M   | 2132.5 | 2175    | Band 7  | 5M    | 2622.5 | 2775    | 17.68     | 17.74      |
|            | CA_2A-5A-66A-66A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 19.9      | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 5M    | 2197.5 | 67311   | 21.2      | 21.26      |
|            | CA_2A-5A-66B      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 19.89     | 19.92      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 19.88     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 21.26     | 21.26      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 5  | 10M   | 881.5  | 2525    | 21.18     | 21.26      |
|            | CA_2A-13A-66B     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 13 | 10M   | 751    | 5230    | Band 66 | 15M   | 2155   | 66886   | Band 66 | 5M    | 2164.3 | 66979   | 19.83     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 66 | 5M    | 2164.3 | 66979   | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | 21.19     | 21.26      |
|            | CA_2A-12A-66A-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 19.9      | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 5M    | 2197.5 | 67311   | 21.16     | 21.26      |
|            | CA_2A-13A-66A-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | 19.91     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 5M    | 2197.5 | 67311   | 21.21     | 21.26      |
|            | CA_2A-2A-66C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1987.5 | 900     | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.9      | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 66 | 20M   | 2174.8 | 67084   | 21.22     | 21.26      |
|            | CA_2A-2A-46C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1987.5 | 900     | Band 46 | 20M   | 5585.5 | 54142   | Band 46 | 20M   | 5605.3 | 54340   | 19.83     | 19.92      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1987.5 | 900     | Band 46 | 20M   | 5585.5 | 54142   | Band 46 | 20M   | 5605.3 | 54340   | 19.82     | 19.92      |
|            | CA_2A-5A-66C      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1987.5 | 900     | Band 5  | 10M   | 881.5  | 2525    | Band 66 | 20M   | 2174.8 | 67084   | 19.88     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 2  | 5M    | 1987.5 | 1175    | Band 5  | 10M   | 881.5  | 2525    | 21.16     | 21.26      |
|            | CA_2A-12A-66C     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.92     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 12 | 10M   | 737.5  | 5095    | Band 66 | 20M   | 2174.8 | 67084   | 21.23     | 21.26      |
|            | CA_2A-13A-66C     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.90     | 19.92      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | 19.88     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2174.8 | 67084   | 21.26     | 21.26      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 13 | 10M   | 751    | 5230    | Band 66 | 20M   | 2174.8 | 67084   | 21.21     | 21.26      |
|            | CA_2A-66C-71A     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 19.89     | 19.92      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 66 | 20M   | 2155   | 66886   | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 19.89     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 21.2      | 21.26      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 66 | 20M   | 2174.8 | 67084   | Band 71 | 20M   | 637    | 68786   | 21.16     | 21.26      |
|            | CA_2A-66A-66A-71A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 19.89     | 19.92      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 66 | 20M   | 2155   | 66886   | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 19.87     | 19.92      |
|            |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 21.24     | 21.26      |
|            |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1      | 0  | Band 2  | 20M   | 1960   | 900     | Band 66 | 5M    | 2197.5 | 67311   | Band 71 | 20M   | 637    | 68786   | 21.24     | 21.26      |
|            | CA_2A-2A-66A-71A  | Band 2           | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1960   | 900     | Band 66 | 20M   | 2155   | 66886   | Band 71 | 20M   | 637    | 68786   | 19.86     | 19.92      |
|            |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1      | 0  | Band 2  | 5M    | 1960   | 900     | Band 66 | 20M   | 2155   | 66886   | Band 71 | 20M   | 637    | 68786   | 19.9      | 19.92      |



# FCC SAR Test Report

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|                          |                   |                  |     |        |        |      |   |    |         |     |        |       |         |     |        |       |         |     |        |       |       |       |
|--------------------------|-------------------|------------------|-----|--------|--------|------|---|----|---------|-----|--------|-------|---------|-----|--------|-------|---------|-----|--------|-------|-------|-------|
| Intra-Band<br>Contiguous |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 21.25 | 21.26 |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 71 | 20M | 637    | 68786 | 21.17 | 21.26 |
|                          | CA_CA_4A-46D      | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 21.18 | 21.23 |
|                          |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 21.2  | 21.23 |
|                          | CA_2A-2A-12A-66A  | Band 2           | 20M | 1900   | 19100  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 12 | 10M | 737.5  | 5095  | Band 66 | 20M | 2155   | 66886 | 19.89 | 19.92 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 21.24 | 21.26 |
|                          | CA_2A-2A-66A-66A  | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 19.85 | 19.92 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 66 | 5M  | 2197.5 | 67311 | 21.21 | 21.26 |
|                          | CA_2C-66A-66A     | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 19.85 | 19.92 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1960   | 900   | Band 66 | 20M | 2155   | 66886 | Band 66 | 5M  | 2197.5 | 67311 | 19.82 | 19.92 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 21.22 | 21.26 |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 20M | 1979.8 | 1098  | Band 66 | 5M  | 2197.5 | 67311 | 21.21 | 21.26 |
|                          | CA_25A-41D        | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 20.01 | 20.09 |
|                          |                   | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 25 | 20M | 1985   | 8590  | 21.13 | 21.15 |
|                          | CA_41A-41D        | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.05 | 21.15 |
|                          |                   | Band 41(4*4MIMO) | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2462.2 | 41094 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.05 | 21.15 |
|                          | CA_41C-41C        | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2660.2 | 41292 | Band 41 | 20M | 2680   | 41490 | 21.08 | 21.15 |
|                          | CA_4A-46A-46C     | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.14 | 21.23 |
|                          |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 46 | 20M | 5160   | 46890 | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.18 | 21.23 |
|                          | CA_2A-46A-46A-66A | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 19.84 | 19.92 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 66 | 20M | 2155   | 66886 | 19.88 | 19.92 |
|                          |                   | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 21.17 | 21.26 |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5160   | 46890 | Band 2  | 20M | 1960   | 900   | 21.21 | 21.26 |
|                          | CA_2A-46C-66A     | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.24 | 21.26 |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | 21.18 | 21.26 |
|                          |                   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 19.85 | 19.92 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 46 | 20M | 5540.2 | 50692 | Band 46 | 20M | 5560   | 50890 | Band 66 | 20M | 2155   | 66886 | 19.9  | 19.92 |
|                          | CA_25A-46D        | Band 25          | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 20.03 | 20.09 |
|                          |                   | Band 25(4*4MIMO) | 20M | 1860   | 26140  | QPSK | 1 | 0  | Band 46 | 20M | 5520.2 | 50492 | Band 46 | 20M | 5540   | 50690 | Band 46 | 20M | 5559.8 | 50888 | 20.02 | 20.09 |
|                          | CA_48D-66A        | Band 66          | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 21.25 | 21.26 |
|                          |                   | Band 66(4*4MIMO) | 20M | 1745   | 132322 | QPSK | 1 | 0  | Band 48 | 20M | 3609   | 55830 | Band 48 | 20M | 3628.8 | 56028 | Band 48 | 20M | 3648.6 | 56226 | 21.24 | 21.26 |
|                          | CA_2A-2A-4A-12A   | Band 2           | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 19.88 | 19.92 |
|                          |                   | Band 2(4*4MIMO)  | 20M | 1860   | 18700  | QPSK | 1 | 0  | Band 2  | 5M  | 1987.5 | 1175  | Band 4  | 20M | 2132.5 | 2175  | Band 12 | 10M | 737.5  | 5095  | 18.87 | 19.92 |
|                          |                   | Band 4           | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 21.19 | 21.23 |
|                          |                   | Band 4(4*4MIMO)  | 20M | 1732.5 | 20175  | QPSK | 1 | 0  | Band 2  | 20M | 1960   | 900   | Band 2  | 5M  | 1987.5 | 1175  | Band 12 | 10M | 737.5  | 5095  | 21.17 | 21.23 |
|                          | CA_41E            | Band 41          | 20M | 2593   | 40620  | QPSK | 1 | 99 | Band 41 | 20M | 2612.8 | 40818 | Band 41 | 20M | 2632.6 | 41016 | Band 41 | 20M | 2652.4 | 41214 | 21.11 | 21.15 |

**<Five Carrier power verification>**

| Configure             |                   | PCC              |       |        |         |      |     | SCC1   |         |       |        | SCC2    |         |       |        | SCC3    |         |       |        | SCC4    |         |       |        | Power   |            |           |
|-----------------------|-------------------|------------------|-------|--------|---------|------|-----|--------|---------|-------|--------|---------|---------|-------|--------|---------|---------|-------|--------|---------|---------|-------|--------|---------|------------|-----------|
|                       |                   | LTE              | BW    | UL     | UL      |      | UL# | UL     |         |       |        | LTE     | BW      | DL    | DL     | LTE     | BW      | DL    | DL     | LTE     | BW      | DL    | DL     | With CA | Without CA |           |
|                       |                   | Band             | (MHz) | Freq.  | Channel | Mod. | RB  | Offset | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Band    | (MHz) | Freq.  | Channel | Tx. Power  | Tx. Power |
|                       |                   |                  |       | (MHz)  |         |      |     |        |         |       | (MHz)  |         |         |       | (MHz)  |         |         |       | (MHz)  |         |         |       |        | (dBm)   | (dBm)      |           |
| Inter-Band            | CA_2A-46A-46C-66A | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5885.2 | 54142   | Band 46 | 20M   | 5905   | 54340   | 19.91      | 19.92     |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5885.2 | 54142   | Band 46 | 20M   | 5905   | 54340   | 19.89      | 19.92     |
|                       |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5540.2 | 50692   | Band 46 | 20M   | 5560   | 50890   | 21.24      | 21.26     |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5540.2 | 50692   | Band 46 | 20M   | 5560   | 50890   | 21.24      | 21.26     |
|                       | CA_2A-2A-46D      | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1932.5 | 625     | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 19.82      | 19.92     |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 2  | 5M    | 1932.5 | 625     | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 19.83      | 19.92     |
|                       | CA_2A-46E         | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 46 | 20M   | 5520   | 50490   | Band 46 | 20M   | 5539.8 | 50688   | Band 46 | 20M   | 5559.9 | 50889   | Band 46 | 20M   | 5580   | 50190   | 19.9       | 19.92     |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 46 | 20M   | 5520   | 50490   | Band 46 | 20M   | 5539.8 | 50688   | Band 46 | 20M   | 5559.9 | 50889   | Band 46 | 20M   | 5580   | 50190   | 19.91      | 19.92     |
|                       | CA_2A-46A-46D     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 19.86      | 19.92     |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 19.83      | 19.92     |
|                       | CA_4A-46A-46D     | Band 4           | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 21.16      | 21.23     |
|                       |                   | Band 4(4*4MIMO)  | 20M   | 1732.5 | 20175   | QPSK | 1   | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 21.17      | 21.23     |
|                       | CA_46A-46D-66A    | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 21.25      | 21.26     |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 46 | 20M   | 5160   | 46890   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 21.24      | 21.26     |
|                       | CA_2A-46D-66A     | Band 2           | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 19.83      | 19.92     |
|                       |                   | Band 2(4*4MIMO)  | 20M   | 1860   | 18700   | QPSK | 1   | 0      | Band 66 | 20M   | 2155   | 66886   | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 19.88      | 19.92     |
|                       |                   | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 21.25      | 21.26     |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 2  | 20M   | 1960   | 900     | Band 46 | 20M   | 5520.2 | 50492   | Band 46 | 20M   | 5540   | 50690   | Band 46 | 20M   | 5559.8 | 50888   | 21.24      | 21.26     |
|                       | CA_41C-41D        | Band 41          | 20M   | 2593   | 40620   | QPSK | 1   | 99     | Band 41 | 20M   | 2612.8 | 40818   | Band 41 | 20M   | 2640.4 | 41094   | Band 41 | 20M   | 2660.2 | 41292   | Band 41 | 20M   | 2680   | 41490   | 21.12      | 21.15     |
|                       | CA_48E-66A        | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 48 | 20M   | 3609   | 55830   | Band 48 | 20M   | 3628.8 | 56028   | Band 48 | 20M   | 3648.6 | 56226   | Band 48 | 20M   | 3668.4 | 56424   | 21.25      | 21.26     |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 48 | 20M   | 3609   | 55830   | Band 48 | 20M   | 3628.8 | 56028   | Band 48 | 20M   | 3648.6 | 56226   | Band 48 | 20M   | 3668.4 | 56424   | 21.24      | 21.26     |
|                       | CA_46E-66A        | Band 66          | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 46 | 20M   | 5520   | 50490   | Band 46 | 20M   | 5539.8 | 50688   | Band 46 | 20M   | 5559.9 | 50889   | Band 46 | 20M   | 5580   | 50190   | 21.17      | 21.26     |
|                       |                   | Band 66(4*4MIMO) | 20M   | 1745   | 132322  | QPSK | 1   | 0      | Band 46 | 20M   | 5520   | 50490   | Band 46 | 20M   | 5539.8 | 50688   | Band 46 | 20M   | 5559.9 | 50889   | Band 46 | 20M   | 5580   | 50190   | 21.16      | 21.26     |
| Intra-Band Contiguous | CA_41F            | Band 41          | 20M   | 2593   | 40620   | QPSK | 1   | 99     | Band 41 | 20M   | 2612.8 | 40818   | Band 41 | 20M   | 2632.6 | 41016   | Band 41 | 20M   | 2652.4 | 41214   | Band 41 | 20M   | 2672.2 | 41412   | 21.12      | 21.15     |

**LTE Carrier Aggregation Conducted Power (Uplink)**

1. This device supports uplink carrier aggregation for LTE CA\_7C, CA\_41C with a maximum of two 20MHz component carriers. For intra band contiguous carrier aggregation scenarios, 3GPP 36.101 Table 6.2.2A-1 specifies that the aggregate maximum allowed output power is equivalent to the single carrier scenario. For the non-contiguously allocated resource blocks which the MPR level is determined by various RB separation and RB sizes requirement, and the allowed MPR levels, settings and the conducted powers are permanently implemented in this device per the 3GPP 36.36.101 section 6.2.3A.1.3 requirements.
2. According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.
3. In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs
4. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC.



### <Top Antenna--Full Power Mode>

**<LTE Band 7>**

| CA_7C                                 |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 20.95                | 22.00               |
| 21100                                 | 20902       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 21.12                | 22.00               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 21.19                | 22.00               |

**<LTE Band 41>**

| CA_41C                                |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 21.31                | 22.00               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 21.42                | 22.00               |
| 40620                                 | 40422       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 21.61                | 22.00               |
| 41055                                 | 40857       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 21.11                | 22.00               |
| 41490                                 | 41292       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 21.08                | 22.00               |

### <Top Antenna--Reduced Power Mode for Receiver On>

**<LTE Band 7>**

| CA_7C                                 |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 14.58                | 15.50               |
| 21100                                 | 20902       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 14.62                | 15.50               |
| 21350                                 | 21152       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 14.71                | 15.50               |

**<LTE Band 41>**

| CA_41C                                |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 17.52                | 18.00               |
| 40185                                 | 40383       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 17.54                | 18.00               |
| 40620                                 | 40422       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 17.60                | 18.00               |
| 41055                                 | 40857       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 17.09                | 18.00               |
| 41490                                 | 41292       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 17.18                | 18.00               |

### <Top Antenna--Reduced Power Mode for Hotspot On>

**<LTE Band 7>**

| CA_7C                                 |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 16.01                | 17.00               |
| 21100                                 | 20902       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 16.19                | 17.00               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 16.24                | 17.00               |

**<LTE Band 41>**

| CA_41C                                |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 18.11                | 18.50               |
| 40185                                 | 40383       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 18.29                | 18.50               |
| 40620                                 | 40422       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 18.37                | 18.50               |
| 41055                                 | 40857       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 17.91                | 18.50               |
| 41490                                 | 41292       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 17.77                | 18.50               |

### <Bottom Antenna--Full Power Mode>

**<LTE Band 7>**

| CA_7C                                 |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 23.15                | 23.80               |
| 21100                                 | 20902       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 23.12                | 23.80               |
| 21350                                 | 21152       | QPSK       | 1       | 0         | 0       | 0         | 1             | 0                     | 23.26                | 23.80               |

**<LTE Band 41>**

| CA_41C                                |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 23.23                | 23.80               |
| 40185                                 | 40383       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 23.53                | 23.80               |
| 40620                                 | 40422       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 23.54                | 23.80               |
| 41055                                 | 40857       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 23.12                | 23.80               |
| 41490                                 | 41292       | QPSK       | 1       | 99        | 0       | 0         | 1             | 0                     | 23.14                | 23.80               |

### <Bottom Antenna--Reduced Power Mode for Hotspot On>

**<LTE Band 7>**

| CA_7C                                 |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 21.27                | 21.80               |
| 21100                                 | 20902       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 21.34                | 21.80               |
| 21350                                 | 21152       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 21.35                | 21.80               |

**<LTE Band 41>**

| CA_41C                                |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 39750                                 | 39948       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 21.54                | 21.80               |
| 40185                                 | 40383       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 21.41                | 21.80               |
| 40620                                 | 40422       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 21.59                | 21.80               |
| 41055                                 | 40857       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 21.22                | 21.80               |
| 41490                                 | 41292       | QPSK       | 50      | 24        | 0       | 0         | 50            | 0                     | 21.02                | 21.80               |

### <Bottom Antenna--Reduced Power Mode for Handheld On>

**<LTE Band 7>**

| CA_7C                                 |             |            |         |           |         |           |               |                       |                      |                     |
|---------------------------------------|-------------|------------|---------|-----------|---------|-----------|---------------|-----------------------|----------------------|---------------------|
| Combination 20MHz+20MHz (100RB+100RB) |             |            |         |           |         |           |               |                       |                      |                     |
| PCC Channel                           | SCC Channel | Modulation | PCC     |           | SCC     |           | Total RB Size | Target MPR Level (dB) | Measured Power (dBm) | Tune up Power (dBm) |
|                                       |             |            | RB Size | RB offset | RB Size | RB offset |               |                       |                      |                     |
| 20850                                 | 21048       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 17.73                | 18.30               |
| 21100                                 | 20902       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 17.79                | 18.30               |
| 21350                                 | 21152       | QPSK       | 50      | 0         | 0       | 0         | 50            | 0                     | 17.92                | 18.30               |

**<WLAN Conducted Power>****General Note:**

1. For WLAN, SAR testing was performed on MIMO mode since it can't transmit in SISO mode, so only evaluate MIMO mode power.
2. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
3. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
4. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
5. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
  - a. When the reported SAR of the initial test position is  $\leq 0.4$  W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band.
  - b. When the reported SAR of the test position is  $> 0.4$  W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is  $\leq 0.8$  W/kg or all required test position are tested.
  - c. For all positions/configurations, when the reported SAR is  $> 0.8$  W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required channels are tested.

**<Full Power>**
**<2.4GHz WLAN Ant.1+2>**

|             | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Duty Cycle % |
|-------------|---------------------|---------|-----------------|---------------------|---------------|--------------|
| 2.4GHz WLAN | 802.11b 1Mbps       | 1       | 2412            | 20.66               | 22.00         | 99.31        |
|             |                     | 6       | 2437            | 20.71               | 22.00         |              |
|             |                     | 11      | 2462            | 20.76               | 22.00         |              |
|             | 802.11g 6Mbps       | 1       | 2412            | 20.56               | 22.00         | 98.28        |
|             |                     | 6       | 2437            | 20.61               | 22.00         |              |
|             |                     | 11      | 2462            | 20.61               | 22.00         |              |
|             | 802.11n-HT20 MCS0   | 1       | 2412            | 20.01               | 21.00         | 98.16        |
|             |                     | 6       | 2437            | 20.61               | 22.00         |              |
|             |                     | 11      | 2462            | 20.66               | 22.00         |              |
|             | 802.11n-HT40 MCS0   | 3       | 2422            | 20.16               | 21.00         | 94.93        |
|             |                     | 6       | 2437            | 20.16               | 21.00         |              |
|             |                     | 9       | 2452            | 19.16               | 20.00         |              |
|             | 802.11ac-VHT20 MCS0 | 1       | 2412            | 19.91               | 21.00         | 96.68        |
|             |                     | 6       | 2437            | 20.51               | 22.00         |              |
|             |                     | 11      | 2462            | 20.56               | 22.00         |              |
|             | 802.11ac-VHT40 MCS0 | 3       | 2422            | 20.01               | 21.00         | 90.54        |
|             |                     | 6       | 2437            | 20.01               | 21.00         |              |
|             |                     | 9       | 2452            | 19.06               | 20.00         |              |

**<5GHz WLAN Ant.1+2>**

|             | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Duty Cycle % |
|-------------|---------------------|---------|-----------------|---------------------|---------------|--------------|
| 5.2GHz WLAN | 802.11a 6Mbps       | 36      | 5180            | 18.59               | 20.00         | 98.31        |
|             |                     | 40      | 5200            | 18.41               | 20.00         |              |
|             |                     | 44      | 5220            | 18.34               | 20.00         |              |
|             |                     | 48      | 5240            | 18.37               | 20.00         |              |
|             | 802.11n-HT20 MCS0   | 36      | 5180            | 18.53               | 20.00         | 98.16        |
|             |                     | 40      | 5200            | 18.34               | 20.00         |              |
|             |                     | 44      | 5220            | 18.23               | 20.00         |              |
|             |                     | 48      | 5240            | 18.29               | 20.00         |              |
|             | 802.11n-HT40 MCS0   | 38      | 5190            | 18.54               | 20.00         | 96.31        |
|             |                     | 46      | 5230            | 18.24               | 20.00         |              |
|             | 802.11ac-VHT20 MCS0 | 36      | 5180            | 18.49               | 20.00         | 96.47        |
|             |                     | 40      | 5200            | 18.28               | 20.00         |              |
|             |                     | 44      | 5220            | 18.19               | 20.00         |              |
|             |                     | 48      | 5240            | 18.25               | 20.00         |              |
|             | 802.11ac-VHT40 MCS0 | 38      | 5190            | 18.51               | 20.00         | 93.48        |
|             |                     | 46      | 5230            | 18.20               | 20.00         |              |
|             | 802.11ac-VHT80 MCS0 | 42      | 5210            | 17.43               | 19.00         | 87.62        |

| 5.3GHz<br>WLAN | Mode                   | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Duty Cycle % |
|----------------|------------------------|---------|--------------------|------------------------|------------------|--------------|
|                | 802.11a 6Mbps          | 52      | 5260               | 18.10                  | 20.00            | 98.31        |
|                |                        | 56      | 5280               | 18.12                  | 20.00            |              |
|                |                        | 60      | 5300               | 18.14                  | 20.00            |              |
|                |                        | 64      | 5320               | 18.37                  | 20.00            |              |
|                | 802.11n-HT20<br>MCS0   | 52      | 5260               | 18.13                  | 20.00            | 98.16        |
|                |                        | 56      | 5280               | 18.14                  | 20.00            |              |
|                |                        | 60      | 5300               | 18.14                  | 20.00            |              |
|                |                        | 64      | 5320               | 18.19                  | 20.00            |              |
|                | 802.11n-HT40<br>MCS0   | 54      | 5270               | 18.11                  | 20.00            | 96.31        |
|                |                        | 62      | 5310               | 18.06                  | 20.00            |              |
|                | 802.11ac-VHT20<br>MCS0 | 52      | 5260               | 18.08                  | 20.00            | 96.47        |
|                |                        | 56      | 5280               | 18.09                  | 20.00            |              |
|                |                        | 60      | 5300               | 18.10                  | 20.00            |              |
|                |                        | 64      | 5320               | 18.14                  | 20.00            |              |
|                | 802.11ac-VHT40<br>MCS0 | 54      | 5270               | 18.07                  | 20.00            | 93.48        |
|                |                        | 62      | 5310               | 18.05                  | 20.00            |              |
|                | 802.11ac-VHT80<br>MCS0 | 58      | 5290               | 17.46                  | 19.00            | 87.62        |

|             | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Duty Cycle % |
|-------------|---------------------|---------|-----------------|---------------------|---------------|--------------|
| 5.5GHz WLAN | 802.11a 6Mbps       | 100     | 5500            | 19.02               | 20.00         | 98.31        |
|             |                     | 116     | 5580            | 19.21               | 20.00         |              |
|             |                     | 124     | 5620            | 19.12               | 20.00         |              |
|             |                     | 132     | 5660            | 18.89               | 20.00         |              |
|             |                     | 140     | 5700            | 18.70               | 20.00         |              |
|             |                     | 144     | 5720            | 18.55               | 20.00         |              |
|             | 802.11n-HT20 MCS0   | 100     | 5500            | 18.80               | 20.00         | 98.16        |
|             |                     | 116     | 5580            | 19.12               | 20.00         |              |
|             |                     | 124     | 5620            | 18.99               | 20.00         |              |
|             |                     | 132     | 5660            | 18.65               | 20.00         |              |
|             |                     | 140     | 5700            | 18.54               | 20.00         |              |
|             |                     | 144     | 5720            | 18.43               | 20.00         |              |
|             | 802.11n-HT40 MCS0   | 102     | 5510            | 18.92               | 20.00         | 96.31        |
|             |                     | 110     | 5550            | 19.23               | 20.00         |              |
|             |                     | 126     | 5630            | 18.58               | 20.00         |              |
|             |                     | 134     | 5670            | 18.73               | 20.00         |              |
|             |                     | 142     | 5710            | 18.48               | 20.00         |              |
|             | 802.11ac-VHT20 MCS0 | 100     | 5500            | 18.75               | 20.00         | 96.47        |
|             |                     | 116     | 5580            | 19.09               | 20.00         |              |
|             |                     | 124     | 5620            | 18.81               | 20.00         |              |
|             |                     | 132     | 5660            | 18.63               | 20.00         |              |
|             |                     | 140     | 5700            | 18.51               | 20.00         |              |
|             |                     | 144     | 5720            | 18.41               | 20.00         |              |
|             | 802.11ac-VHT40 MCS0 | 102     | 5510            | 18.85               | 20.00         | 93.48        |
|             |                     | 110     | 5550            | 19.20               | 20.00         |              |
|             |                     | 126     | 5630            | 18.89               | 20.00         |              |
|             |                     | 134     | 5670            | 18.67               | 20.00         |              |
|             |                     | 142     | 5710            | 18.44               | 20.00         |              |
|             | 802.11ac-VHT80 MCS0 | 106     | 5530            | 17.65               | 19.00         | 87.62        |
|             |                     | 122     | 5610            | 17.78               | 19.00         |              |
|             |                     | 138     | 5690            | 17.48               | 19.00         |              |

| 5.8GHz<br>WLAN | Mode                   | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Duty Cycle % |
|----------------|------------------------|---------|--------------------|------------------------|------------------|--------------|
|                | 802.11a MCS0           | 149     | 5745               | 17.59                  | 19.00            | 98.31        |
|                |                        | 157     | 5785               | 17.59                  | 19.00            |              |
|                |                        | 165     | 5825               | 17.47                  | 19.00            |              |
|                | 802.11n-HT20<br>MCS0   | 149     | 5745               | 17.52                  | 19.00            | 98.16        |
|                |                        | 157     | 5785               | 17.58                  | 19.00            |              |
|                |                        | 165     | 5825               | 17.47                  | 19.00            |              |
|                | 802.11n-HT40<br>MCS0   | 151     | 5755               | 17.43                  | 19.00            | 96.31        |
|                |                        | 159     | 5795               | 17.36                  | 19.00            |              |
|                | 802.11ac-VHT20<br>MCS0 | 149     | 5745               | 17.47                  | 19.00            | 96.47        |
|                |                        | 157     | 5785               | 17.48                  | 19.00            |              |
|                |                        | 165     | 5825               | 17.43                  | 19.00            |              |
|                | 802.11ac-VHT40<br>MCS0 | 151     | 5755               | 17.35                  | 19.00            | 93.48        |
|                |                        | 159     | 5795               | 17.27                  | 19.00            |              |
|                | 802.11ac-VHT80<br>MCS0 | 155     | 5775               | 16.76                  | 18.00            | 87.62        |

**<Reduced Power Mode for Receiver On>**
**<2.4GHz WLAN Ant.1+2>**

| 2.4GHz<br>WLAN | Mode                   | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Duty Cycle % |
|----------------|------------------------|---------|--------------------|------------------------|------------------|--------------|
|                | 802.11b 1Mbps          | 1       | 2412               | 14.66                  | 16.00            | 99.31        |
|                |                        | 6       | 2437               | 14.71                  | 16.00            |              |
|                |                        | 11      | 2462               | 14.76                  | 16.00            |              |
|                | 802.11g 6Mbps          | 1       | 2412               | 12.82                  | 14.00            | 98.28        |
|                |                        | 6       | 2437               | 13.72                  | 15.00            |              |
|                |                        | 11      | 2462               | 12.71                  | 14.00            |              |
|                | 802.11n-HT20<br>MCS0   | 1       | 2412               | 12.11                  | 13.00            | 98.16        |
|                |                        | 6       | 2437               | 13.77                  | 15.00            |              |
|                |                        | 11      | 2462               | 12.86                  | 14.00            |              |
|                | 802.11n-HT40<br>MCS0   | 3       | 2422               | 12.11                  | 13.00            | 94.93        |
|                |                        | 6       | 2437               | 12.11                  | 13.00            |              |
|                |                        | 9       | 2452               | 11.16                  | 12.00            |              |
|                | 802.11ac-VHT20<br>MCS0 | 1       | 2412               | 11.86                  | 13.00            | 96.68        |
|                |                        | 6       | 2437               | 13.61                  | 15.00            |              |
|                |                        | 11      | 2462               | 12.61                  | 14.00            |              |
|                | 802.11ac-VHT40<br>MCS0 | 3       | 2422               | 11.91                  | 13.00            | 90.54        |
|                |                        | 6       | 2437               | 11.91                  | 13.00            |              |
|                |                        | 9       | 2452               | 10.96                  | 12.00            |              |

**<5GHz WLAN Ant.1+2>**

| 5.2GHz<br>WLAN | Mode                   | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Duty Cycle % |
|----------------|------------------------|---------|--------------------|------------------------|------------------|--------------|
|                | 802.11a 6Mbps          | 36      | 5180               | 16.56                  | 18.00            | 98.31        |
|                |                        | 40      | 5200               | 16.39                  | 18.00            |              |
|                |                        | 44      | 5220               | 16.35                  | 18.00            |              |
|                |                        | 48      | 5240               | 16.37                  | 18.00            |              |
|                | 802.11n-HT20<br>MCS0   | 36      | 5180               | 16.53                  | 18.00            | 98.16        |
|                |                        | 40      | 5200               | 16.48                  | 18.00            |              |
|                |                        | 44      | 5220               | 16.22                  | 18.00            |              |
|                |                        | 48      | 5240               | 16.29                  | 18.00            |              |
|                | 802.11n-HT40<br>MCS0   | 38      | 5190               | 16.52                  | 18.00            | 96.31        |
|                |                        | 46      | 5230               | 16.25                  | 18.00            |              |
|                | 802.11ac-VHT20<br>MCS0 | 36      | 5180               | 16.50                  | 18.00            | 96.47        |
|                |                        | 40      | 5200               | 16.35                  | 18.00            |              |
|                |                        | 44      | 5220               | 16.19                  | 18.00            |              |
|                |                        | 48      | 5240               | 16.27                  | 18.00            |              |
|                | 802.11ac-VHT40<br>MCS0 | 38      | 5190               | 16.49                  | 18.00            | 93.48        |
|                |                        | 46      | 5230               | 16.21                  | 18.00            |              |
|                | 802.11ac-VHT80<br>MCS0 | 42      | 5210               | 15.41                  | 17.00            | 87.62        |

| 5.3GHz<br>WLAN | Mode                   | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Duty Cycle % |
|----------------|------------------------|---------|--------------------|------------------------|------------------|--------------|
|                | 802.11a 6Mbps          | 52      | 5260               | 16.10                  | 18.00            | 98.31        |
|                |                        | 56      | 5280               | 16.11                  | 18.00            |              |
|                |                        | 60      | 5300               | 16.16                  | 18.00            |              |
|                |                        | 64      | 5320               | 16.35                  | 18.00            |              |
|                | 802.11n-HT20<br>MCS0   | 52      | 5260               | 16.17                  | 18.00            | 98.16        |
|                |                        | 56      | 5280               | 16.14                  | 18.00            |              |
|                |                        | 60      | 5300               | 16.12                  | 18.00            |              |
|                |                        | 64      | 5320               | 16.19                  | 18.00            |              |
|                | 802.11n-HT40<br>MCS0   | 54      | 5270               | 16.13                  | 18.00            | 96.31        |
|                |                        | 62      | 5310               | 16.08                  | 18.00            |              |
|                | 802.11ac-VHT20<br>MCS0 | 52      | 5260               | 16.13                  | 18.00            | 96.47        |
|                |                        | 56      | 5280               | 16.08                  | 18.00            |              |
|                |                        | 60      | 5300               | 16.09                  | 18.00            |              |
|                |                        | 64      | 5320               | 16.16                  | 18.00            |              |
|                | 802.11ac-VHT40<br>MCS0 | 54      | 5270               | 16.09                  | 18.00            | 93.48        |
|                |                        | 62      | 5310               | 16.05                  | 18.00            |              |
|                | 802.11ac-VHT80<br>MCS0 | 58      | 5290               | 15.47                  | 17.00            | 87.62        |

**<Reduced Power Mode for Hotspot On>**
**<2.4GHz WLAN Ant.1+2>**

|             | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Duty Cycle % |
|-------------|---------------------|---------|-----------------|---------------------|---------------|--------------|
| 2.4GHz WLAN | 802.11b 1Mbps       | 1       | 2412            | 17.66               | 19.00         | 99.31        |
|             |                     | 6       | 2437            | 17.71               | 19.00         |              |
|             |                     | 11      | 2462            | 17.76               | 19.00         |              |
|             | 802.11g 6Mbps       | 1       | 2412            | 15.82               | 17.00         | 98.28        |
|             |                     | 6       | 2437            | 16.72               | 18.00         |              |
|             |                     | 11      | 2462            | 15.71               | 17.00         |              |
|             | 802.11n-HT20 MCS0   | 1       | 2412            | 15.11               | 16.00         | 98.16        |
|             |                     | 6       | 2437            | 16.77               | 18.00         |              |
|             |                     | 11      | 2462            | 15.86               | 17.00         |              |
|             | 802.11n-HT40 MCS0   | 3       | 2422            | 15.11               | 16.00         | 94.93        |
|             |                     | 6       | 2437            | 15.11               | 16.00         |              |
|             |                     | 9       | 2452            | 14.16               | 15.00         |              |
|             | 802.11ac-VHT20 MCS0 | 1       | 2412            | 14.86               | 16.00         | 96.68        |
|             |                     | 6       | 2437            | 16.61               | 18.00         |              |
|             |                     | 11      | 2462            | 15.61               | 17.00         |              |
|             | 802.11ac-VHT40 MCS0 | 3       | 2422            | 15.01               | 16.00         | 90.54        |
|             |                     | 6       | 2437            | 15.01               | 16.00         |              |
|             |                     | 9       | 2452            | 14.01               | 15.00         |              |

**<5GHz WLAN Ant.1+2>**

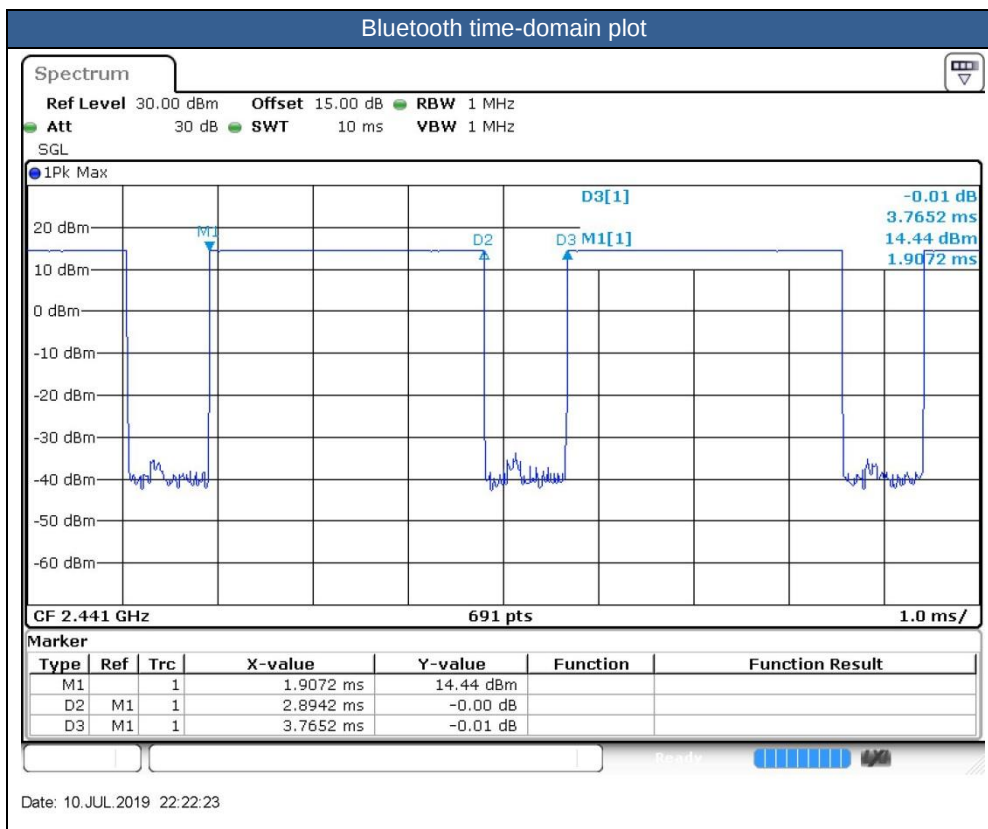
|             | Mode                | Channel | Frequency (MHz) | Average power (dBm) | Tune-Up Limit | Duty Cycle % |
|-------------|---------------------|---------|-----------------|---------------------|---------------|--------------|
| 5.2GHz WLAN | 802.11a 6Mbps       | 36      | 5180            | 15.59               | 17.00         | 98.31        |
|             |                     | 40      | 5200            | 15.41               | 17.00         |              |
|             |                     | 44      | 5220            | 15.34               | 17.00         |              |
|             |                     | 48      | 5240            | 15.37               | 17.00         |              |
|             | 802.11n-HT20 MCS0   | 36      | 5180            | 15.56               | 17.00         | 98.16        |
|             |                     | 40      | 5200            | 15.34               | 17.00         |              |
|             |                     | 44      | 5220            | 15.28               | 17.00         |              |
|             |                     | 48      | 5240            | 15.32               | 17.00         |              |
|             | 802.11n-HT40 MCS0   | 38      | 5190            | 15.51               | 17.00         | 96.31        |
|             |                     | 46      | 5230            | 15.25               | 17.00         |              |
|             | 802.11ac-VHT20 MCS0 | 36      | 5180            | 15.47               | 17.00         | 96.47        |
|             |                     | 40      | 5200            | 15.26               | 17.00         |              |
|             |                     | 44      | 5220            | 15.17               | 17.00         |              |
|             |                     | 48      | 5240            | 15.23               | 17.00         |              |
|             | 802.11ac-VHT40 MCS0 | 38      | 5190            | 15.48               | 17.00         | 93.48        |
|             |                     | 46      | 5230            | 15.12               | 17.00         |              |
|             | 802.11ac-VHT80 MCS0 | 42      | 5210            | 14.46               | 16.00         | 87.62        |

| 5.8GHz<br>WLAN | Mode                   | Channel | Frequency<br>(MHz) | Average power<br>(dBm) | Tune-Up<br>Limit | Duty Cycle % |
|----------------|------------------------|---------|--------------------|------------------------|------------------|--------------|
|                | 802.11a MCS0           | 149     | 5745               | 14.56                  | 16.00            | 98.31        |
|                |                        | 157     | 5785               | 14.61                  | 16.00            |              |
|                |                        | 165     | 5825               | 14.51                  | 16.00            |              |
|                | 802.11n-HT20<br>MCS0   | 149     | 5745               | 14.46                  | 16.00            | 98.16        |
|                |                        | 157     | 5785               | 14.58                  | 16.00            |              |
|                |                        | 165     | 5825               | 14.43                  | 16.00            |              |
|                | 802.11n-HT40<br>MCS0   | 151     | 5755               | 14.48                  | 16.00            | 96.31        |
|                |                        | 159     | 5795               | 14.41                  | 16.00            |              |
|                | 802.11ac-VHT20<br>MCS0 | 149     | 5745               | 14.40                  | 16.00            | 96.47        |
|                |                        | 157     | 5785               | 14.43                  | 16.00            |              |
|                |                        | 165     | 5825               | 14.37                  | 16.00            |              |
|                | 802.11ac-VHT40<br>MCS0 | 151     | 5755               | 14.34                  | 16.00            | 93.48        |
|                |                        | 159     | 5795               | 14.23                  | 16.00            |              |
|                | 802.11ac-VHT80<br>MCS0 | 155     | 5775               | 13.73                  | 15.00            | 87.62        |

## <2.4GHz Bluetooth>

### General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps, due to its highest average power.
2. The Bluetooth duty cycle is 76.87 % as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 83.3%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.

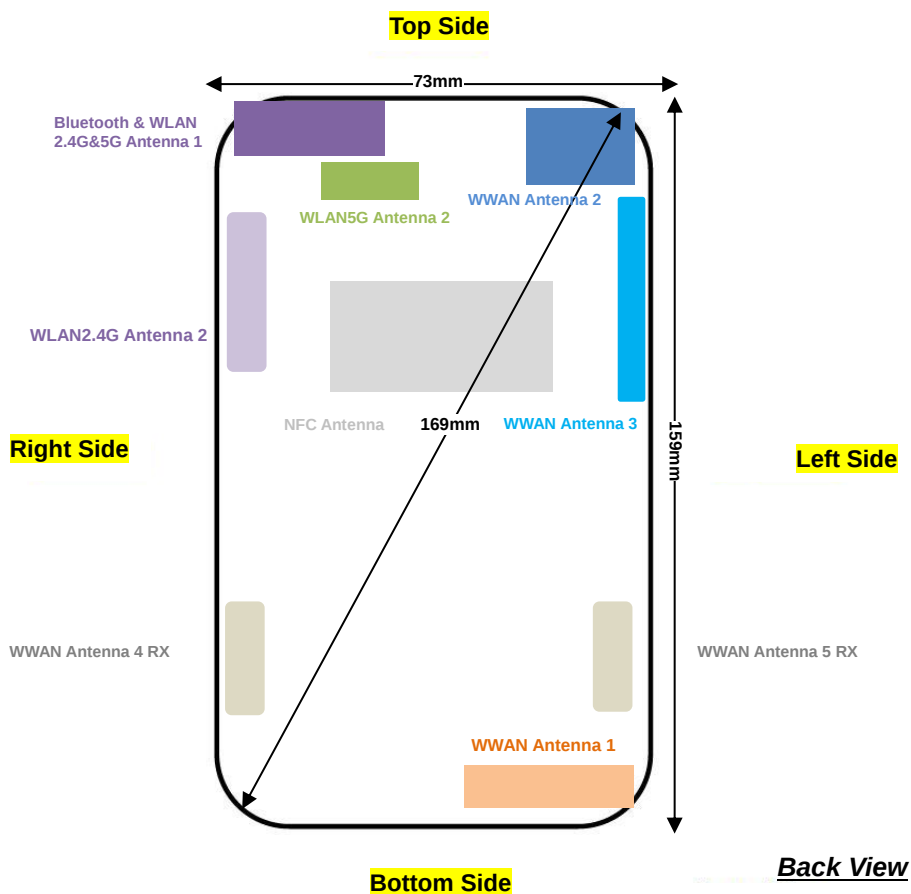


| Mode                | Channel | Frequency (MHz) | Average power (dBm) |
|---------------------|---------|-----------------|---------------------|
|                     |         |                 | 1Mbps               |
| v3.0 with EDR       | CH 00   | 2402            | 14.10               |
|                     | CH 39   | 2441            | 14.10               |
|                     | CH 78   | 2480            | 13.40               |
| Tune-up limit (dBm) |         |                 | 15.40               |

| Mode                 | Channel | Frequency (MHz) | Average power (dBm) |
|----------------------|---------|-----------------|---------------------|
|                      |         |                 | GFSK                |
| v4.0/4.1/4.2 with LE | CH 00   | 2402            | 11.50               |
|                      | CH 19   | 2440            | 11.30               |
|                      | CH 39   | 2480            | 10.60               |
| Tune-up limit (dBm)  |         |                 | 12.00               |

| Mode                | Channel | Frequency (MHz) | Average power (dBm) |
|---------------------|---------|-----------------|---------------------|
|                     |         |                 | GFSK                |
| v5.0 with LE        | CH 00   | 2402            | 11.60               |
|                     | CH 19   | 2440            | 11.30               |
|                     | CH 39   | 2480            | 10.60               |
| Tune-up limit (dBm) |         |                 | 12.00               |

### 13. Antenna Location



| Antenna                           | Support Band                                                                                      |
|-----------------------------------|---------------------------------------------------------------------------------------------------|
| WWAN Antenna 1                    | GSM: 1900<br>WCDMA: B2 / B4<br>CDMA: BC1<br>LTE: B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66       |
| WWAN Antenna 2                    | GSM: 1900<br>WCDMA: B2 / B4<br>CDMA: BC1<br>LTE: B2 / B4 / B7 / B25 / B30 / B38 / B41 / B48 / B66 |
| WWAN Antenna 3                    | GSM: 850<br>WCDMA: B5<br>CDMA: BC0/BC10<br>LTE: B5 / B12 / B13 / B17 / B26 / B71                  |
| WWAN Antenna 4                    | LTE B2/4/25/66/41 RX                                                                              |
| WWAN Antenna 5                    | LTEB2/4/25/66/41/48 RX                                                                            |
| Bluetooth & WLAN2.4G&5G Antenna 1 | Bluetooth<br>WLAN 2.4GHz<br>WLAN 5GHz                                                             |
| WLAN2.4G Antenna 2                | WLAN 2.4GHz                                                                                       |
| WLAN 5G Antenna 2                 | WLAN 5GHz                                                                                         |

| Distance of the Antenna to the EUT surface/edge |        |        |          |             |            |           |
|-------------------------------------------------|--------|--------|----------|-------------|------------|-----------|
| Antennas                                        | Back   | Front  | Top Side | Bottom Side | Right Side | Left Side |
| WWAN Antenna 1                                  | ≤ 25mm | ≤ 25mm | >25mm    | ≤ 25mm      | >25mm      | ≤ 25mm    |
| WWAN Antenna 2                                  | ≤ 25mm | ≤ 25mm | ≤ 25mm   | >25mm       | >25mm      | ≤ 25mm    |
| WWAN Antenna 3                                  | ≤ 25mm | ≤ 25mm | ≤ 25mm   | >25mm       | >25mm      | ≤ 25mm    |
| Bluetooth & WLAN2.4G&5G Antenna 1               | ≤ 25mm | ≤ 25mm | ≤ 25mm   | >25mm       | ≤ 25mm     | >25mm     |
| WLAN2.4G Antenna 2                              | ≤ 25mm | ≤ 25mm | ≤ 25mm   | >25mm       | ≤ 25mm     | >25mm     |
| WLAN 5G Antenna 2                               | ≤ 25mm | ≤ 25mm | ≤ 25mm   | >25mm       | ≤ 25mm     | >25mm     |

| Positions for SAR tests; Hotspot mode |      |       |          |             |            |           |
|---------------------------------------|------|-------|----------|-------------|------------|-----------|
| Antennas                              | Back | Front | Top Side | Bottom Side | Right Side | Left Side |
| WWAN Antenna 1                        | Yes  | Yes   | No       | Yes         | No         | Yes       |
| WWAN Antenna 2                        | Yes  | Yes   | Yes      | No          | No         | Yes       |
| WWAN Antenna 3                        | Yes  | Yes   | Yes      | No          | No         | Yes       |
| Bluetooth & WLAN2.4G&5G Antenna 1     | Yes  | Yes   | Yes      | No          | Yes        | No        |
| WLAN2.4G Antenna 2                    | Yes  | Yes   | Yes      | No          | Yes        | No        |
| WLAN 5G Antenna 2                     | Yes  | Yes   | Yes      | No          | Yes        | No        |

**General Note:**

Referring to KDB 941225 D06 v02r01, when the overall device length and width are ≥ 9cm\*5cm, the test distance is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.



## 14. 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 SAR testing of BT/WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
  - c. For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor
  - d. For WLAN/Bluetooth: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor
  - e. 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 for 1g SAR and 2.0W/Kg for 10g SAR.
4. Per KDB 648474 D04v01r03, when the reported SAR for a body-worn accessory measured without a headset connected to the handset is  $\leq 1.2$  W/kg, SAR testing with a headset connected to the handset is not required.
5. This device 2.4GHz WLAN/5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
6. This device has three WWAN transmitter antennas. WWAN antenna 1 is located at the bottom edge of the device, WWAN antenna 2 is located at the left side of top edge of the device, WWAN antenna 3 is located under WWAN antenna 2, and which can refer to antenna location chapter. WWAN antenna 1 frequency bands include GSM1900, WCDMA B2 / B4, CDMA BC1 and LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66, WWAN antenna 2 frequency bands include GSM1900, WCDMA B2 / B4, CDMA BC1 and LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B48 / B66, and WWAN antenna 3 frequency bands include GSM850, WCDMA B5, CDMA BC0/BC10 and LTE B5 / B12 / B13 / B17 / B26 / B71.
7. For WWAN top antenna 2/3, when the phone is in talking mode and receiver worked, then power reduction will be implemented immediately at GSM850, WCDMA B2 / B4 / B5, CDMA BC0/BC1/BC10 and LTE B2 / B4 / B5 / B7 / B12 / B13 / B17 / B25 / B26 / B30 / B38 / B41 / B48 / B66 / B71.
8. For WWAN top antenna 2/3, hotspot mode is enabled, power reduction will be activated to limit the maximum power of GSM850, WCDMA B5, CDMA2000 BC0 / BC10 and LTE B5 / B7 / B12 / B13 / B17 / B26 / B38 / B41 / B48 / B71.
9. For WWAN bottom antenna 1, hotspot mode is enabled, power reduction will be activated to limit the maximum power of WCDMA B2 / B4, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66.
10. P-sensor can detect handheld state, WCDMA B2 / B4, CDMA2000 BC1, LTE B2 / B4 / B7 / B25 / B30 / B38 / B41 / B66 for front/back/bottom sides of product specific 10g SAR condition reduced powers will be active.
11. For WLAN, when the phone is in talking mode and receiver worked, then power reduction will be implemented immediately at WLAN2.4/5.2/5.3GHz.
12. For WLAN, hotspot mode is enabled, power reduction will be activated to limit the maximum power of WLAN2.4/5.2/5.8GHz.
13. This device supports HPUE for LTE band 41 with class 2 level, so HPUE SAR has been performed.
14. WLAN 2.4GHz/5GHz can transmit in MIMO antenna mode only, and it has no SISO antenna mode.
15. Per KDB648474 D04v01r03, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, when hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg, however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.
  - a. For this device, WWAN transmitter scaled to reduced power mode for product specific 10g SAR is higher than 1.2W/kg of WCDMA B2 / B4, CDMA BC0/1/10 and LTE B5 /B7 /B13 / B4 / B26 / B38 / B41 / B48 / B66, therefore product specific SAR is necessary.
  - b. WLAN 5.3/5.5GHz tested the product specific 10g SAR since it has no hotspot mode.
  - c. When 10-g product specific 10g SAR is considered, SAR thresholds is specified in the procedures for SAR test reduction and exclusion should be multiplied by 2.5.

**GSM Note:**

1. Per KDB 941225 D01v03r01, for SAR test reduction for GSM / GPRS / EDGE modes is determined by the source-based time-averaged output power including tune-up tolerance. The mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.
2. Other configurations of GSM / GPRS / EDGE are considered as secondary modes. The 3G SAR test reduction procedure is applied, when the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode, SAR measurement is not required for the secondary mode.

**WCDMA 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 / HSPA+ 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 / HSPA+ to RMC12.2Kbps and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+, and according to the following RF output power, the output power results of the secondary modes (HSDPA / HSUPA / DC-HSDPA / HSPA+) are less than  $\frac{1}{4}$  dB higher than the primary modes; therefore, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA / HSPA+.

**CDMA2000 Note:**

1. Per KDB 941225 D01v03r01, SAR for head exposure is measured in RC3 with the handset configured to transmit at full rate in SO55.
2. Per KDB 941225 D01v03r01, in Hotspot mode EUT is treated as data device and SAR is tested with Ev-Do Rev 0 (RTAP 153.6kbps) as the primary mode.
3. Per KDB 941225 D01v03r01, for Body-worn accessory SAR is measured in RC3 with the handset configured in TDSO/SO32 to transmit at full rate on FCH only with all other code channels disabled. The body-worn accessory procedures in KDB Publication 447498 are applied. The 3G SAR test reduction procedure is applied to the multiple code channel configuration (FCH+SCH), with FCH only as the primary mode.

**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/64QAM 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/64QAM 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. Per FCC KDB inquiry guidance, the following applied to intra-band contiguous UL CA only;
  - a. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05. The required test channel should be associated with the UL PCC. For channels at the ends of a frequency band, the SCC and subsequent CCs are added to the side within the transmission band. Otherwise, the CCs should be added alternatively to either side of the PCC
  - b. UL CA SAR is measured for each exposure condition in each frequency band using the highest SAR configuration tested in standalone LTE mode to establish the UL CA PCC. The SCC and subsequent CC must use configurations similar to the PCC to establish conservative or worst case equivalent SAR test conditions.
  - c. When the SAR configuration tested in step b) has a maximum output power specification more than  $\frac{1}{4}$  dB lower than the highest maximum output power conditions measured in the power measurements in step a) above and the reported SAR in step b) is larger than 1.2 W/kg, SAR measurement is also required for the configuration in step a)
  - d. All standalone SAR configurations with SAR  $> 1.2$  W/kg must also be tested by applying the procedures in step b)
7. For LTE B5 / B12 / 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.
8. LTE B17 / B4 / B2 / B38 SAR test was covered by B12 / B66 / B25 / B41; 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.

**WLAN Note:**

1. For 2.4GHz WLAN each antenna, transmit power in SISO operation is larger than (or equal to) the power in MIMO operation, RF exposure compliance of MIMO mode can be deduced from the compliance simultaneous transmission of antennas operating in SISO mode.
2. For 5GHz WLAN, SAR testing was performed on MIMO mode since it can't transmit in SISO mode, so only evaluate MIMO mode SAR.
3. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is  $\leq 1.2$  W/kg.
4. Per KDB 248227 D01v02r02, U-NII-1 SAR testing is not required when the U-NII-2A band highest reported SAR for a test configuration is  $\leq 1.2$  W/kg, SAR is not required for U-NII-1 band.
5. When the reported SAR of the test position is  $> 0.4$  W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is  $\leq 0.8$  W/kg or all required test position are tested.
6. For all positions / configurations, when the reported SAR is  $> 0.8$  W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required channels are tested.
7. During SAR testing the WLAN transmission was verified using a spectrum analyzer.



### **14.1 Head SAR**

#### **<GSM SAR>**

| Plot No. | Antenna | Band    | Mode             | Test Position | 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) |
|----------|---------|---------|------------------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | GSM850  | GPRS(4 Tx slot)  | Right Cheek   | Reduced         | 128 | 824.2       | 24.29               | 25.30               | 1.262                  | -0.17            | 0.286                  | 0.361                  |
|          | 3       | GSM850  | GPRS(4 Tx slot)  | Right Tilted  | Reduced         | 128 | 824.2       | 24.29               | 25.30               | 1.262                  | 0.08             | 0.052                  | 0.066                  |
|          | 3       | GSM850  | GPRS(4 Tx slot)  | Left Cheek    | Reduced         | 128 | 824.2       | 24.29               | 25.30               | 1.262                  | 0.04             | 0.401                  | 0.506                  |
|          | 3       | GSM850  | GPRS(4 Tx slot)  | Left Tilted   | Reduced         | 128 | 824.2       | 24.29               | 25.30               | 1.262                  | 0.09             | 0.065                  | 0.082                  |
|          | 3       | GSM850  | GPRS(4 Tx slot)  | Left Cheek    | Reduced         | 189 | 836.4       | 24.21               | 25.30               | 1.285                  | -0.05            | 0.491                  | 0.631                  |
| 01       | 3       | GSM850  | GPRS(4 Tx slot)  | Left Cheek    | Reduced         | 251 | 848.8       | 24.05               | 25.30               | 1.334                  | 0.19             | 0.581                  | <b>0.775</b>           |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Right Cheek   | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.09             | 0.613                  | 0.705                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Right Tilted  | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.06             | 0.592                  | 0.681                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Left Cheek    | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.09             | 0.309                  | 0.356                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Left Tilted   | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.08             | 0.469                  | 0.540                  |
| 02       | 2       | GSM1900 | GPRS(3 Tx slots) | Right Cheek   | Full            | 661 | 1880        | 24.39               | 25.10               | 1.178                  | -0.14            | 0.789                  | <b>0.929</b>           |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Right Cheek   | Full            | 810 | 1909.8      | 24.32               | 25.10               | 1.197                  | 0.02             | 0.739                  | 0.884                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Right Cheek   | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.09             | 0.064                  | 0.081                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Right Tilted  | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.04             | 0.059                  | 0.075                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Left Cheek    | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.03             | 0.076                  | 0.096                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Left Tilted   | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.07             | 0.053                  | 0.067                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Left Cheek    | Full            | 661 | 1880        | 25.45               | 26.50               | 1.274                  | -0.09            | 0.070                  | 0.089                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Left Cheek    | Full            | 810 | 1909.8      | 25.42               | 26.50               | 1.282                  | 0.01             | 0.074                  | 0.095                  |

<WCDMA SAR>

| Plot No. | Antenna | Band     | Mode         | Test Position | 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) |
|----------|---------|----------|--------------|---------------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | WCDMA V  | RMC 12.2Kbps | Right Cheek   | Reduced         | 4132 | 826.4       | 20.88               | 21.30               | 1.102                  | 0.05             | 0.449                  | 0.495                  |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Right Tilted  | Reduced         | 4132 | 826.4       | 20.88               | 21.30               | 1.102                  | 0.09             | 0.085                  | 0.094                  |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Left Cheek    | Reduced         | 4132 | 826.4       | 20.88               | 21.30               | 1.102                  | 0.02             | 0.645                  | 0.710                  |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Left Tilted   | Reduced         | 4132 | 826.4       | 20.88               | 21.30               | 1.102                  | 0.14             | 0.104                  | 0.115                  |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Left Cheek    | Reduced         | 4182 | 836.4       | 20.76               | 21.30               | 1.132                  | 0.07             | 0.640                  | 0.725                  |
| 03       | 3       | WCDMA V  | RMC 12.2Kbps | Left Cheek    | Reduced         | 4233 | 846.6       | 20.59               | 21.30               | 1.178                  | -0.06            | 0.627                  | 0.738                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Right Cheek   | Reduced         | 1413 | 1732.6      | 20.26               | 20.40               | 1.033                  | 0.05             | 0.780                  | 0.806                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Right Tilted  | Reduced         | 1413 | 1732.6      | 20.26               | 20.40               | 1.033                  | 0.03             | 0.568                  | 0.587                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Left Cheek    | Reduced         | 1413 | 1732.6      | 20.26               | 20.40               | 1.033                  | 0.05             | 0.325                  | 0.336                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Left Tilted   | Reduced         | 1413 | 1732.6      | 20.26               | 20.40               | 1.033                  | 0.01             | 0.415                  | 0.429                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Right Cheek   | Reduced         | 1312 | 1712.4      | 20.10               | 20.40               | 1.072                  | 0.04             | 0.794                  | 0.851                  |
| 04       | 2       | WCDMA IV | RMC 12.2Kbps | Right Cheek   | Reduced         | 1513 | 1752.6      | 20.21               | 20.40               | 1.045                  | 0.03             | 0.876                  | 0.915                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Right Cheek   | Full            | 1413 | 1732.6      | 24.18               | 24.80               | 1.153                  | 0.05             | 0.246                  | 0.284                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Right Tilted  | Full            | 1413 | 1732.6      | 24.18               | 24.80               | 1.153                  | 0.01             | 0.120                  | 0.138                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Left Cheek    | Full            | 1413 | 1732.6      | 24.18               | 24.80               | 1.153                  | -0.06            | 0.143                  | 0.165                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Left Tilted   | Full            | 1413 | 1732.6      | 24.18               | 24.80               | 1.153                  | 0.02             | 0.114                  | 0.131                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Right Cheek   | Full            | 1312 | 1712.4      | 24.09               | 24.80               | 1.178                  | 0.07             | 0.240                  | 0.283                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Right Cheek   | Full            | 1513 | 1752.6      | 24.17               | 24.80               | 1.156                  | 0.06             | 0.178                  | 0.206                  |
|          | 2       | WCDMA II | RMC 12.2Kbps | Right Cheek   | Reduced         | 9400 | 1880        | 20.10               | 20.40               | 1.072                  | -0.05            | 0.747                  | 0.800                  |
|          | 2       | WCDMA II | RMC 12.2Kbps | Right Tilted  | Reduced         | 9400 | 1880        | 20.10               | 20.40               | 1.072                  | 0.01             | 0.602                  | 0.645                  |
|          | 2       | WCDMA II | RMC 12.2Kbps | Left Cheek    | Reduced         | 9400 | 1880        | 20.10               | 20.40               | 1.072                  | 0.1              | 0.371                  | 0.398                  |
|          | 2       | WCDMA II | RMC 12.2Kbps | Left Tilted   | Reduced         | 9400 | 1880        | 20.10               | 20.40               | 1.072                  | 0.05             | 0.544                  | 0.583                  |
| 05       | 2       | WCDMA II | RMC 12.2Kbps | Right Cheek   | Reduced         | 9262 | 1852.4      | 20.01               | 20.40               | 1.094                  | -0.08            | 0.799                  | 0.874                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Right Cheek   | Reduced         | 9538 | 1907.6      | 20.00               | 20.40               | 1.096                  | 0.06             | 0.731                  | 0.802                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Right Cheek   | Full            | 9400 | 1880        | 24.21               | 24.80               | 1.146                  | -0.04            | 0.167                  | 0.191                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Right Tilted  | Full            | 9400 | 1880        | 24.21               | 24.80               | 1.146                  | 0.02             | 0.124                  | 0.142                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Left Cheek    | Full            | 9400 | 1880        | 24.21               | 24.80               | 1.146                  | 0.06             | 0.181                  | 0.207                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Left Tilted   | Full            | 9400 | 1880        | 24.21               | 24.80               | 1.146                  | 0.11             | 0.116                  | 0.133                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Left Cheek    | Full            | 9262 | 1852.4      | 24.15               | 24.80               | 1.161                  | 0.1              | 0.169                  | 0.196                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Left Cheek    | Full            | 9538 | 1907.6      | 24.20               | 24.80               | 1.148                  | 0.03             | 0.182                  | 0.209                  |



**<CDMA2000 SAR>**

| Plot No. | Antenna | Band          | Mode     | Test Position | 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) |
|----------|---------|---------------|----------|---------------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | CDMA2000 BC0  | RC3+SO55 | Right Cheek   | Reduced         | 1013 | 824.7       | 21.21               | 21.80               | 1.146                  | 0.05             | 0.517                  | 0.592                  |
|          | 3       | CDMA2000 BC0  | RC3+SO55 | Right Tilted  | Reduced         | 1013 | 824.7       | 21.21               | 21.80               | 1.146                  | 0.03             | 0.100                  | 0.115                  |
|          | 3       | CDMA2000 BC0  | RC3+SO55 | Left Cheek    | Reduced         | 1013 | 824.7       | 21.21               | 21.80               | 1.146                  | 0.08             | 0.710                  | 0.813                  |
|          | 3       | CDMA2000 BC0  | RC3+SO55 | Left Tilted   | Reduced         | 1013 | 824.7       | 21.21               | 21.80               | 1.146                  | 0.04             | 0.127                  | 0.145                  |
|          | 3       | CDMA2000 BC0  | RC3+SO55 | Left Cheek    | Reduced         | 384  | 836.52      | 20.96               | 21.80               | 1.213                  | 0.11             | 0.673                  | 0.817                  |
| 06       | 3       | CDMA2000 BC0  | RC3+SO55 | Left Cheek    | Reduced         | 777  | 848.31      | 20.84               | 21.80               | 1.247                  | 0.09             | 0.660                  | 0.823                  |
|          | 3       | CDMA2000 BC10 | RC3+SO55 | Right Cheek   | Reduced         | 580  | 820.5       | 21.25               | 21.80               | 1.135                  | 0.05             | 0.538                  | 0.611                  |
|          | 3       | CDMA2000 BC10 | RC3+SO55 | Right Tilted  | Reduced         | 580  | 820.5       | 21.25               | 21.80               | 1.135                  | 0.02             | 0.107                  | 0.121                  |
| 07       | 3       | CDMA2000 BC10 | RC3+SO55 | Left Cheek    | Reduced         | 580  | 820.5       | 21.25               | 21.80               | 1.135                  | 0.08             | 0.737                  | 0.837                  |
|          | 3       | CDMA2000 BC10 | RC3+SO55 | Left Tilted   | Reduced         | 580  | 820.5       | 21.25               | 21.80               | 1.135                  | 0.11             | 0.136                  | 0.154                  |
|          | 3       | CDMA2000 BC10 | RC3+SO55 | Left Cheek    | Reduced         | 476  | 817.9       | 21.23               | 21.80               | 1.140                  | -0.07            | 0.722                  | 0.823                  |
|          | 3       | CDMA2000 BC10 | RC3+SO55 | Left Cheek    | Reduced         | 684  | 823.1       | 21.20               | 21.80               | 1.148                  | 0.09             | 0.707                  | 0.812                  |
|          | 2       | CDMA2000 BC1  | RC3+SO55 | Right Cheek   | Reduced         | 1175 | 1908.75     | 20.27               | 20.90               | 1.156                  | 0.03             | 0.711                  | 0.822                  |
|          | 2       | CDMA2000 BC1  | RC3+SO55 | Right Tilted  | Reduced         | 1175 | 1908.75     | 20.27               | 20.90               | 1.156                  | 0.09             | 0.429                  | 0.496                  |
|          | 2       | CDMA2000 BC1  | RC3+SO55 | Left Cheek    | Reduced         | 1175 | 1908.75     | 20.27               | 20.90               | 1.156                  | 0.1              | 0.424                  | 0.490                  |
|          | 2       | CDMA2000 BC1  | RC3+SO55 | Left Tilted   | Reduced         | 1175 | 1908.75     | 20.27               | 20.90               | 1.156                  | 0.01             | 0.601                  | 0.695                  |
|          | 2       | CDMA2000 BC1  | RC3+SO55 | Right Cheek   | Reduced         | 25   | 1851.25     | 20.22               | 20.90               | 1.169                  | 0.04             | 0.705                  | 0.824                  |
| 08       | 2       | CDMA2000 BC1  | RC3+SO55 | Right Cheek   | Reduced         | 600  | 1880        | 20.17               | 20.90               | 1.183                  | 0.03             | 0.706                  | 0.835                  |
|          | 1       | CDMA2000 BC1  | RC3+SO55 | Right Cheek   | Full            | 1175 | 1908.75     | 23.97               | 24.80               | 1.211                  | -0.06            | 0.147                  | 0.178                  |
|          | 1       | CDMA2000 BC1  | RC3+SO55 | Right Tilted  | Full            | 1175 | 1908.75     | 23.97               | 24.80               | 1.211                  | 0.02             | 0.061                  | 0.074                  |
|          | 1       | CDMA2000 BC1  | RC3+SO55 | Left Cheek    | Full            | 1175 | 1908.75     | 23.97               | 24.80               | 1.211                  | 0.07             | 0.151                  | 0.183                  |
|          | 1       | CDMA2000 BC1  | RC3+SO55 | Left Tilted   | Full            | 1175 | 1908.75     | 23.97               | 24.80               | 1.211                  | -0.04            | 0.104                  | 0.126                  |
|          | 1       | CDMA2000 BC1  | RC3+SO55 | Left Cheek    | Full            | 25   | 1851.25     | 23.87               | 24.80               | 1.239                  | 0.05             | 0.137                  | 0.170                  |
|          | 1       | CDMA2000 BC1  | RC3+SO55 | Left Cheek    | Full            | 600  | 1880        | 23.85               | 24.80               | 1.245                  | 0.03             | 0.161                  | 0.200                  |



**<FDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.02             | 0.440                  | 0.475                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.05             | 0.092                  | 0.099                  |
| 09       | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.09             | 0.721                  | 0.778                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.03             | 0.128                  | 0.138                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | 0.11             | 0.411                  | 0.447                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Right Tilted  | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | 0.02             | 0.085                  | 0.092                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Left Cheek    | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | -0.11            | 0.634                  | 0.689                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Left Tilted   | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | -0.03            | 0.124                  | 0.135                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 23095  | 707.5       | 19.94               | 20.80               | 1.219                  | 0.02             | 0.310                  | 0.378                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 23095  | 707.5       | 19.94               | 20.80               | 1.219                  | 0.09             | 0.064                  | 0.078                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 23095  | 707.5       | 19.94               | 20.80               | 1.219                  | 0.05             | 0.393                  | 0.479                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 23095  | 707.5       | 19.94               | 20.80               | 1.219                  | 0.07             | 0.072                  | 0.088                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Right Cheek   | Reduced         | 23095  | 707.5       | 19.93               | 20.80               | 1.222                  | 0.03             | 0.322                  | 0.393                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Right Tilted  | Reduced         | 23095  | 707.5       | 19.93               | 20.80               | 1.222                  | 0.06             | 0.064                  | 0.078                  |
| 10       | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Left Cheek    | Reduced         | 23095  | 707.5       | 19.93               | 20.80               | 1.222                  | 0.12             | 0.442                  | 0.540                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Left Tilted   | Reduced         | 23095  | 707.5       | 19.93               | 20.80               | 1.222                  | 0.04             | 0.083                  | 0.101                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 23230  | 782         | 20.68               | 21.30               | 1.153                  | 0.05             | 0.501                  | 0.578                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 23230  | 782         | 20.68               | 21.30               | 1.153                  | 0.09             | 0.104                  | 0.120                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 23230  | 782         | 20.68               | 21.30               | 1.153                  | 0.07             | 0.680                  | 0.784                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 23230  | 782         | 20.68               | 21.30               | 1.153                  | 0.02             | 0.137                  | 0.158                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Right Cheek   | Reduced         | 23230  | 782         | 20.66               | 21.30               | 1.159                  | 0.03             | 0.517                  | 0.599                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Right Tilted  | Reduced         | 23230  | 782         | 20.66               | 21.30               | 1.159                  | 0.06             | 0.106                  | 0.123                  |
| 11       | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Left Cheek    | Reduced         | 23230  | 782         | 20.66               | 21.30               | 1.159                  | 0.08             | 0.735                  | 0.852                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Left Tilted   | Reduced         | 23230  | 782         | 20.66               | 21.30               | 1.159                  | 0.11             | 0.140                  | 0.162                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 50      | 0         | Left Cheek    | Reduced         | 23230  | 782         | 20.66               | 21.30               | 1.159                  | 0.05             | 0.707                  | 0.819                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 20525  | 836.5       | 19.08               | 19.80               | 1.180                  | 0.02             | 0.357                  | 0.421                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 20525  | 836.5       | 19.08               | 19.80               | 1.180                  | 0.09             | 0.069                  | 0.081                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 20525  | 836.5       | 19.08               | 19.80               | 1.180                  | 0.04             | 0.488                  | 0.576                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 20525  | 836.5       | 19.08               | 19.80               | 1.180                  | 0.07             | 0.081                  | 0.096                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Right Cheek   | Reduced         | 20525  | 836.5       | 19.06               | 19.80               | 1.186                  | 0.06             | 0.365                  | 0.433                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Right Tilted  | Reduced         | 20525  | 836.5       | 19.06               | 19.80               | 1.186                  | 0.08             | 0.074                  | 0.088                  |
| 12       | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Left Cheek    | Reduced         | 20525  | 836.5       | 19.06               | 19.80               | 1.186                  | 0.09             | 0.501                  | 0.594                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Left Tilted   | Reduced         | 20525  | 836.5       | 19.06               | 19.80               | 1.186                  | 0.03             | 0.085                  | 0.101                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 26865  | 831.5       | 19.15               | 19.80               | 1.161                  | 0.02             | 0.364                  | 0.423                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 26865  | 831.5       | 19.15               | 19.80               | 1.161                  | 0.08             | 0.070                  | 0.081                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 26865  | 831.5       | 19.15               | 19.80               | 1.161                  | 0.09             | 0.521                  | 0.605                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 26865  | 831.5       | 19.15               | 19.80               | 1.161                  | 0.07             | 0.086                  | 0.100                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Right Cheek   | Reduced         | 26865  | 831.5       | 19.13               | 19.80               | 1.167                  | 0.02             | 0.377                  | 0.440                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Right Tilted  | Reduced         | 26865  | 831.5       | 19.13               | 19.80               | 1.167                  | 0.08             | 0.072                  | 0.084                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Left Cheek    | Reduced         | 26865  | 831.5       | 19.13               | 19.80               | 1.167                  | 0.04             | 0.524                  | 0.611                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Left Tilted   | Reduced         | 26865  | 831.5       | 19.13               | 19.80               | 1.167                  | 0.03             | 0.087                  | 0.102                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Left Cheek    | Reduced         | 26765  | 821.5       | 19.10               | 19.80               | 1.175                  | 0.05             | 0.546                  | 0.641                  |
| 13       | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Left Cheek    | Reduced         | 26965  | 841.5       | 19.00               | 19.80               | 1.202                  | 0.04             | 0.545                  | 0.655                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 132322 | 1745        | 18.75               | 18.90               | 1.035                  | -0.06            | 0.867                  | 0.897                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 132322 | 1745        | 18.75               | 18.90               | 1.035                  | 0.06             | 0.582                  | 0.602                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 132322 | 1745        | 18.75               | 18.90               | 1.035                  | 0.01             | 0.291                  | 0.301                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 132322 | 1745        | 18.75               | 18.90               | 1.035                  | 0.08             | 0.384                  | 0.397                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 132072 | 1720        | 18.68               | 18.90               | 1.052                  | 0.01             | 0.741                  | 0.780                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 132572 | 1770        | 18.62               | 18.90               | 1.067                  | 0.01             | 0.753                  | 0.803                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 132322 | 1745        | 18.69               | 18.90               | 1.050                  | 0.04             | 0.889                  | 0.933                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Right Tilted  | Reduced         | 132322 | 1745        | 18.69               | 18.90               | 1.050                  | 0.02             | 0.617                  | 0.648                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Left Cheek    | Reduced         | 132322 | 1745        | 18.69               | 18.90               | 1.050                  | 0.06             | 0.305                  | 0.320                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Left Tilted   | Reduced         | 132322 | 1745        | 18.69               | 18.90               | 1.050                  | 0.01             | 0.411                  | 0.431                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 132072 | 1720        | 18.61               | 18.90               | 1.069                  | -0.11            | 0.771                  | 0.824                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 132572 | 1770        | 18.60               | 18.90               | 1.072                  | 0.07             | 0.765                  | 0.820                  |
| 14       | 2       | LTE Band 66 | 20M      | QPSK       | 100     | 0         | Right Cheek   | Reduced         | 132322 | 1745        | 18.61               | 18.90               | 1.069                  | 0.01             | 0.886                  | 0.947                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Full            | 132322 | 1745        | 23.13               | 23.80               | 1.167                  | 0.03             | 0.229                  | 0.267                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Tilted  | Full            | 132322 | 1745        | 23.13               | 23.80               | 1.167                  | 0.05             | 0.098                  | 0.114                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Full            | 132322 | 1745        | 23.13               | 23.80               | 1.167                  | 0.09             | 0.132                  | 0.154                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Left Tilted   | Full            | 132322 | 1745        | 23.13               | 23.80               | 1.167                  | 0.12             | 0.112                  | 0.131                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Full            | 132072 | 1720        | 23.04               | 23.80               | 1.191                  | -0.08            | 0.212                  | 0.253                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Full            | 132572 | 1770        | 23.12               | 23.80               | 1.169                  | 0.06             | 0.176                  | 0.206                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Full            | 132322 | 1745        | 22.21               | 22.80               | 1.146                  | 0.04             | 0.174                  | 0.199                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Right Tilted  | Full            | 132322 | 1745        | 22.21               | 22.80               | 1.146                  | 0.03             | 0.079                  | 0.090                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Left Cheek    | Full            | 132322 | 1745        | 22.21               | 22.80               | 1.146                  | 0.08             | 0.108                  | 0.124                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Left Tilted   | Full            | 132322 | 1745        | 22.21               | 22.80               | 1.146                  | 0.05             | 0.091                  | 0.104                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 26140 | 1860        | 18.99               | 19.40               | 1.099                  | 0.07             | 0.824                  | 0.906                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 26140 | 1860        | 18.99               | 19.40               | 1.099                  | -0.02            | 0.606                  | 0.666                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 26140 | 1860        | 18.99               | 19.40               | 1.099                  | 0.06             | 0.370                  | 0.407                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 26140 | 1860        | 18.99               | 19.40               | 1.099                  | 0.07             | 0.510                  | 0.560                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 26340 | 1880        | 18.91               | 19.40               | 1.119                  | 0.04             | 0.804                  | 0.900                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 26590 | 1905        | 18.93               | 19.40               | 1.114                  | 0.01             | 0.791                  | 0.881                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 26140 | 1860        | 18.98               | 19.40               | 1.102                  | 0.09             | 0.910                  | 1.002                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Right Tilted  | Reduced         | 26140 | 1860        | 18.98               | 19.40               | 1.102                  | 0.04             | 0.607                  | 0.669                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Left Cheek    | Reduced         | 26140 | 1860        | 18.98               | 19.40               | 1.102                  | 0.11             | 0.375                  | 0.413                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Left Tilted   | Reduced         | 26140 | 1860        | 18.98               | 19.40               | 1.102                  | -0.03            | 0.520                  | 0.573                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 26340 | 1880        | 18.92               | 19.40               | 1.117                  | 0.01             | 0.814                  | 0.909                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 26590 | 1905        | 18.96               | 19.40               | 1.107                  | 0.06             | 0.804                  | 0.890                  |
| 15       | 2       | LTE Band 25 | 20M      | QPSK       | 100     | 0         | Right Cheek   | Reduced         | 26140 | 1860        | 18.94               | 19.40               | 1.112                  | 0.05             | 0.913                  | 1.015                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Full            | 26140 | 1860        | 23.09               | 23.80               | 1.178                  | 0.1              | 0.129                  | 0.152                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Right Tilted  | Full            | 26140 | 1860        | 23.09               | 23.80               | 1.178                  | 0.06             | 0.091                  | 0.107                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Full            | 26140 | 1860        | 23.09               | 23.80               | 1.178                  | 0.02             | 0.136                  | 0.160                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Tilted   | Full            | 26140 | 1860        | 23.09               | 23.80               | 1.178                  | -0.05            | 0.097                  | 0.114                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Full            | 26340 | 1880        | 23.08               | 23.80               | 1.180                  | -0.1             | 0.156                  | 0.184                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Full            | 26590 | 1905        | 22.90               | 23.80               | 1.230                  | -0.04            | 0.165                  | 0.203                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Full            | 26140 | 1860        | 22.12               | 22.80               | 1.169                  | 0.11             | 0.104                  | 0.122                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Right Tilted  | Full            | 26140 | 1860        | 22.12               | 22.80               | 1.169                  | 0.07             | 0.075                  | 0.088                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Left Cheek    | Full            | 26140 | 1860        | 22.12               | 22.80               | 1.169                  | 0.03             | 0.113                  | 0.132                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Left Tilted   | Full            | 26140 | 1860        | 22.12               | 22.80               | 1.169                  | 0.08             | 0.079                  | 0.092                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Right Cheek   | Reduced         | 27710 | 2310        | 15.12               | 16.00               | 1.225                  | 0.01             | 0.511                  | 0.626                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Right Tilted  | Reduced         | 27710 | 2310        | 15.12               | 16.00               | 1.225                  | -0.02            | 0.582                  | 0.713                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Left Cheek    | Reduced         | 27710 | 2310        | 15.12               | 16.00               | 1.225                  | 0.07             | 0.355                  | 0.435                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Left Tilted   | Reduced         | 27710 | 2310        | 15.12               | 16.00               | 1.225                  | 0.03             | 0.498                  | 0.610                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Right Cheek   | Reduced         | 27710 | 2310        | 14.94               | 16.00               | 1.276                  | 0.05             | 0.574                  | 0.733                  |
| 16       | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Right Tilted  | Reduced         | 27710 | 2310        | 14.94               | 16.00               | 1.276                  | 0.04             | 0.657                  | 0.839                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Left Cheek    | Reduced         | 27710 | 2310        | 14.94               | 16.00               | 1.276                  | 0.06             | 0.364                  | 0.465                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Left Tilted   | Reduced         | 27710 | 2310        | 14.94               | 16.00               | 1.276                  | -0.02            | 0.523                  | 0.668                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 50      | 0         | Right Tilted  | Reduced         | 27710 | 2310        | 14.91               | 16.00               | 1.285                  | 0.03             | 0.580                  | 0.745                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Right Cheek   | Full            | 27710 | 2310        | 22.68               | 23.80               | 1.294                  | 0.06             | 0.130                  | 0.168                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Right Tilted  | Full            | 27710 | 2310        | 22.68               | 23.80               | 1.294                  | 0.03             | 0.125                  | 0.162                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Left Cheek    | Full            | 27710 | 2310        | 22.68               | 23.80               | 1.294                  | -0.04            | 0.181                  | 0.234                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Left Tilted   | Full            | 27710 | 2310        | 22.68               | 23.80               | 1.294                  | 0.07             | 0.118                  | 0.153                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Right Cheek   | Full            | 27710 | 2310        | 21.78               | 22.80               | 1.265                  | 0.16             | 0.104                  | 0.132                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Right Tilted  | Full            | 27710 | 2310        | 21.78               | 22.80               | 1.265                  | 0.12             | 0.100                  | 0.126                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Left Cheek    | Full            | 27710 | 2310        | 21.78               | 22.80               | 1.265                  | 0.06             | 0.162                  | 0.205                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Left Tilted   | Full            | 27710 | 2310        | 21.78               | 22.80               | 1.265                  | 0.1              | 0.096                  | 0.121                  |



| Plot No. | Antenna | Band       | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|------------|----------|------------|---------|-----------|---------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Reduced         | 21350 | 2560        | 14.87               | 15.50               | 1.156                  | 0.03             | 0.600                  | 0.694                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Right Tilted  | Reduced         | 21350 | 2560        | 14.87               | 15.50               | 1.156                  | -0.02            | 0.593                  | 0.686                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 21350 | 2560        | 14.87               | 15.50               | 1.156                  | -0.07            | 0.335                  | 0.387                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Tilted   | Reduced         | 21350 | 2560        | 14.87               | 15.50               | 1.156                  | 0.05             | 0.455                  | 0.526                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 21350 | 2560        | 14.82               | 15.50               | 1.169                  | 0.07             | 0.629                  | 0.736                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Right Tilted  | Reduced         | 21350 | 2560        | 14.82               | 15.50               | 1.169                  | 0.16             | 0.616                  | 0.720                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Left Cheek    | Reduced         | 21350 | 2560        | 14.82               | 15.50               | 1.169                  | 0.09             | 0.405                  | 0.474                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Left Tilted   | Reduced         | 21350 | 2560        | 14.82               | 15.50               | 1.169                  | 0.04             | 0.541                  | 0.633                  |
| 17       | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 20850 | 2510        | 14.64               | 15.50               | 1.219                  | 0.01             | 0.645                  | 0.786                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 21100 | 2535        | 14.77               | 15.50               | 1.183                  | -0.06            | 0.663                  | 0.784                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Right Cheek   | Full            | 21350 | 2560        | 23.45               | 23.80               | 1.084                  | -0.11            | 0.199                  | 0.216                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Right Tilted  | Full            | 21350 | 2560        | 23.45               | 23.80               | 1.084                  | 0.02             | 0.224                  | 0.243                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Full            | 21350 | 2560        | 23.45               | 23.80               | 1.084                  | -0.09            | 0.316                  | 0.343                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Tilted   | Full            | 21350 | 2560        | 23.45               | 23.80               | 1.084                  | 0.08             | 0.234                  | 0.254                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Full            | 20850 | 2510        | 23.25               | 23.80               | 1.135                  | 0.07             | 0.278                  | 0.316                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Full            | 21100 | 2535        | 23.30               | 23.80               | 1.122                  | 0.1              | 0.294                  | 0.330                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Right Cheek   | Full            | 21350 | 2560        | 22.51               | 22.80               | 1.069                  | 0.03             | 0.157                  | 0.168                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Right Tilted  | Full            | 21350 | 2560        | 22.51               | 22.80               | 1.069                  | 0.09             | 0.172                  | 0.184                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Left Cheek    | Full            | 21350 | 2560        | 22.51               | 22.80               | 1.069                  | 0.05             | 0.247                  | 0.264                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Left Tilted   | Full            | 21350 | 2560        | 22.51               | 22.80               | 1.069                  | 0.04             | 0.175                  | 0.187                  |



**<TDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|-----------------|-------------------------|-------------------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Right Cheek   | Reduced         | 40620                   | 2593                    | 17.65               | 18.00               | 1.084                  | 62.9         | 1.006                     | 0.01             | 0.497                  | 0.542                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Right Tilted  | Reduced         | 40620                   | 2593                    | 17.65               | 18.00               | 1.084                  | 62.9         | 1.006                     | 0.06             | 0.453                  | 0.494                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Reduced         | 40620                   | 2593                    | 17.65               | 18.00               | 1.084                  | 62.9         | 1.006                     | 0.08             | 0.365                  | 0.398                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Tilted   | Reduced         | 40620                   | 2593                    | 17.65               | 18.00               | 1.084                  | 62.9         | 1.006                     | -0.01            | 0.496                  | 0.541                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 40620                   | 2593                    | 17.62               | 18.00               | 1.091                  | 62.9         | 1.006                     | -0.05            | 0.558                  | 0.613                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Tilted  | Reduced         | 40620                   | 2593                    | 17.62               | 18.00               | 1.091                  | 62.9         | 1.006                     | 0.02             | 0.473                  | 0.519                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Left Cheek    | Reduced         | 40620                   | 2593                    | 17.62               | 18.00               | 1.091                  | 62.9         | 1.006                     | 0.07             | 0.385                  | 0.423                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Left Tilted   | Reduced         | 40620                   | 2593                    | 17.62               | 18.00               | 1.091                  | 62.9         | 1.006                     | 0.1              | 0.510                  | 0.560                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 39750                   | 2506                    | 17.59               | 18.00               | 1.099                  | 62.9         | 1.006                     | 0.04             | 0.579                  | 0.640                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 40185                   | 2549.5                  | 17.59               | 18.00               | 1.099                  | 62.9         | 1.006                     | 0.04             | 0.542                  | 0.599                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 41055                   | 2636.5                  | 17.25               | 18.00               | 1.189                  | 62.9         | 1.006                     | -0.11            | 0.530                  | 0.634                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 41490                   | 2680                    | 17.30               | 18.00               | 1.175                  | 62.9         | 1.006                     | 0.02             | 0.640                  | 0.756                  |
| 18       | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 41490                   | 2680                    | 19.18               | 20.00               | 1.208                  | 42.9         | 1.009                     | -0.17            | 0.622                  | 0.758                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 40620                   | 2593                    | 19.65               | 20.00               | 1.084                  | 42.9         | 1.009                     | 0.06             | 0.606                  | 0.663                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 39750                   | 2506                    | 19.63               | 20.00               | 1.089                  | 42.9         | 1.009                     | 0.02             | 0.582                  | 0.639                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 40185                   | 2549.5                  | 19.61               | 20.00               | 1.094                  | 42.9         | 1.009                     | -0.06            | 0.561                  | 0.619                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 41055                   | 2636.5                  | 19.07               | 20.00               | 1.239                  | 42.9         | 1.009                     | 0.04             | 0.547                  | 0.684                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 100     | 0         | Right Cheek   | Reduced         | 40620                   | 2593                    | 17.60               | 18.00               | 1.096                  | 62.9         | 1.006                     | 0.13             | 0.521                  | 0.575                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Right Cheek   | Full            | 40620                   | 2593                    | 23.67               | 23.80               | 1.030                  | 62.9         | 1.006                     | 0.15             | 0.142                  | 0.147                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Right Tilted  | Full            | 40620                   | 2593                    | 23.67               | 23.80               | 1.030                  | 62.9         | 1.006                     | 0.03             | 0.116                  | 0.120                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Full            | 40620                   | 2593                    | 23.67               | 23.80               | 1.030                  | 62.9         | 1.006                     | 0.11             | 0.229                  | 0.237                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Full            | 40620                   | 2593                    | 26.03               | 26.30               | 1.064                  | 42.9         | 1.009                     | 0.01             | 0.250                  | 0.268                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Tilted   | Full            | 40620                   | 2593                    | 23.67               | 23.80               | 1.030                  | 62.9         | 1.006                     | 0.05             | 0.092                  | 0.095                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Full            | 39750                   | 2506                    | 23.43               | 23.80               | 1.089                  | 62.9         | 1.006                     | -0.06            | 0.180                  | 0.197                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Full            | 40185                   | 2549.5                  | 23.60               | 23.80               | 1.047                  | 62.9         | 1.006                     | 0.04             | 0.184                  | 0.194                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Full            | 41055                   | 2636.5                  | 22.99               | 23.80               | 1.205                  | 62.9         | 1.006                     | -0.02            | 0.194                  | 0.235                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Full            | 41490                   | 2680                    | 23.13               | 23.80               | 1.167                  | 62.9         | 1.006                     | -0.07            | 0.198                  | 0.232                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Full            | 40620(PCC) + 40422(SCC) | 2593(PCC) + 2573.2(SCC) | 23.54               | 23.80               | 1.062                  | 62.9         | 1.006                     | 0.06             | 0.211                  | 0.225                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Full            | 40620                   | 2593                    | 22.58               | 22.80               | 1.052                  | 62.9         | 1.006                     | 0.02             | 0.096                  | 0.102                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Tilted  | Full            | 40620                   | 2593                    | 22.58               | 22.80               | 1.052                  | 62.9         | 1.006                     | -0.06            | 0.090                  | 0.095                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Left Cheek    | Full            | 40620                   | 2593                    | 22.58               | 22.80               | 1.052                  | 62.9         | 1.006                     | 0.06             | 0.190                  | 0.201                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Left Tilted   | Full            | 40620                   | 2593                    | 22.58               | 22.80               | 1.052                  | 62.9         | 1.006                     | 0.01             | 0.079                  | 0.084                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Cheek   | Reduced         | 55830 | 3609        | 16.56               | 16.80               | 1.057                  | 62.9         | 1.006                     | -0.05            | 0.745                  | 0.792                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Tilted  | Reduced         | 55830 | 3609        | 16.56               | 16.80               | 1.057                  | 62.9         | 1.006                     | 0.03             | 0.732                  | 0.778                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Left Cheek    | Reduced         | 55830 | 3609        | 16.56               | 16.80               | 1.057                  | 62.9         | 1.006                     | -0.01            | 0.181                  | 0.192                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Left Tilted   | Reduced         | 55830 | 3609        | 16.56               | 16.80               | 1.057                  | 62.9         | 1.006                     | 0.05             | 0.326                  | 0.347                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Cheek   | Reduced         | 55340 | 3560        | 16.35               | 16.80               | 1.109                  | 62.9         | 1.006                     | -0.08            | 0.721                  | 0.805                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Cheek   | Reduced         | 56150 | 3641        | 16.36               | 16.80               | 1.107                  | 62.9         | 1.006                     | 0.03             | 0.744                  | 0.828                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Cheek   | Reduced         | 56640 | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | 0.08             | 0.772                  | 0.830                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Tilted  | Reduced         | 55340 | 3560        | 16.35               | 16.80               | 1.109                  | 62.9         | 1.006                     | 0.06             | 0.694                  | 0.774                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Tilted  | Reduced         | 56150 | 3641        | 16.36               | 16.80               | 1.107                  | 62.9         | 1.006                     | 0.01             | 0.696                  | 0.775                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Right Tilted  | Reduced         | 56640 | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | -0.01            | 0.727                  | 0.782                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 55830 | 3609        | 16.52               | 16.80               | 1.067                  | 62.9         | 1.006                     | 0.05             | 0.774                  | 0.830                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Tilted  | Reduced         | 55830 | 3609        | 16.52               | 16.80               | 1.067                  | 62.9         | 1.006                     | 0.09             | 0.751                  | 0.806                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Left Cheek    | Reduced         | 55830 | 3609        | 16.52               | 16.80               | 1.067                  | 62.9         | 1.006                     | 0.04             | 0.271                  | 0.291                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Left Tilted   | Reduced         | 55830 | 3609        | 16.52               | 16.80               | 1.067                  | 62.9         | 1.006                     | 0.07             | 0.331                  | 0.355                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 55340 | 3560        | 16.31               | 16.80               | 1.119                  | 62.9         | 1.006                     | -0.08            | 0.753                  | 0.848                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 56150 | 3641        | 16.41               | 16.80               | 1.094                  | 62.9         | 1.006                     | 0.03             | 0.789                  | 0.868                  |
| 19       | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 56640 | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | 0.02             | 0.998                  | 1.073                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Tilted  | Reduced         | 55340 | 3560        | 16.31               | 16.80               | 1.119                  | 62.9         | 1.006                     | 0.06             | 0.763                  | 0.859                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Tilted  | Reduced         | 56150 | 3641        | 16.41               | 16.80               | 1.094                  | 62.9         | 1.006                     | 0.12             | 0.770                  | 0.847                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Tilted  | Reduced         | 56640 | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | -0.03            | 0.834                  | 0.897                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 100     | 0         | Right Cheek   | Reduced         | 55830 | 3609        | 16.48               | 16.80               | 1.076                  | 62.9         | 1.006                     | 0.08             | 0.777                  | 0.841                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 100     | 0         | Right Tilted  | Reduced         | 55830 | 3609        | 16.48               | 16.80               | 1.076                  | 62.9         | 1.006                     | 0.05             | 0.721                  | 0.781                  |



## &lt;WLAN 2.4GHz SAR&gt;

| Plot No. | Antenna | Band       | Mode          | Test Position | 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) |
|----------|---------|------------|---------------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Right Cheek   | Reduced         | 11  | 2462        | 14.76               | 16.00               | 1.330                  | 99.31        | 1.007                     | -0.06            | 0.120                  | 0.161                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Right Tilted  | Reduced         | 11  | 2462        | 14.76               | 16.00               | 1.330                  | 99.31        | 1.007                     | 0.03             | 0.132                  | 0.177                  |
| 20       | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Left Cheek    | Reduced         | 11  | 2462        | 14.76               | 16.00               | 1.330                  | 99.31        | 1.007                     | -0.04            | 0.340                  | 0.455                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Left Tilted   | Reduced         | 11  | 2462        | 14.76               | 16.00               | 1.330                  | 99.31        | 1.007                     | 0.05             | 0.227                  | 0.304                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Left Cheek    | Reduced         | 1   | 2412        | 14.66               | 16.00               | 1.361                  | 99.31        | 1.007                     | 0.05             | 0.243                  | 0.333                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Left Cheek    | Reduced         | 6   | 2437        | 14.71               | 16.00               | 1.344                  | 99.31        | 1.007                     | -0.02            | 0.287                  | 0.389                  |

## &lt;Bluetooth SAR&gt;

| Plot No. | Antenna | Band      | Mode      | Test Position | 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) |
|----------|---------|-----------|-----------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1       | Bluetooth | DH5 1Mbps | Right Cheek   | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.19             | 0.128                  | 0.187                  |
|          | 1       | Bluetooth | DH5 1Mbps | Right Tilted  | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | -0.04            | 0.132                  | 0.193                  |
|          | 1       | Bluetooth | DH5 1Mbps | Left Cheek    | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.1              | 0.274                  | 0.401                  |
|          | 1       | Bluetooth | DH5 1Mbps | Left Tilted   | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.06             | 0.207                  | 0.303                  |
|          | 1       | Bluetooth | DH5 1Mbps | Left Cheek    | Full            | 0   | 2402        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | -0.07            | 0.259                  | 0.379                  |
| 21       | 1       | Bluetooth | DH5 1Mbps | Left Cheek    | Full            | 78  | 2480        | 13.40               | 15.40               | 1.585                  | 76.87        | 1.084                     | -0.09            | 0.240                  | 0.412                  |

## &lt;WLAN 5GHz SAR&gt;

| Plot No. | Antenna | Band       | Mode              | Test Position | 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) |
|----------|---------|------------|-------------------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Right Cheek   | Reduced         | 54  | 5270        | 16.13               | 18.00               | 1.540                  | 96.31        | 1.038                     | -0.18            | 0.149                  | 0.238                  |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Right Tilted  | Reduced         | 54  | 5270        | 16.13               | 18.00               | 1.540                  | 96.31        | 1.038                     | -0.08            | 0.119                  | 0.190                  |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Left Cheek    | Reduced         | 54  | 5270        | 16.13               | 18.00               | 1.540                  | 96.31        | 1.038                     | -0.06            | 0.365                  | 0.583                  |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Left Tilted   | Reduced         | 54  | 5270        | 16.13               | 18.00               | 1.540                  | 96.31        | 1.038                     | 0.09             | 0.326                  | 0.521                  |
| 22       | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Left Cheek    | Reduced         | 62  | 5310        | 16.08               | 18.00               | 1.557                  | 96.31        | 1.038                     | 0.17             | 0.380                  | 0.614                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Right Cheek   | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | 0.05             | 0.014                  | 0.017                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Right Tilted  | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | 0.09             | 0.006                  | 0.007                  |
| 23       | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | 0.03             | 0.256                  | 0.317                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Tilted   | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | 0.07             | 0.191                  | 0.237                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 102 | 5510        | 18.92               | 20.00               | 1.282                  | 96.31        | 1.038                     | 0.06             | 0.222                  | 0.295                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 126 | 5630        | 18.58               | 20.00               | 1.387                  | 96.31        | 1.038                     | 0.04             | 0.066                  | 0.095                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 134 | 5670        | 18.73               | 20.00               | 1.340                  | 96.31        | 1.038                     | 0.02             | 0.073                  | 0.101                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 142 | 5710        | 18.48               | 20.00               | 1.419                  | 96.31        | 1.038                     | 0.03             | 0.084                  | 0.123                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Right Cheek   | Full            | 151 | 5755        | 17.43               | 19.00               | 1.435                  | 96.31        | 1.038                     | 0.05             | 0.012                  | 0.018                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Right Tilted  | Full            | 151 | 5755        | 17.43               | 19.00               | 1.435                  | 96.31        | 1.038                     | -0.05            | 0.005                  | 0.007                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 151 | 5755        | 17.43               | 19.00               | 1.435                  | 96.31        | 1.038                     | 0.03             | 0.035                  | 0.052                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Left Tilted   | Full            | 151 | 5755        | 17.43               | 19.00               | 1.435                  | 96.31        | 1.038                     | 0.15             | 0.021                  | 0.031                  |
| 24       | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 159 | 5795        | 17.36               | 19.00               | 1.459                  | 96.31        | 1.038                     | 0.01             | 0.096                  | 0.145                  |



## 14.2 Hotspot SAR

### <GSM SAR>

| Plot No. | Antenna | Band    | Mode             | Test Position | Gap (mm) | 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) |
|----------|---------|---------|------------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | GSM850  | GPRS(3 Tx slots) | Front         | 10       | Reduced         | 128 | 824.2       | 26.55               | 27.80               | 1.334                  | 0.08             | 0.243                  | 0.324                  |
|          | 3       | GSM850  | GPRS(3 Tx slots) | Back          | 10       | Reduced         | 128 | 824.2       | 26.55               | 27.80               | 1.334                  | 0.04             | 0.329                  | 0.439                  |
|          | 3       | GSM850  | GPRS(3 Tx slots) | Left Side     | 10       | Reduced         | 128 | 824.2       | 26.55               | 27.80               | 1.334                  | 0.05             | 0.419                  | 0.559                  |
|          | 3       | GSM850  | GPRS(3 Tx slots) | Top Side      | 10       | Reduced         | 128 | 824.2       | 26.55               | 27.80               | 1.334                  | 0.11             | 0.029                  | 0.039                  |
|          | 3       | GSM850  | GPRS(3 Tx slots) | Left Side     | 10       | Reduced         | 189 | 836.4       | 26.45               | 27.80               | 1.365                  | -0.02            | 0.452                  | 0.617                  |
| 25       | 3       | GSM850  | GPRS(3 Tx slots) | Left Side     | 10       | Reduced         | 251 | 848.8       | 26.35               | 27.80               | 1.396                  | 0.07             | 0.478                  | 0.667                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Front         | 10       | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.06             | 0.116                  | 0.133                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Back          | 10       | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.09             | 0.194                  | 0.223                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Left Side     | 10       | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.03             | 0.099                  | 0.114                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Top Side      | 10       | Full            | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.05             | 0.330                  | 0.380                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Top Side      | 10       | Full            | 661 | 1880        | 24.39               | 25.10               | 1.178                  | 0.08             | 0.328                  | 0.386                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Top Side      | 10       | Full            | 810 | 1909.8      | 24.32               | 25.10               | 1.197                  | -0.01            | 0.410                  | 0.491                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Front         | 10       | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.03             | 0.267                  | 0.338                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Back          | 10       | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.08             | 0.429                  | 0.544                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Left Side     | 10       | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.06             | 0.148                  | 0.188                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Right Side    | 10       | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.13             | 0.067                  | 0.085                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Bottom Side   | 10       | Full            | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | -0.05            | 0.508                  | 0.644                  |
| 26       | 1       | GSM1900 | GPRS(3 Tx slots) | Bottom Side   | 10       | Full            | 661 | 1880        | 25.45               | 26.50               | 1.274                  | 0.07             | 0.619                  | 0.788                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Bottom Side   | 10       | Full            | 810 | 1909.8      | 25.42               | 26.50               | 1.282                  | 0.04             | 0.597                  | 0.766                  |



**<WCDMA SAR>**

| Plot No. | Antenna | Band     | Mode         | Test Position | Gap (mm) | 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) |
|----------|---------|----------|--------------|---------------|----------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | WCDMA V  | RMC 12.2Kbps | Front         | 10       | Reduced         | 4132 | 826.4       | 21.72               | 22.30               | 1.143                  | 0.05             | 0.447                  | 0.511                  |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Back          | 10       | Reduced         | 4132 | 826.4       | 21.72               | 22.30               | 1.143                  | 0.08             | 0.540                  | 0.617                  |
| 27       | 3       | WCDMA V  | RMC 12.2Kbps | Left Side     | 10       | Reduced         | 4132 | 826.4       | 21.72               | 22.30               | 1.143                  | -0.14            | 0.641                  | <b>0.733</b>           |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Top Side      | 10       | Reduced         | 4132 | 826.4       | 21.72               | 22.30               | 1.143                  | 0.09             | 0.024                  | 0.027                  |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Left Side     | 10       | Reduced         | 4182 | 836.4       | 21.69               | 22.30               | 1.151                  | 0.02             | 0.609                  | 0.701                  |
|          | 3       | WCDMA V  | RMC 12.2Kbps | Left Side     | 10       | Reduced         | 4233 | 846.6       | 21.49               | 22.30               | 1.205                  | 0.05             | 0.576                  | 0.694                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Front         | 10       | Full            | 1413 | 1732.6      | 23.01               | 23.40               | 1.094                  | 0.05             | 0.264                  | 0.289                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Back          | 10       | Full            | 1413 | 1732.6      | 23.01               | 23.40               | 1.094                  | 0.18             | 0.361                  | 0.395                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Left Side     | 10       | Full            | 1413 | 1732.6      | 23.01               | 23.40               | 1.094                  | 0.06             | 0.244                  | 0.267                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Top Side      | 10       | Full            | 1413 | 1732.6      | 23.01               | 23.40               | 1.094                  | 0.08             | 0.469                  | 0.513                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Top Side      | 10       | Full            | 1312 | 1712.4      | 22.92               | 23.40               | 1.117                  | 0.11             | 0.412                  | 0.460                  |
|          | 2       | WCDMA IV | RMC 12.2Kbps | Top Side      | 10       | Full            | 1513 | 1752.6      | 22.96               | 23.40               | 1.107                  | -0.12            | 0.630                  | 0.697                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Front         | 10       | Reduced         | 1413 | 1732.6      | 21.79               | 22.30               | 1.125                  | 0.09             | 0.391                  | 0.440                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Back          | 10       | Reduced         | 1413 | 1732.6      | 21.79               | 22.30               | 1.125                  | 0.04             | 0.496                  | 0.558                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Left Side     | 10       | Reduced         | 1413 | 1732.6      | 21.79               | 22.30               | 1.125                  | 0.01             | 0.166                  | 0.187                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Right Side    | 10       | Reduced         | 1413 | 1732.6      | 21.79               | 22.30               | 1.125                  | -0.05            | 0.121                  | 0.136                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 1413 | 1732.6      | 21.79               | 22.30               | 1.125                  | 0.01             | 0.602                  | 0.677                  |
|          | 1       | WCDMA IV | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 1312 | 1712.4      | 21.68               | 22.30               | 1.153                  | 0.02             | 0.593                  | 0.684                  |
| 28       | 1       | WCDMA IV | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 1513 | 1752.6      | 21.76               | 22.30               | 1.132                  | 0.08             | 0.627                  | <b>0.710</b>           |
|          | 2       | WCDMA II | RMC 12.2Kbps | Front         | 10       | Full            | 9400 | 1880        | 22.86               | 23.40               | 1.132                  | 0.03             | 0.262                  | 0.297                  |
|          | 2       | WCDMA II | RMC 12.2Kbps | Back          | 10       | Full            | 9400 | 1880        | 22.86               | 23.40               | 1.132                  | 0.07             | 0.461                  | 0.522                  |
|          | 2       | WCDMA II | RMC 12.2Kbps | Left Side     | 10       | Full            | 9400 | 1880        | 22.86               | 23.40               | 1.132                  | 0.05             | 0.199                  | 0.225                  |
|          | 2       | WCDMA II | RMC 12.2Kbps | Top Side      | 10       | Full            | 9400 | 1880        | 22.86               | 23.40               | 1.132                  | 0.09             | 0.712                  | 0.806                  |
| 29       | 2       | WCDMA II | RMC 12.2Kbps | Top Side      | 10       | Full            | 9262 | 1852.4      | 22.82               | 23.40               | 1.143                  | -0.02            | 0.848                  | <b>0.969</b>           |
|          | 2       | WCDMA II | RMC 12.2Kbps | Top Side      | 10       | Full            | 9538 | 1907.6      | 22.74               | 23.40               | 1.164                  | 0.07             | 0.736                  | 0.857                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Front         | 10       | Reduced         | 9400 | 1880        | 20.71               | 21.30               | 1.146                  | 0.03             | 0.250                  | 0.286                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Back          | 10       | Reduced         | 9400 | 1880        | 20.71               | 21.30               | 1.146                  | -0.03            | 0.474                  | 0.543                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Left Side     | 10       | Reduced         | 9400 | 1880        | 20.71               | 21.30               | 1.146                  | -0.08            | 0.148                  | 0.170                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Right Side    | 10       | Reduced         | 9400 | 1880        | 20.71               | 21.30               | 1.146                  | 0.05             | 0.077                  | 0.088                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 9400 | 1880        | 20.71               | 21.30               | 1.146                  | -0.01            | 0.664                  | 0.761                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 9262 | 1852.4      | 20.59               | 21.30               | 1.178                  | 0.07             | 0.650                  | 0.765                  |
|          | 1       | WCDMA II | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 9538 | 1907.6      | 20.69               | 21.30               | 1.151                  | 0.11             | 0.740                  | 0.852                  |



**<CDMA2000 SAR>**

| Plot No. | Antenna | Band          | Mode           | Test Position | Gap (mm) | 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) |
|----------|---------|---------------|----------------|---------------|----------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Front         | 10       | Reduced         | 1013 | 824.7       | 22.22               | 22.80               | 1.143                  | 0.05             | 0.492                  | 0.562                  |
|          | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Back          | 10       | Reduced         | 1013 | 824.7       | 22.22               | 22.80               | 1.143                  | 0.1              | 0.561                  | 0.641                  |
|          | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 1013 | 824.7       | 22.22               | 22.80               | 1.143                  | 0.03             | 0.730                  | 0.834                  |
|          | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Top Side      | 10       | Reduced         | 1013 | 824.7       | 22.22               | 22.80               | 1.143                  | -0.05            | 0.018                  | 0.021                  |
|          | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 777  | 848.31      | 22.10               | 22.80               | 1.175                  | 0.07             | 0.694                  | 0.815                  |
| 30       | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 384  | 836.52      | 21.95               | 22.80               | 1.216                  | 0.04             | 0.747                  | <b>0.908</b>           |
|          | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Front         | 10       | Reduced         | 580  | 820.5       | 21.68               | 22.30               | 1.153                  | 0.06             | 0.475                  | 0.548                  |
|          | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Back          | 10       | Reduced         | 580  | 820.5       | 21.68               | 22.30               | 1.153                  | 0.08             | 0.532                  | 0.614                  |
| 31       | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 580  | 820.5       | 21.68               | 22.30               | 1.153                  | 0.03             | 0.695                  | <b>0.802</b>           |
|          | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Top Side      | 10       | Reduced         | 580  | 820.5       | 21.68               | 22.30               | 1.153                  | 0.07             | 0.021                  | 0.024                  |
|          | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 476  | 817.9       | 21.63               | 22.30               | 1.167                  | 0.01             | 0.674                  | 0.786                  |
|          | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 684  | 823.1       | 21.60               | 22.30               | 1.175                  | 0.12             | 0.640                  | 0.752                  |
|          | 2       | CDMA2000 BC1  | RTAP 153.6Kbps | Front         | 10       | Full            | 1175 | 1908.75     | 22.51               | 23.40               | 1.227                  | 0.06             | 0.231                  | 0.284                  |
|          | 2       | CDMA2000 BC1  | RTAP 153.6Kbps | Back          | 10       | Full            | 1175 | 1908.75     | 22.51               | 23.40               | 1.227                  | -0.04            | 0.421                  | 0.517                  |
|          | 2       | CDMA2000 BC1  | RTAP 153.6Kbps | Left Side     | 10       | Full            | 1175 | 1908.75     | 22.51               | 23.40               | 1.227                  | 0.05             | 0.155                  | 0.190                  |
|          | 2       | CDMA2000 BC1  | RTAP 153.6Kbps | Top Side      | 10       | Full            | 1175 | 1908.75     | 22.51               | 23.40               | 1.227                  | 0.08             | 0.689                  | 0.846                  |
|          | 2       | CDMA2000 BC1  | RTAP 153.6Kbps | Top Side      | 10       | Full            | 25   | 1851.25     | 22.45               | 23.40               | 1.245                  | 0.09             | 0.763                  | 0.950                  |
|          | 2       | CDMA2000 BC1  | RTAP 153.6Kbps | Top Side      | 10       | Full            | 600  | 1880        | 22.50               | 23.40               | 1.230                  | 0.02             | 0.733                  | 0.902                  |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Front         | 10       | Reduced         | 1175 | 1908.75     | 20.37               | 21.30               | 1.239                  | 0.05             | 0.378                  | 0.468                  |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Back          | 10       | Reduced         | 1175 | 1908.75     | 20.37               | 21.30               | 1.239                  | -0.02            | 0.644                  | 0.798                  |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 1175 | 1908.75     | 20.37               | 21.30               | 1.239                  | 0.03             | 0.155                  | 0.192                  |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Right Side    | 10       | Reduced         | 1175 | 1908.75     | 20.37               | 21.30               | 1.239                  | -0.11            | 0.114                  | 0.141                  |
| 32       | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Bottom Side   | 10       | Reduced         | 1175 | 1908.75     | 20.37               | 21.30               | 1.239                  | 0.01             | 0.815                  | <b>1.010</b>           |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Bottom Side   | 10       | Reduced         | 25   | 1851.25     | 20.36               | 21.30               | 1.242                  | 0.07             | 0.644                  | 0.800                  |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Bottom Side   | 10       | Reduced         | 600  | 1880        | 20.30               | 21.30               | 1.259                  | 0.02             | 0.682                  | 0.859                  |



**<FDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.03             | 0.429                  | 0.463                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.08             | 0.510                  | 0.550                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.05             | 0.662                  | 0.714                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | 0.14             | 0.019                  | 0.020                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | -0.06            | 0.437                  | 0.475                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | 0.04             | 0.535                  | 0.581                  |
| 33       | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | 0.09             | 0.793                  | 0.862                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Top Side      | 10       | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | 0.05             | 0.013                  | 0.014                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 100     | 0         | Left Side     | 10       | Reduced         | 133322 | 683         | 22.36               | 22.80               | 1.107                  | 0.03             | 0.659                  | 0.729                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 23095  | 707.5       | 20.46               | 21.30               | 1.213                  | 0.09             | 0.285                  | 0.346                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 23095  | 707.5       | 20.46               | 21.30               | 1.213                  | 0.04             | 0.323                  | 0.392                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 23095  | 707.5       | 20.46               | 21.30               | 1.213                  | 0.02             | 0.443                  | 0.538                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 23095  | 707.5       | 20.46               | 21.30               | 1.213                  | 0.03             | 0.026                  | 0.032                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Front         | 10       | Reduced         | 23095  | 707.5       | 20.42               | 21.30               | 1.225                  | 0.06             | 0.297                  | 0.364                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Back          | 10       | Reduced         | 23095  | 707.5       | 20.42               | 21.30               | 1.225                  | 0.01             | 0.337                  | 0.413                  |
| 34       | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Reduced         | 23095  | 707.5       | 20.42               | 21.30               | 1.225                  | 0.06             | 0.499                  | 0.611                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Top Side      | 10       | Reduced         | 23095  | 707.5       | 20.42               | 21.30               | 1.225                  | 0.05             | 0.018                  | 0.022                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 23230  | 782         | 20.12               | 20.80               | 1.169                  | -0.05            | 0.345                  | 0.403                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 23230  | 782         | 20.12               | 20.80               | 1.169                  | 0.07             | 0.415                  | 0.485                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 23230  | 782         | 20.12               | 20.80               | 1.169                  | 0.01             | 0.563                  | 0.658                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 23230  | 782         | 20.12               | 20.80               | 1.169                  | 0.05             | 0.016                  | 0.019                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Front         | 10       | Reduced         | 23230  | 782         | 20.10               | 20.80               | 1.175                  | 0.11             | 0.354                  | 0.416                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Back          | 10       | Reduced         | 23230  | 782         | 20.10               | 20.80               | 1.175                  | 0.06             | 0.437                  | 0.513                  |
| 35       | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Reduced         | 23230  | 782         | 20.10               | 20.80               | 1.175                  | 0.02             | 0.593                  | 0.697                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Top Side      | 10       | Reduced         | 23230  | 782         | 20.10               | 20.80               | 1.175                  | 0.02             | 0.017                  | 0.020                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 20525  | 836.5       | 21.58               | 22.30               | 1.180                  | 0.06             | 0.477                  | 0.563                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 20525  | 836.5       | 21.58               | 22.30               | 1.180                  | 0.08             | 0.535                  | 0.631                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 20525  | 836.5       | 21.58               | 22.30               | 1.180                  | 0.05             | 0.655                  | 0.773                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 20525  | 836.5       | 21.58               | 22.30               | 1.180                  | 0.02             | 0.027                  | 0.032                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Front         | 10       | Reduced         | 20525  | 836.5       | 21.56               | 22.30               | 1.186                  | 0.03             | 0.482                  | 0.572                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Back          | 10       | Reduced         | 20525  | 836.5       | 21.56               | 22.30               | 1.186                  | 0.07             | 0.542                  | 0.643                  |
| 36       | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Reduced         | 20525  | 836.5       | 21.56               | 22.30               | 1.186                  | 0.02             | 0.740                  | 0.877                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Top Side      | 10       | Reduced         | 20525  | 836.5       | 21.56               | 22.30               | 1.186                  | 0.09             | 0.029                  | 0.034                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 50      | 0         | Left Side     | 10       | Reduced         | 20525  | 836.5       | 21.53               | 22.30               | 1.194                  | 0.06             | 0.684                  | 0.817                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 26865  | 831.5       | 20.78               | 21.30               | 1.127                  | 0.08             | 0.383                  | 0.432                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 26865  | 831.5       | 20.78               | 21.30               | 1.127                  | 0.04             | 0.440                  | 0.496                  |
| 37       | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 26865  | 831.5       | 20.78               | 21.30               | 1.127                  | 0.13             | 0.673                  | 0.759                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 26865  | 831.5       | 20.78               | 21.30               | 1.127                  | 0.05             | 0.036                  | 0.041                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 26765  | 821.5       | 20.70               | 21.30               | 1.148                  | -0.01            | 0.660                  | 0.758                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 26965  | 841.5       | 20.62               | 21.30               | 1.169                  | 0.15             | 0.608                  | 0.711                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36RB    | 0         | Front         | 10       | Reduced         | 26865  | 831.5       | 20.75               | 21.30               | 1.135                  | 0.02             | 0.386                  | 0.438                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36RB    | 0         | Back          | 10       | Reduced         | 26865  | 831.5       | 20.75               | 21.30               | 1.135                  | 0.14             | 0.472                  | 0.536                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36RB    | 0         | Left Side     | 10       | Reduced         | 26865  | 831.5       | 20.75               | 21.30               | 1.135                  | -0.08            | 0.567                  | 0.644                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36RB    | 0         | Top Side      | 10       | Reduced         | 26865  | 831.5       | 20.75               | 21.30               | 1.135                  | 0.02             | 0.031                  | 0.035                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Full            | 132322 | 1745        | 21.93               | 22.40               | 1.114                  | -0.01            | 0.262                  | 0.292                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Full            | 132322 | 1745        | 21.93               | 22.40               | 1.114                  | 0.06             | 0.433                  | 0.482                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Left Side     | 10       | Full            | 132322 | 1745        | 21.93               | 22.40               | 1.114                  | 0.05             | 0.234                  | 0.261                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Full            | 132322 | 1745        | 21.93               | 22.40               | 1.114                  | -0.02            | 0.552                  | 0.615                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Full            | 132072 | 1720        | 21.87               | 22.40               | 1.130                  | 0.01             | 0.468                  | 0.529                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Full            | 132572 | 1770        | 21.90               | 22.40               | 1.122                  | -0.06            | 0.595                  | 0.668                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Full            | 132322 | 1745        | 21.04               | 21.40               | 1.086                  | 0.04             | 0.219                  | 0.238                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Full            | 132322 | 1745        | 21.04               | 21.40               | 1.086                  | 0.02             | 0.358                  | 0.389                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Full            | 132322 | 1745        | 21.04               | 21.40               | 1.086                  | 0.11             | 0.194                  | 0.211                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Top Side      | 10       | Full            | 132322 | 1745        | 21.04               | 21.40               | 1.086                  | 0.01             | 0.406                  | 0.441                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 132322 | 1745        | 20.80               | 21.30               | 1.122                  | 0.02             | 0.380                  | 0.426                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 132322 | 1745        | 20.80               | 21.30               | 1.122                  | 0.06             | 0.454                  | 0.509                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 132322 | 1745        | 20.80               | 21.30               | 1.122                  | 0.07             | 0.164                  | 0.184                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Right Side    | 10       | Reduced         | 132322 | 1745        | 20.80               | 21.30               | 1.122                  | 0.01             | 0.110                  | 0.123                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 10       | Reduced         | 132322 | 1745        | 20.80               | 21.30               | 1.122                  | -0.09            | 0.643                  | 0.721                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 132322 | 1745        | 20.72               | 21.30               | 1.143                  | -0.07            | 0.398                  | 0.455                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 132322 | 1745        | 20.72               | 21.30               | 1.143                  | 0.08             | 0.513                  | 0.586                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Reduced         | 132322 | 1745        | 20.72               | 21.30               | 1.143                  | 0.02             | 0.175                  | 0.200                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Right Side    | 10       | Reduced         | 132322 | 1745        | 20.72               | 21.30               | 1.143                  | 0.05             | 0.114                  | 0.130                  |
| 38       | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 132322 | 1745        | 20.72               | 21.30               | 1.143                  | 0.03             | 0.671                  | 0.767                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 132072 | 1720        | 20.50               | 21.30               | 1.202                  | 0.1              | 0.601                  | 0.723                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 132572 | 1770        | 20.59               | 21.30               | 1.178                  | 0.06             | 0.637                  | 0.750                  |



| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Full            | 26140 | 1860        | 21.79               | 22.40               | 1.151                  | 0.11             | 0.266                  | 0.306                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Full            | 26140 | 1860        | 21.79               | 22.40               | 1.151                  | 0.07             | 0.449                  | 0.517                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Side     | 10       | Full            | 26140 | 1860        | 21.79               | 22.40               | 1.151                  | 0.06             | 0.211                  | 0.243                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Full            | 26140 | 1860        | 21.79               | 22.40               | 1.151                  | 0.03             | 0.823                  | 0.947                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Full            | 26340 | 1880        | 21.70               | 22.40               | 1.175                  | 0.09             | 0.826                  | 0.970                  |
| 39       | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Full            | 26590 | 1905        | 21.72               | 22.40               | 1.169                  | 0.07             | 0.856                  | 1.001                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Full            | 26140 | 1860        | 20.84               | 21.40               | 1.138                  | 0.04             | 0.216                  | 0.246                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Full            | 26140 | 1860        | 20.84               | 21.40               | 1.138                  | -0.03            | 0.336                  | 0.382                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Full            | 26140 | 1860        | 20.84               | 21.40               | 1.138                  | -0.08            | 0.166                  | 0.189                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Top Side      | 10       | Full            | 26140 | 1860        | 20.84               | 21.40               | 1.138                  | 0.06             | 0.667                  | 0.759                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Top Side      | 10       | Full            | 26340 | 1880        | 20.74               | 21.40               | 1.164                  | 0.07             | 0.645                  | 0.751                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Top Side      | 10       | Full            | 26590 | 1905        | 20.72               | 21.40               | 1.169                  | 0.02             | 0.630                  | 0.737                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 100     | 0         | Top Side      | 10       | Full            | 26140 | 1860        | 20.81               | 21.40               | 1.146                  | 0.09             | 0.660                  | 0.756                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 26140 | 1860        | 20.18               | 20.80               | 1.153                  | 0.06             | 0.316                  | 0.364                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 26140 | 1860        | 20.18               | 20.80               | 1.153                  | 0.11             | 0.475                  | 0.548                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 26140 | 1860        | 20.18               | 20.80               | 1.153                  | -0.04            | 0.144                  | 0.166                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Right Side    | 10       | Reduced         | 26140 | 1860        | 20.18               | 20.80               | 1.153                  | 0.08             | 0.077                  | 0.089                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 10       | Reduced         | 26140 | 1860        | 20.18               | 20.80               | 1.153                  | -0.09            | 0.713                  | 0.822                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 10       | Reduced         | 26340 | 1880        | 20.12               | 20.80               | 1.169                  | 0.07             | 0.696                  | 0.814                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 10       | Reduced         | 26590 | 1905        | 20.16               | 20.80               | 1.159                  | 0.02             | 0.651                  | 0.754                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 26140 | 1860        | 20.14               | 20.80               | 1.164                  | 0.09             | 0.324                  | 0.377                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 26140 | 1860        | 20.14               | 20.80               | 1.164                  | -0.12            | 0.483                  | 0.562                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Reduced         | 26140 | 1860        | 20.14               | 20.80               | 1.164                  | 0.1              | 0.152                  | 0.177                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Right Side    | 10       | Reduced         | 26140 | 1860        | 20.14               | 20.80               | 1.164                  | 0.03             | 0.085                  | 0.099                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 26140 | 1860        | 20.14               | 20.80               | 1.164                  | 0.01             | 0.705                  | 0.821                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 26340 | 1880        | 20.12               | 20.80               | 1.169                  | 0.05             | 0.846                  | 0.989                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 26590 | 1905        | 20.11               | 20.80               | 1.172                  | -0.02            | 0.776                  | 0.910                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 100     | 0         | Bottom Side   | 10       | Reduced         | 26140 | 1860        | 20.12               | 20.80               | 1.169                  | 0.03             | 0.750                  | 0.877                  |



| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|-------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Front         | 10       | Full            | 27710 | 2310        | 21.12               | 22.00               | 1.225                  | 0.05             | 0.274                  | 0.336                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Back          | 10       | Full            | 27710 | 2310        | 21.12               | 22.00               | 1.225                  | -0.02            | 0.389                  | 0.476                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Left Side     | 10       | Full            | 27710 | 2310        | 21.12               | 22.00               | 1.225                  | 0.02             | 0.259                  | 0.317                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Top Side      | 10       | Full            | 27710 | 2310        | 21.12               | 22.00               | 1.225                  | 0.02             | 0.657                  | 0.805                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Front         | 10       | Full            | 27710 | 2310        | 20.25               | 21.00               | 1.189                  | 0.09             | 0.224                  | 0.266                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Back          | 10       | Full            | 27710 | 2310        | 20.25               | 21.00               | 1.189                  | 0.04             | 0.232                  | 0.276                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Full            | 27710 | 2310        | 20.25               | 21.00               | 1.189                  | -0.03            | 0.210                  | 0.250                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Top Side      | 10       | Full            | 27710 | 2310        | 20.25               | 21.00               | 1.189                  | 0.08             | 0.498                  | 0.592                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 50      | 0         | Top Side      | 10       | Full            | 27710 | 2310        | 20.23               | 21.00               | 1.194                  | 0.05             | 0.495                  | 0.591                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Front         | 10       | Reduced         | 27710 | 2310        | 21.60               | 22.80               | 1.318                  | 0.05             | 0.602                  | 0.794                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Back          | 10       | Reduced         | 27710 | 2310        | 21.60               | 22.80               | 1.318                  | 0.04             | 0.439                  | 0.579                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Left Side     | 10       | Reduced         | 27710 | 2310        | 21.60               | 22.80               | 1.318                  | 0.08             | 0.187                  | 0.247                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Right Side    | 10       | Reduced         | 27710 | 2310        | 21.60               | 22.80               | 1.318                  | 0.02             | 0.156                  | 0.206                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Bottom Side   | 10       | Reduced         | 27710 | 2310        | 21.60               | 22.80               | 1.318                  | 0.09             | 0.340                  | 0.448                  |
| 40       | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Front         | 10       | Reduced         | 27710 | 2310        | 21.53               | 22.80               | 1.340                  | -0.08            | 0.642                  | 0.860                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Back          | 10       | Reduced         | 27710 | 2310        | 21.53               | 22.80               | 1.340                  | 0.07             | 0.464                  | 0.622                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Reduced         | 27710 | 2310        | 21.53               | 22.80               | 1.340                  | 0.02             | 0.192                  | 0.257                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Right Side    | 10       | Reduced         | 27710 | 2310        | 21.53               | 22.80               | 1.340                  | 0.11             | 0.165                  | 0.221                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Bottom Side   | 10       | Reduced         | 27710 | 2310        | 21.53               | 22.80               | 1.340                  | -0.18            | 0.362                  | 0.485                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 27710 | 2310        | 21.50               | 22.80               | 1.349                  | -0.03            | 0.613                  | 0.827                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band       | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|------------|----------|------------|---------|-----------|---------------|----------|-----------------|-------------------------|-------------------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 21350                   | 2560                    | 16.35               | 17.00               | 1.161                  | 0.05             | 0.176                  | 0.204                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 21350                   | 2560                    | 16.35               | 17.00               | 1.161                  | 0.09             | 0.277                  | 0.322                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 21350                   | 2560                    | 16.35               | 17.00               | 1.161                  | 0.02             | 0.107                  | 0.124                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 21350                   | 2560                    | 16.35               | 17.00               | 1.161                  | 0.07             | 0.612                  | 0.711                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 20850                   | 2510                    | 16.14               | 17.00               | 1.219                  | 0.03             | 0.688                  | 0.839                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 21100                   | 2535                    | 16.28               | 17.00               | 1.180                  | -0.11            | 0.773                  | 0.912                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 21350(PCC) + 21152(SCC) | 2560(PCC) + 2540.2(SCC) | 16.24               | 17.00               | 1.191                  | 0.09             | 0.764                  | 0.910                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 20850(PCC) + 21048(SCC) | 2510(PCC) + 2529.8(SCC) | 16.01               | 17.00               | 1.256                  | 0.14             | 0.726                  | 0.912                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Reduced         | 21100(PCC)+ 20902(SCC)  | 2535(PCC) + 2515.2(SCC) | 16.19               | 17.00               | 1.205                  | -0.08            | 0.751                  | 0.905                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 21350                   | 2560                    | 16.34               | 17.00               | 1.164                  | 0.05             | 0.167                  | 0.194                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 21350                   | 2560                    | 16.34               | 17.00               | 1.164                  | 0.08             | 0.259                  | 0.302                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Reduced         | 21350                   | 2560                    | 16.34               | 17.00               | 1.164                  | 0.04             | 0.112                  | 0.130                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Top Side      | 10       | Reduced         | 21350                   | 2560                    | 16.34               | 17.00               | 1.164                  | 0.1              | 0.603                  | 0.702                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 100     | 0         | Top Side      | 10       | Reduced         | 21350                   | 2560                    | 16.27               | 17.00               | 1.183                  | 0.03             | 0.585                  | 0.692                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 21350                   | 2560                    | 21.43               | 21.80               | 1.089                  | 0.04             | 0.730                  | 0.795                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 21350                   | 2560                    | 21.43               | 21.80               | 1.089                  | 0.09             | 0.830                  | 0.904                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 21350                   | 2560                    | 21.43               | 21.80               | 1.089                  | 0.11             | 0.227                  | 0.247                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Right Side    | 10       | Reduced         | 21350                   | 2560                    | 21.43               | 21.80               | 1.089                  | 0.02             | 0.186                  | 0.203                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 10       | Reduced         | 21350                   | 2560                    | 21.43               | 21.80               | 1.089                  | -0.06            | 0.863                  | 0.940                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 20850                   | 2510                    | 21.23               | 21.80               | 1.140                  | -0.02            | 0.710                  | 0.810                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 10       | Reduced         | 21100                   | 2535                    | 21.29               | 21.80               | 1.125                  | 0.07             | 0.739                  | 0.831                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 20850                   | 2510                    | 21.23               | 21.80               | 1.140                  | 0.06             | 0.883                  | 1.007                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 10       | Reduced         | 21100                   | 2535                    | 21.29               | 21.80               | 1.125                  | -0.11            | 0.876                  | 0.985                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 10       | Reduced         | 20850                   | 2510                    | 21.23               | 21.80               | 1.140                  | 0.03             | 0.751                  | 0.856                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 10       | Reduced         | 21100                   | 2535                    | 21.29               | 21.80               | 1.125                  | 0.01             | 0.756                  | 0.850                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 21350                   | 2560                    | 21.39               | 21.80               | 1.099                  | 0.08             | 0.779                  | 0.856                  |
| 41       | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 21350                   | 2560                    | 21.39               | 21.80               | 1.099                  | -0.18            | 0.998                  | 1.097                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Reduced         | 21350                   | 2560                    | 21.39               | 21.80               | 1.099                  | 0.09             | 0.238                  | 0.262                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Right Side    | 10       | Reduced         | 21350                   | 2560                    | 21.39               | 21.80               | 1.099                  | 0.02             | 0.196                  | 0.215                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 21350                   | 2560                    | 21.39               | 21.80               | 1.099                  | 0.05             | 0.961                  | 1.056                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 20850                   | 2510                    | 21.23               | 21.80               | 1.140                  | 0.09             | 0.673                  | 0.767                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Front         | 10       | Reduced         | 21100                   | 2535                    | 21.34               | 21.80               | 1.112                  | 0.03             | 0.720                  | 0.800                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 20850                   | 2510                    | 21.23               | 21.80               | 1.140                  | 0.05             | 0.851                  | 0.970                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 21100                   | 2535                    | 21.34               | 21.80               | 1.112                  | -0.02            | 0.899                  | 0.999                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 20850                   | 2510                    | 21.23               | 21.80               | 1.140                  | 0.16             | 0.871                  | 0.993                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 21100                   | 2535                    | 21.34               | 21.80               | 1.112                  | 0.07             | 0.926                  | 1.029                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 21350(PCC) + 21152(SCC) | 2560(PCC) + 2540.2(SCC) | 21.35               | 21.80               | 1.109                  | -0.05            | 0.939                  | 1.042                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 20850(PCC) + 21048(SCC) | 2510(PCC) + 2529.8(SCC) | 21.27               | 21.80               | 1.130                  | 0.06             | 0.872                  | 0.985                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 21100(PCC) + 20902(SCC) | 2535(PCC) + 2515.2(SCC) | 21.34               | 21.80               | 1.112                  | 0.09             | 0.962                  | 1.069                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 100     | 0         | Front         | 10       | Reduced         | 21350                   | 2560                    | 21.33               | 21.80               | 1.114                  | -0.05            | 0.733                  | 0.817                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 100     | 0         | Back          | 10       | Reduced         | 21350                   | 2560                    | 21.33               | 21.80               | 1.114                  | 0.09             | 0.816                  | 0.909                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 100     | 0         | Bottom Side   | 10       | Reduced         | 21350                   | 2560                    | 21.33               | 21.80               | 1.114                  | 0.03             | 0.944                  | 1.052                  |



**<TDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|-------------------------|---------------------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 10       | Reduced         | 40620                   | 2593                      | 18.29               | 18.50               | 1.050                  | 62.9         | 1.006                     | 0.06             | 0.138                  | 0.146                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 10       | Reduced         | 40620                   | 2593                      | 18.29               | 18.50               | 1.050                  | 62.9         | 1.006                     | 0.08             | 0.186                  | 0.196                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Side     | 10       | Reduced         | 40620                   | 2593                      | 18.29               | 18.50               | 1.050                  | 62.9         | 1.006                     | 0.05             | 0.067                  | 0.071                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 40620                   | 2593                      | 18.29               | 18.50               | 1.050                  | 62.9         | 1.006                     | 0.02             | 0.589                  | 0.622                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 39750                   | 2506                      | 18.19               | 18.50               | 1.074                  | 62.9         | 1.006                     | 0.05             | 0.517                  | 0.559                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 40185                   | 2549.5                    | 18.08               | 18.50               | 1.102                  | 62.9         | 1.006                     | 0.07             | 0.541                  | 0.600                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 41055                   | 2636.5                    | 17.79               | 18.50               | 1.178                  | 62.9         | 1.006                     | 0.02             | 0.531                  | 0.629                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 41490                   | 2680                      | 17.84               | 18.50               | 1.164                  | 62.9         | 1.006                     | 0.02             | 0.533                  | 0.624                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Front         | 10       | Reduced         | 40620                   | 2593                      | 18.25               | 18.50               | 1.059                  | 62.9         | 1.006                     | 0.03             | 0.144                  | 0.153                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 10       | Reduced         | 40620                   | 2593                      | 18.25               | 18.50               | 1.059                  | 62.9         | 1.006                     | 0.07             | 0.274                  | 0.292                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Left Side     | 10       | Reduced         | 40620                   | 2593                      | 18.25               | 18.50               | 1.059                  | 62.9         | 1.006                     | 0.04             | 0.069                  | 0.074                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 40620                   | 2593                      | 18.25               | 18.50               | 1.059                  | 62.9         | 1.006                     | -0.05            | 0.602                  | 0.641                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 39750                   | 2506                      | 18.19               | 18.50               | 1.074                  | 62.9         | 1.006                     | 0.08             | 0.616                  | 0.666                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 40185                   | 2549.5                    | 18.18               | 18.50               | 1.076                  | 62.9         | 1.006                     | 0.03             | 0.642                  | 0.695                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 41055                   | 2636.5                    | 17.78               | 18.50               | 1.180                  | 62.9         | 1.006                     | 0.06             | 0.562                  | 0.667                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 41490                   | 2680                      | 17.75               | 18.50               | 1.189                  | 62.9         | 1.006                     | 0.12             | 0.541                  | 0.647                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 41490                   | 2680                      | 20.69               | 21.50               | 1.205                  | 42.9         | 1.009                     | -0.02            | 0.611                  | 0.743                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 40620                   | 2593                      | 21.14               | 21.50               | 1.086                  | 42.9         | 1.009                     | 0.05             | 0.699                  | 0.766                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 39750                   | 2506                      | 21.13               | 21.50               | 1.089                  | 42.9         | 1.009                     | 0.07             | 0.622                  | 0.683                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 40185                   | 2549.5                    | 21.05               | 21.50               | 1.109                  | 42.9         | 1.009                     | 0.03             | 0.644                  | 0.721                  |
| 42       | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 41055                   | 2636.5                    | 20.76               | 21.50               | 1.186                  | 42.9         | 1.009                     | 0.01             | 0.727                  | 0.870                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 40620(PCC) + 40422(SCC) | 2593(PCC) + 2573.2(SCC)   | 18.37               | 18.50               | 1.030                  | 62.9         | 1.006                     | -0.06            | 0.580                  | 0.601                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 39750(PCC) + 39948(SCC) | 2506(PCC) + 2525.8(SCC)   | 18.11               | 18.50               | 1.094                  | 62.9         | 1.006                     | 0.08             | 0.554                  | 0.610                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 39790(PCC) + 39988(SCC) | 2510(PCC) + 2529.8(SCC)   | 18.14               | 18.50               | 1.086                  | 62.9         | 1.006                     | 0.01             | 0.543                  | 0.593                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 40185(PCC) + 40383(SCC) | 2549.5(PCC) + 2569.3(SCC) | 18.29               | 18.50               | 1.050                  | 62.9         | 1.006                     | 0.04             | 0.622                  | 0.657                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 41055(PCC) + 40857(SCC) | 2636.5(PCC) + 2616.7(SCC) | 17.91               | 18.50               | 1.146                  | 62.9         | 1.006                     | 0.09             | 0.545                  | 0.628                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 41490(PCC)+ 41292(SCC)  | 2680(PCC) + 2660.2(SCC)   | 17.77               | 18.50               | 1.183                  | 62.9         | 1.006                     | 0.02             | 0.570                  | 0.678                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 100     | 0         | Top Side      | 10       | Reduced         | 40620                   | 2593                      | 18.23               | 18.50               | 1.064                  | 62.9         | 1.006                     | 0.09             | 0.559                  | 0.598                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|-------------------------|---------------------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 10       | Reduced         | 40620                   | 2593                      | 21.65               | 21.80               | 1.035                  | 62.9         | 1.006                     | 0.09             | 0.355                  | 0.370                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 10       | Reduced         | 40620                   | 2593                      | 21.65               | 21.80               | 1.035                  | 62.9         | 1.006                     | 0.19             | 0.555                  | 0.578                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Left Side     | 10       | Reduced         | 40620                   | 2593                      | 21.65               | 21.80               | 1.035                  | 62.9         | 1.006                     | 0.06             | 0.126                  | 0.131                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Right Side    | 10       | Reduced         | 40620                   | 2593                      | 21.65               | 21.80               | 1.035                  | 62.9         | 1.006                     | 0.01             | 0.108                  | 0.112                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Bottom Side   | 10       | Reduced         | 40620                   | 2593                      | 21.65               | 21.80               | 1.035                  | 62.9         | 1.006                     | 0.13             | 0.635                  | 0.661                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Bottom Side   | 10       | Reduced         | 39750                   | 2506                      | 21.55               | 21.80               | 1.059                  | 62.9         | 1.006                     | -0.08            | 0.497                  | 0.530                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Bottom Side   | 10       | Reduced         | 40185                   | 2549.5                    | 21.55               | 21.80               | 1.059                  | 62.9         | 1.006                     | 0.07             | 0.562                  | 0.599                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Bottom Side   | 10       | Reduced         | 41055                   | 2636.5                    | 20.91               | 21.80               | 1.227                  | 62.9         | 1.006                     | 0.03             | 0.608                  | 0.751                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Bottom Side   | 10       | Reduced         | 41490                   | 2680                      | 21.09               | 21.80               | 1.178                  | 62.9         | 1.006                     | -0.19            | 0.618                  | 0.732                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Front         | 10       | Reduced         | 40620                   | 2593                      | 21.64               | 21.80               | 1.038                  | 62.9         | 1.006                     | 0.05             | 0.378                  | 0.395                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 10       | Reduced         | 40620                   | 2593                      | 21.64               | 21.80               | 1.038                  | 62.9         | 1.006                     | -0.06            | 0.651                  | 0.679                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Left Side     | 10       | Reduced         | 40620                   | 2593                      | 21.64               | 21.80               | 1.038                  | 62.9         | 1.006                     | 0.02             | 0.133                  | 0.139                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Side    | 10       | Reduced         | 40620                   | 2593                      | 21.64               | 21.80               | 1.038                  | 62.9         | 1.006                     | 0.08             | 0.117                  | 0.122                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 40620                   | 2593                      | 21.64               | 21.80               | 1.038                  | 62.9         | 1.006                     | 0.18             | 0.658                  | 0.687                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 10       | Reduced         | 39750                   | 2506                      | 21.62               | 21.80               | 1.042                  | 62.9         | 1.006                     | -0.02            | 0.492                  | 0.516                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 10       | Reduced         | 40185                   | 2549.5                    | 21.47               | 21.80               | 1.079                  | 62.9         | 1.006                     | 0.01             | 0.559                  | 0.607                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 10       | Reduced         | 41055                   | 2636.5                    | 21.19               | 21.80               | 1.151                  | 62.9         | 1.006                     | 0.09             | 0.589                  | 0.682                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 10       | Reduced         | 41490                   | 2680                      | 21.09               | 21.80               | 1.178                  | 62.9         | 1.006                     | 0.04             | 0.598                  | 0.708                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 39750                   | 2506                      | 21.62               | 21.80               | 1.042                  | 62.9         | 1.006                     | -0.13            | 0.501                  | 0.525                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 40185                   | 2549.5                    | 21.47               | 21.80               | 1.079                  | 62.9         | 1.006                     | -0.09            | 0.573                  | 0.622                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 41055                   | 2636.5                    | 21.19               | 21.80               | 1.151                  | 62.9         | 1.006                     | -0.15            | 0.603                  | 0.698                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 41490                   | 2680                      | 21.09               | 21.80               | 1.178                  | 62.9         | 1.006                     | -0.05            | 0.609                  | 0.721                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 41490                   | 2680                      | 23.46               | 24.30               | 1.213                  | 42.9         | 1.009                     | 0.03             | 0.661                  | 0.809                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 40620                   | 2593                      | 24.14               | 24.30               | 1.038                  | 42.9         | 1.009                     | -0.05            | 0.552                  | 0.578                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 39750                   | 2506                      | 23.99               | 24.30               | 1.074                  | 42.9         | 1.009                     | -0.02            | 0.435                  | 0.471                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 40185                   | 2549.5                    | 24.02               | 24.30               | 1.067                  | 42.9         | 1.009                     | 0.01             | 0.508                  | 0.547                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 41055                   | 2636.5                    | 23.78               | 24.30               | 1.127                  | 42.9         | 1.009                     | 0.08             | 0.592                  | 0.673                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 40620(PCC) + 40422(SCC) | 2593(PCC) + 2573.2(SCC)   | 21.59               | 21.80               | 1.050                  | 62.9         | 1.006                     | -0.05            | 0.611                  | 0.645                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 39750(PCC) + 39948(SCC) | 2506(PCC) + 2525.8(SCC)   | 21.54               | 21.80               | 1.062                  | 62.9         | 1.006                     | 0.02             | 0.484                  | 0.517                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 39790(PCC) + 39988(SCC) | 2510(PCC) + 2529.8(SCC)   | 21.56               | 21.80               | 1.057                  | 62.9         | 1.006                     | 0.06             | 0.496                  | 0.527                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 40185(PCC) + 40383(SCC) | 2549.5(PCC) + 2569.3(SCC) | 21.41               | 21.80               | 1.094                  | 62.9         | 1.006                     | -0.11            | 0.539                  | 0.593                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 41055(PCC) + 40857(SCC) | 2636.5(PCC) + 2616.7(SCC) | 21.22               | 21.80               | 1.143                  | 62.9         | 1.006                     | 0.07             | 0.532                  | 0.612                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Bottom Side   | 10       | Reduced         | 41490(PCC)+41292(SCC)   | 2680(PCC) + 2660.2(SCC)   | 21.02               | 21.80               | 1.197                  | 62.9         | 1.006                     | 0.02             | 0.564                  | 0.679                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 100     | 0         | Back          | 10       | Reduced         | 40620                   | 2593                      | 21.62               | 21.80               | 1.042                  | 62.9         | 1.006                     | 0.05             | 0.454                  | 0.476                  |
| 1        | 1       | LTE Band 41 | 20M      | QPSK       | 100     | 0         | Bottom Side   | 10       | Reduced         | 40620                   | 2593                      | 21.62               | 21.80               | 1.042                  | 62.9         | 1.006                     | 0.06             | 0.470                  | 0.493                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Front         | 10       | Reduced         | 55830 | 3609        | 22.43               | 22.80               | 1.089                  | 62.9         | 1.006                     | 0.05             | 0.337                  | 0.369                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Back          | 10       | Reduced         | 55830 | 3609        | 22.43               | 22.80               | 1.089                  | 62.9         | 1.006                     | -0.08            | 0.432                  | 0.473                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Left Side     | 10       | Reduced         | 55830 | 3609        | 22.43               | 22.80               | 1.089                  | 62.9         | 1.006                     | 0.06             | 0.228                  | 0.250                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 55830 | 3609        | 22.43               | 22.80               | 1.089                  | 62.9         | 1.006                     | 0.07             | 0.748                  | 0.819                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 55340 | 3560        | 22.21               | 22.80               | 1.146                  | 62.9         | 1.006                     | 0.12             | 0.734                  | 0.846                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 56150 | 3641        | 22.26               | 22.80               | 1.132                  | 62.9         | 1.006                     | 0.03             | 0.810                  | 0.923                  |
| 43       | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 56640 | 3690        | 22.25               | 22.80               | 1.135                  | 62.9         | 1.006                     | 0.04             | 0.867                  | 0.990                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Front         | 10       | Reduced         | 55830 | 3609        | 22.38               | 22.80               | 1.102                  | 62.9         | 1.006                     | 0.08             | 0.257                  | 0.285                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Back          | 10       | Reduced         | 55830 | 3609        | 22.38               | 22.80               | 1.102                  | 62.9         | 1.006                     | 0.06             | 0.297                  | 0.329                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Left Side     | 10       | Reduced         | 55830 | 3609        | 22.38               | 22.80               | 1.102                  | 62.9         | 1.006                     | 0.09             | 0.183                  | 0.203                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 55830 | 3609        | 22.38               | 22.80               | 1.102                  | 62.9         | 1.006                     | 0.02             | 0.646                  | 0.716                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 55340 | 3560        | 22.23               | 22.80               | 1.140                  | 62.9         | 1.006                     | 0.07             | 0.675                  | 0.774                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 56150 | 3641        | 22.37               | 22.80               | 1.104                  | 62.9         | 1.006                     | 0.05             | 0.706                  | 0.784                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 56640 | 3690        | 22.37               | 22.80               | 1.104                  | 62.9         | 1.006                     | 0.01             | 0.765                  | 0.850                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 100     | 0         | Top Side      | 10       | Reduced         | 55830 | 3609        | 22.36               | 22.80               | 1.107                  | 62.9         | 1.006                     | 0.1              | 0.659                  | 0.734                  |

**<WLAN 2.4GHz SAR>**

| Plot No. | Antenna | Band       | Mode          | Test Position | Gap (mm) | 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) |
|----------|---------|------------|---------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Front         | 10       | Reduced         | 11  | 2462        | 17.76               | 19.00               | 1.330                  | 99.31        | 1.007                     | 0.09             | 0.099                  | 0.132                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 10       | Reduced         | 11  | 2462        | 17.76               | 19.00               | 1.330                  | 99.31        | 1.007                     | -0.06            | 0.307                  | 0.411                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Right Side    | 10       | Reduced         | 11  | 2462        | 17.76               | 19.00               | 1.330                  | 99.31        | 1.007                     | 0.02             | 0.118                  | 0.158                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Top Side      | 10       | Reduced         | 11  | 2462        | 17.76               | 19.00               | 1.330                  | 99.31        | 1.007                     | 0.15             | 0.136                  | 0.182                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 10       | Reduced         | 1   | 2412        | 17.66               | 19.00               | 1.361                  | 99.31        | 1.007                     | 0.03             | 0.390                  | 0.535                  |
| 44       | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 10       | Reduced         | 6   | 2437        | 17.71               | 19.00               | 1.346                  | 99.31        | 1.007                     | 0.08             | 0.525                  | <b>0.712</b>           |

**<Bluetooth SAR>**

| Plot No. | Antenna | Band      | Mode      | Test Position | Gap (mm) | 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) |
|----------|---------|-----------|-----------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1       | Bluetooth | DH5 1Mbps | Front         | 10       | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.09             | 0.057                  | 0.083                  |
| 45       | 1       | Bluetooth | DH5 1Mbps | Back          | 10       | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | -0.19            | 0.078                  | <b>0.114</b>           |
|          | 1       | Bluetooth | DH5 1Mbps | Right Side    | 10       | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | -0.03            | 0.035                  | 0.051                  |
|          | 1       | Bluetooth | DH5 1Mbps | Top Side      | 10       | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.02             | 0.075                  | 0.110                  |
|          | 1       | Bluetooth | DH5 1Mbps | Back          | 10       | Full            | 0   | 2402        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.06             | 0.074                  | 0.108                  |
|          | 1       | Bluetooth | DH5 1Mbps | Back          | 10       | Full            | 78  | 2480        | 13.40               | 15.40               | 1.585                  | 76.87        | 1.084                     | 0.01             | 0.060                  | 0.103                  |

**<WLAN 5GHz SAR>**

| Plot No. | Antenna | Band       | Mode              | Test Position | Gap (mm) | 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) |
|----------|---------|------------|-------------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Front         | 10       | Reduced         | 38  | 5190        | 15.51               | 17.00               | 1.409                  | 96.31        | 1.038                     | 0.09             | 0.015                  | 0.021                  |
|          | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Back          | 10       | Reduced         | 38  | 5190        | 15.51               | 17.00               | 1.409                  | 96.31        | 1.038                     | 0.02             | 0.515                  | 0.753                  |
|          | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Right Side    | 10       | Reduced         | 38  | 5190        | 15.51               | 17.00               | 1.409                  | 96.31        | 1.038                     | 0.09             | 0.147                  | 0.215                  |
|          | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Top Side      | 10       | Reduced         | 38  | 5190        | 15.51               | 17.00               | 1.409                  | 96.31        | 1.038                     | 0.08             | 0.071                  | 0.103                  |
| 46       | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Back          | 10       | Reduced         | 46  | 5230        | 15.25               | 17.00               | 1.496                  | 96.31        | 1.038                     | 0.05             | 0.538                  | <b>0.836</b>           |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Front         | 10       | Reduced         | 151 | 5755        | 14.48               | 16.00               | 1.419                  | 96.31        | 1.038                     | -0.03            | 0.110                  | 0.162                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 10       | Reduced         | 151 | 5755        | 14.48               | 16.00               | 1.419                  | 96.31        | 1.038                     | 0.06             | 0.505                  | 0.744                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Right Side    | 10       | Reduced         | 151 | 5755        | 14.48               | 16.00               | 1.419                  | 96.31        | 1.038                     | 0.05             | 0.132                  | 0.194                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Top Side      | 10       | Reduced         | 151 | 5755        | 14.48               | 16.00               | 1.419                  | 96.31        | 1.038                     | 0.11             | 0.068                  | 0.100                  |
| 47       | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 10       | Reduced         | 159 | 5795        | 14.41               | 16.00               | 1.442                  | 96.31        | 1.038                     | -0.08            | 0.558                  | <b>0.835</b>           |



### 14.3 Body Worn Accessory SAR

#### <GSM SAR>

| Plot No. | Antenna | Band    | Mode             | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|---------|------------------|---------------|----------|------------|-----|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | GSM850  | GPRS(3 Tx slots) | Front         | 15       | Full       | 128 | 824.2       | 28.75               | 29.80               | 1.274                  | 0.05             | 0.357                  | 0.455                  |
|          | 3       | GSM850  | GPRS(3 Tx slots) | Back          | 15       | Full       | 128 | 824.2       | 28.75               | 29.80               | 1.274                  | 0.08             | 0.416                  | 0.530                  |
|          | 3       | GSM850  | GPRS(3 Tx slots) | Back          | 15       | Full       | 189 | 836.4       | 28.48               | 29.80               | 1.355                  | 0.06             | 0.417                  | 0.565                  |
| 48       | 3       | GSM850  | GPRS(3 Tx slots) | Back          | 15       | Full       | 251 | 848.8       | 28.45               | 29.80               | 1.365                  | -0.13            | 0.433                  | 0.591                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Front         | 15       | Full       | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | 0.06             | 0.063                  | 0.073                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Back          | 15       | Full       | 512 | 1850.2      | 24.49               | 25.10               | 1.151                  | -0.07            | 0.098                  | 0.113                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Back          | 15       | Full       | 661 | 1880        | 24.39               | 25.10               | 1.178                  | 0.03             | 0.081                  | 0.095                  |
|          | 2       | GSM1900 | GPRS(3 Tx slots) | Back          | 15       | Full       | 810 | 1909.8      | 24.32               | 25.10               | 1.197                  | 0.08             | 0.083                  | 0.099                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Front         | 15       | Full       | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.11             | 0.142                  | 0.180                  |
| 49       | 1       | GSM1900 | GPRS(3 Tx slots) | Back          | 15       | Full       | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | 0.08             | 0.231                  | 0.293                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Back          | 15       | Full       | 661 | 1880        | 25.45               | 26.50               | 1.274                  | -0.03            | 0.194                  | 0.247                  |
|          | 1       | GSM1900 | GPRS(3 Tx slots) | Back          | 15       | Full       | 810 | 1909.8      | 25.42               | 26.50               | 1.282                  | 0.05             | 0.211                  | 0.271                  |

#### <WCDMA SAR>

| Plot No. | Antenna | Band          | Mode         | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|---------------|--------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | WCDMA Band V  | RMC 12.2Kbps | Front         | 15       | Full       | 4132 | 826.4       | 24.20               | 24.80               | 1.148                  | 0.08             | 0.461                  | 0.529                  |
|          | 3       | WCDMA Band V  | RMC 12.2Kbps | Back          | 15       | Full       | 4132 | 826.4       | 24.20               | 24.80               | 1.148                  | 0.02             | 0.496                  | 0.569                  |
| 50       | 3       | WCDMA Band V  | RMC 12.2Kbps | Back          | 15       | Full       | 4182 | 836.4       | 24.02               | 24.80               | 1.197                  | -0.19            | 0.569                  | 0.681                  |
|          | 3       | WCDMA Band V  | RMC 12.2Kbps | Back          | 15       | Full       | 4233 | 846.6       | 23.90               | 24.80               | 1.230                  | 0.07             | 0.453                  | 0.557                  |
|          | 2       | WCDMA Band IV | RMC 12.2Kbps | Front         | 15       | Full       | 1413 | 1732.6      | 23.01               | 23.40               | 1.094                  | 0.02             | 0.151                  | 0.165                  |
|          | 2       | WCDMA Band IV | RMC 12.2Kbps | Back          | 15       | Full       | 1413 | 1732.6      | 23.01               | 23.40               | 1.094                  | 0.09             | 0.180                  | 0.197                  |
|          | 2       | WCDMA Band IV | RMC 12.2Kbps | Back          | 15       | Full       | 1312 | 1712.4      | 22.92               | 23.40               | 1.117                  | 0.1              | 0.237                  | 0.265                  |
|          | 2       | WCDMA Band IV | RMC 12.2Kbps | Back          | 15       | Full       | 1513 | 1752.6      | 22.96               | 23.40               | 1.107                  | 0.04             | 0.166                  | 0.184                  |
|          | 1       | WCDMA Band IV | RMC 12.2Kbps | Front         | 15       | Full       | 1413 | 1732.6      | 24.18               | 24.80               | 1.153                  | 0.03             | 0.344                  | 0.397                  |
|          | 1       | WCDMA Band IV | RMC 12.2Kbps | Back          | 15       | Full       | 1413 | 1732.6      | 24.18               | 24.80               | 1.153                  | 0.01             | 0.389                  | 0.449                  |
| 51       | 1       | WCDMA Band IV | RMC 12.2Kbps | Back          | 15       | Full       | 1312 | 1712.4      | 24.09               | 24.80               | 1.178                  | -0.12            | 0.396                  | 0.466                  |
|          | 1       | WCDMA Band IV | RMC 12.2Kbps | Back          | 15       | Full       | 1513 | 1752.6      | 24.17               | 24.80               | 1.156                  | 0.07             | 0.384                  | 0.444                  |
|          | 2       | WCDMA Band II | RMC 12.2Kbps | Front         | 15       | Full       | 9400 | 1880        | 22.86               | 23.40               | 1.132                  | 0.08             | 0.147                  | 0.166                  |
|          | 2       | WCDMA Band II | RMC 12.2Kbps | Back          | 15       | Full       | 9400 | 1880        | 22.86               | 23.40               | 1.132                  | 0.03             | 0.197                  | 0.223                  |
|          | 2       | WCDMA Band II | RMC 12.2Kbps | Back          | 15       | Full       | 9262 | 1852.4      | 22.82               | 23.40               | 1.143                  | 0.05             | 0.199                  | 0.227                  |
|          | 2       | WCDMA Band II | RMC 12.2Kbps | Back          | 15       | Full       | 9538 | 1907.6      | 22.74               | 23.40               | 1.164                  | -0.12            | 0.259                  | 0.302                  |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Front         | 15       | Full       | 9400 | 1880        | 24.21               | 24.80               | 1.146                  | 0.11             | 0.340                  | 0.389                  |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 15       | Full       | 9400 | 1880        | 24.21               | 24.80               | 1.146                  | 0.09             | 0.449                  | 0.514                  |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 15       | Full       | 9262 | 1852.4      | 24.15               | 24.80               | 1.161                  | 0.02             | 0.402                  | 0.467                  |
| 52       | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 15       | Full       | 9538 | 1907.6      | 24.20               | 24.80               | 1.148                  | 0.13             | 0.611                  | 0.702                  |



<CDMA2000 SAR>

| Plot No. | Antenna | Band          | Mode             | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|---------------|------------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | CDMA2000 BC0  | RC3 SO32 (F+SCH) | Front         | 15       | Full       | 1013 | 824.7       | 23.97               | 24.80               | 1.211                  | 0.08             | 0.285                  | 0.345                  |
| 53       | 3       | CDMA2000 BC0  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 1013 | 824.7       | 23.97               | 24.80               | 1.211                  | -0.02            | 0.473                  | 0.573                  |
|          | 3       | CDMA2000 BC0  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 777  | 848.31      | 23.84               | 24.80               | 1.247                  | 0.05             | 0.305                  | 0.380                  |
|          | 3       | CDMA2000 BC0  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 384  | 836.52      | 23.92               | 24.80               | 1.225                  | 0.07             | 0.307                  | 0.376                  |
|          | 3       | CDMA2000 BC10 | RC3 SO32 (F+SCH) | Front         | 15       | Full       | 580  | 820.5       | 24.07               | 24.80               | 1.183                  | 0.04             | 0.299                  | 0.354                  |
| 54       | 3       | CDMA2000 BC10 | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 580  | 820.5       | 24.07               | 24.80               | 1.183                  | -0.03            | 0.301                  | 0.356                  |
|          | 3       | CDMA2000 BC10 | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 476  | 817.9       | 24.06               | 24.80               | 1.186                  | -0.05            | 0.299                  | 0.355                  |
|          | 3       | CDMA2000 BC10 | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 684  | 823.1       | 24.03               | 24.80               | 1.194                  | 0.08             | 0.285                  | 0.340                  |
|          | 2       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Front         | 15       | Full       | 1175 | 1908.75     | 22.55               | 23.40               | 1.216                  | 0.06             | 0.083                  | 0.101                  |
|          | 2       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 1175 | 1908.75     | 22.55               | 23.40               | 1.216                  | 0.03             | 0.107                  | 0.130                  |
|          | 2       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 600  | 1880        | 22.53               | 23.40               | 1.222                  | 0.07             | 0.101                  | 0.123                  |
|          | 2       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 25   | 1851.25     | 22.54               | 23.40               | 1.219                  | 0.08             | 0.215                  | 0.262                  |
|          | 1       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Front         | 15       | Full       | 1175 | 1908.75     | 23.90               | 24.80               | 1.230                  | 0.08             | 0.312                  | 0.384                  |
| 55       | 1       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 1175 | 1908.75     | 23.90               | 24.80               | 1.230                  | 0.11             | 0.522                  | 0.642                  |
|          | 1       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 600  | 1880        | 23.81               | 24.80               | 1.256                  | -0.03            | 0.489                  | 0.614                  |
|          | 1       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 25   | 1851.25     | 23.79               | 24.80               | 1.262                  | 0.05             | 0.447                  | 0.564                  |



**<FDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 133322 | 683         | 23.47               | 23.80               | 1.079                  | 0.05             | 0.254                  | 0.274                  |
| 56       | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 133322 | 683         | 23.47               | 23.80               | 1.079                  | 0.16             | 0.294                  | 0.317                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Front         | 15       | Full       | 133322 | 683         | 22.52               | 22.80               | 1.067                  | 0.03             | 0.252                  | 0.269                  |
|          | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Back          | 15       | Full       | 133322 | 683         | 22.52               | 22.80               | 1.067                  | 0.08             | 0.289                  | 0.308                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 23095  | 707.5       | 22.91               | 23.80               | 1.227                  | 0.09             | 0.312                  | 0.383                  |
| 57       | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 23095  | 707.5       | 22.91               | 23.80               | 1.227                  | 0.04             | 0.333                  | 0.409                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Front         | 15       | Full       | 23095  | 707.5       | 21.98               | 22.80               | 1.208                  | 0.07             | 0.268                  | 0.324                  |
|          | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Back          | 15       | Full       | 23095  | 707.5       | 21.98               | 22.80               | 1.208                  | 0.03             | 0.277                  | 0.335                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 23230  | 782         | 22.95               | 23.80               | 1.216                  | 0.05             | 0.286                  | 0.348                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 23230  | 782         | 22.95               | 23.80               | 1.216                  | 0.02             | 0.401                  | 0.488                  |
|          | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Front         | 15       | Full       | 23230  | 782         | 22.05               | 22.80               | 1.189                  | 0.06             | 0.313                  | 0.372                  |
| 58       | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Back          | 15       | Full       | 23230  | 782         | 22.05               | 22.80               | 1.189                  | -0.08            | 0.445                  | 0.529                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 20525  | 836.5       | 22.86               | 23.80               | 1.242                  | 0.06             | 0.345                  | 0.428                  |
| 59       | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 20525  | 836.5       | 22.86               | 23.80               | 1.242                  | -0.17            | 0.526                  | 0.653                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Front         | 15       | Full       | 20525  | 836.5       | 21.94               | 22.80               | 1.219                  | 0.05             | 0.273                  | 0.333                  |
|          | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Back          | 15       | Full       | 20525  | 836.5       | 21.94               | 22.80               | 1.219                  | 0.08             | 0.361                  | 0.440                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 26865  | 831.5       | 22.99               | 23.80               | 1.205                  | 0.08             | 0.387                  | 0.466                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26865  | 831.5       | 22.99               | 23.80               | 1.205                  | 0.02             | 0.456                  | 0.549                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26765  | 821.5       | 22.97               | 23.80               | 1.211                  | 0.06             | 0.467                  | 0.565                  |
| 60       | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26965  | 841.5       | 22.91               | 23.80               | 1.227                  | -0.09            | 0.525                  | 0.644                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Front         | 15       | Full       | 26865  | 831.5       | 22.06               | 22.80               | 1.186                  | 0.03             | 0.317                  | 0.376                  |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Back          | 15       | Full       | 26865  | 831.5       | 22.06               | 22.80               | 1.186                  | 0.09             | 0.405                  | 0.480                  |



| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 132322 | 1745        | 21.93               | 22.40               | 1.114                  | 0.03             | 0.147                  | 0.164                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 132322 | 1745        | 21.93               | 22.40               | 1.114                  | 0.05             | 0.173                  | 0.193                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 132072 | 1720        | 21.87               | 22.40               | 1.130                  | 0.09             | 0.248                  | 0.280                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 132572 | 1770        | 21.90               | 22.40               | 1.122                  | 0.07             | 0.189                  | 0.212                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Front         | 15       | Full       | 132322 | 1745        | 21.04               | 21.40               | 1.086                  | 0.06             | 0.118                  | 0.128                  |
|          | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Back          | 15       | Full       | 132322 | 1745        | 21.04               | 21.40               | 1.086                  | 0.02             | 0.143                  | 0.155                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 132322 | 1745        | 23.13               | 23.80               | 1.167                  | 0.06             | 0.326                  | 0.380                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 132322 | 1745        | 23.13               | 23.80               | 1.167                  | 0.01             | 0.420                  | 0.490                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 132072 | 1720        | 23.04               | 23.80               | 1.191                  | 0.02             | 0.386                  | 0.460                  |
| 61       | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 132572 | 1770        | 23.12               | 23.80               | 1.169                  | 0.11             | 0.464                  | 0.543                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Front         | 15       | Full       | 132322 | 1745        | 22.21               | 22.80               | 1.146                  | 0.01             | 0.277                  | 0.317                  |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Back          | 15       | Full       | 132322 | 1745        | 22.21               | 22.80               | 1.146                  | 0.07             | 0.324                  | 0.371                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 26140  | 1860        | 21.79               | 22.40               | 1.151                  | 0.05             | 0.143                  | 0.165                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26140  | 1860        | 21.79               | 22.40               | 1.151                  | 0.13             | 0.244                  | 0.281                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26340  | 1880        | 21.70               | 22.40               | 1.175                  | 0.06             | 0.180                  | 0.211                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26590  | 1905        | 21.72               | 22.40               | 1.169                  | 0.07             | 0.181                  | 0.212                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Front         | 15       | Full       | 26140  | 1860        | 20.84               | 21.40               | 1.138                  | 0.05             | 0.115                  | 0.131                  |
|          | 2       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Back          | 15       | Full       | 26140  | 1860        | 20.84               | 21.40               | 1.138                  | 0.09             | 0.153                  | 0.174                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 26140  | 1860        | 23.09               | 23.80               | 1.178                  | -0.04            | 0.318                  | 0.374                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26140  | 1860        | 23.09               | 23.80               | 1.178                  | -0.09            | 0.405                  | 0.477                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26340  | 1880        | 23.08               | 23.80               | 1.180                  | -0.1             | 0.424                  | 0.500                  |
| 62       | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26590  | 1905        | 22.90               | 23.80               | 1.230                  | 0.06             | 0.539                  | 0.663                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Front         | 15       | Full       | 26140  | 1860        | 22.12               | 22.80               | 1.169                  | 0.03             | 0.257                  | 0.301                  |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Back          | 15       | Full       | 26140  | 1860        | 22.12               | 22.80               | 1.169                  | 0.01             | 0.327                  | 0.382                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Front         | 15       | Full       | 27710  | 2310        | 21.12               | 22.00               | 1.225                  | 0.05             | 0.218                  | 0.267                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Back          | 15       | Full       | 27710  | 2310        | 21.12               | 22.00               | 1.225                  | 0.06             | 0.329                  | 0.403                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Front         | 15       | Full       | 27710  | 2310        | 20.25               | 21.00               | 1.189                  | 0.09             | 0.181                  | 0.215                  |
|          | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Back          | 15       | Full       | 27710  | 2310        | 20.25               | 21.00               | 1.189                  | 0.03             | 0.295                  | 0.351                  |
| 63       | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Front         | 15       | Full       | 27710  | 2310        | 22.68               | 23.80               | 1.294                  | 0.07             | 0.425                  | 0.550                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Back          | 15       | Full       | 27710  | 2310        | 22.68               | 23.80               | 1.294                  | 0.04             | 0.320                  | 0.414                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Front         | 15       | Full       | 27710  | 2310        | 21.78               | 22.80               | 1.265                  | 0.02             | 0.335                  | 0.424                  |
|          | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Back          | 15       | Full       | 27710  | 2310        | 21.78               | 22.80               | 1.265                  | 0.06             | 0.255                  | 0.323                  |



# FCC SAR Test Report

Report No. : FA970213-03

| Plot No. | Antenna | Band       | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|------------|----------|------------|---------|-----------|---------------|----------|------------|-------------------------|-------------------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 21350                   | 2560                    | 21.30               | 22.00               | 1.175                  | 0.09             | 0.289                  | 0.340                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 21350                   | 2560                    | 21.30               | 22.00               | 1.175                  | 0.02             | 0.362                  | 0.425                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 20850                   | 2510                    | 21.00               | 22.00               | 1.259                  | -0.06            | 0.394                  | 0.496                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 21100                   | 2535                    | 21.25               | 22.00               | 1.189                  | 0.03             | 0.390                  | 0.464                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 20850(PCC) + 21048(SCC) | 2510(PCC) + 2529.8(SCC) | 20.95               | 22.00               | 1.274                  | 0.06             | 0.367                  | 0.467                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Front         | 15       | Full       | 21350                   | 2560                    | 20.42               | 21.00               | 1.143                  | 0.06             | 0.222                  | 0.254                  |
|          | 2       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 15       | Full       | 21350                   | 2560                    | 20.42               | 21.00               | 1.143                  | 0.08             | 0.275                  | 0.314                  |
| 64       | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 21350                   | 2560                    | 23.45               | 23.80               | 1.084                  | 0.03             | 0.660                  | 0.715                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 21350                   | 2560                    | 23.45               | 23.80               | 1.084                  | 0.08             | 0.623                  | 0.675                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 20850                   | 2510                    | 23.25               | 23.80               | 1.135                  | -0.05            | 0.560                  | 0.636                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 21100                   | 2535                    | 23.30               | 23.80               | 1.122                  | -0.09            | 0.554                  | 0.622                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 21350(PCC) + 21152(SCC) | 2560(PCC) + 2540.2(SCC) | 23.26               | 23.80               | 1.132                  | 0.09             | 0.609                  | 0.690                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Front         | 15       | Full       | 21350                   | 2560                    | 22.51               | 22.80               | 1.069                  | 0.01             | 0.435                  | 0.465                  |
|          | 1       | LTE Band 7 | 20M      | QPSK       | 50      | 0         | Back          | 15       | Full       | 21350                   | 2560                    | 22.51               | 22.80               | 1.069                  | -0.06            | 0.395                  | 0.422                  |



**<TDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Class | Power Mode | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-------------|------------|-------------------------|---------------------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 40620                   | 2593                      | 21.68               | 22.00               | 1.076                  | 62.9         | 1.006                     | 0.03             | 0.155                  | 0.168                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 40620                   | 2593                      | 21.68               | 22.00               | 1.076                  | 62.9         | 1.006                     | 0.09             | 0.200                  | 0.217                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 39750                   | 2506                      | 21.58               | 22.00               | 1.102                  | 62.9         | 1.006                     | 0.11             | 0.303                  | 0.336                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 40185                   | 2549.5                    | 21.55               | 22.00               | 1.109                  | 62.9         | 1.006                     | 0.06             | 0.233                  | 0.260                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 41055                   | 2636.5                    | 21.15               | 22.00               | 1.216                  | 62.9         | 1.006                     | 0.12             | 0.288                  | 0.352                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 2           | Full       | 41055                   | 2636.5                    | 23.28               | 24.50               | 1.324                  | 42.9         | 1.009                     | 0.17             | 0.298                  | 0.398                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 41490                   | 2680                      | 21.13               | 22.00               | 1.222                  | 62.9         | 1.006                     | -0.04            | 0.250                  | 0.307                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 41055(PCC) + 40857(SCC) | 2636.5(PCC) + 2616.7(SCC) | 21.11               | 22.00               | 1.227                  | 62.9         | 1.006                     | 0.02             | 0.165                  | 0.204                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Front         | 15       | 3           | Full       | 40620                   | 2593                      | 20.78               | 21.00               | 1.052                  | 62.9         | 1.006                     | 0.06             | 0.133                  | 0.141                  |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 15       | 3           | Full       | 40620                   | 2593                      | 20.78               | 21.00               | 1.052                  | 62.9         | 1.006                     | 0.03             | 0.173                  | 0.183                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 40620                   | 2593                      | 23.67               | 23.80               | 1.030                  | 62.9         | 1.006                     | 0.01             | 0.337                  | 0.349                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 40620                   | 2593                      | 23.67               | 23.80               | 1.030                  | 62.9         | 1.006                     | 0.15             | 0.324                  | 0.336                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 39750                   | 2506                      | 23.43               | 23.80               | 1.089                  | 62.9         | 1.006                     | 0.05             | 0.313                  | 0.343                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 40185                   | 2549.5                    | 23.60               | 23.80               | 1.047                  | 62.9         | 1.006                     | 0.08             | 0.337                  | 0.355                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 41055                   | 2636.5                    | 22.99               | 23.80               | 1.205                  | 62.9         | 1.006                     | 0.04             | 0.330                  | 0.400                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 41490                   | 2680                      | 23.13               | 23.80               | 1.167                  | 62.9         | 1.006                     | 0.02             | 0.383                  | 0.450                  |
| 65       | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 2           | Full       | 41490                   | 2680                      | 25.52               | 26.30               | 1.197                  | 42.9         | 1.009                     | -0.02            | 0.413                  | 0.499                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 41490(PCC) + 41292(SCC) | 2680(PCC) + 2660.2(SCC)   | 23.14               | 23.80               | 1.164                  | 62.9         | 1.006                     | 0.11             | 0.314                  | 0.368                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Front         | 15       | 3           | Full       | 40620                   | 2593                      | 22.58               | 22.80               | 1.052                  | 62.9         | 1.006                     | 0.06             | 0.278                  | 0.294                  |
|          | 1       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Back          | 15       | 3           | Full       | 40620                   | 2593                      | 22.58               | 22.80               | 1.052                  | 62.9         | 1.006                     | 0.02             | 0.267                  | 0.283                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 3           | Full       | 55830                   | 3609                      | 23.53               | 23.80               | 1.064                  | 62.9         | 1.006                     | 0.08             | 0.194                  | 0.208                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 55830                   | 3609                      | 23.53               | 23.80               | 1.064                  | 62.9         | 1.006                     | 0.03             | 0.276                  | 0.295                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 55340                   | 3560                      | 23.39               | 23.80               | 1.099                  | 62.9         | 1.006                     | 0.04             | 0.223                  | 0.247                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 56150                   | 3641                      | 23.41               | 23.80               | 1.094                  | 62.9         | 1.006                     | 0.11             | 0.220                  | 0.242                  |
| 66       | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 56640                   | 3690                      | 23.42               | 23.80               | 1.091                  | 62.9         | 1.006                     | -0.05            | 0.301                  | 0.330                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Front         | 15       | 3           | Full       | 55830                   | 3609                      | 22.61               | 22.80               | 1.045                  | 62.9         | 1.006                     | 0.06             | 0.141                  | 0.148                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Back          | 15       | 3           | Full       | 55830                   | 3609                      | 22.61               | 22.80               | 1.045                  | 62.9         | 1.006                     | 0.09             | 0.195                  | 0.205                  |

**<WLAN 2.4GHz SAR>**

| Plot No. | Antenna | Band       | Mode          | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|------------|---------------|---------------|----------|------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Front         | 15       | Full       | 11  | 2462        | 20.76               | 22.00               | 1.330                  | 99.31        | 1.007                     | 0.06             | 0.096                  | 0.128                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 15       | Full       | 11  | 2462        | 20.76               | 22.00               | 1.330                  | 99.31        | 1.007                     | 0.08             | 0.260                  | 0.348                  |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 15       | Full       | 1   | 2412        | 20.66               | 22.00               | 1.361                  | 99.31        | 1.007                     | -0.07            | 0.358                  | 0.491                  |
| 67       | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 15       | Full       | 6   | 2437        | 20.71               | 22.00               | 1.344                  | 99.31        | 1.007                     | 0.02             | 0.403                  | <b>0.546</b>           |

**<WLAN 5GHz SAR>**

| Plot No. | Antenna | Band       | Mode              | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|------------|-------------------|---------------|----------|------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Front         | 15       | Full       | 54  | 5270        | 18.11               | 20.00               | 1.545                  | 96.31        | 1.038                     | 0.08             | 0.034                  | 0.054                  |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 54  | 5270        | 18.11               | 20.00               | 1.545                  | 96.31        | 1.038                     | 0.06             | 0.617                  | 0.990                  |
| 68       | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 62  | 5310        | 18.06               | 20.00               | 1.563                  | 96.31        | 1.038                     | 0.09             | 0.623                  | <b>1.011</b>           |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Front         | 15       | Full       | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | -0.09            | 0.016                  | 0.020                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | 0.06             | 0.809                  | 1.003                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 102 | 5510        | 18.92               | 20.00               | 1.282                  | 96.31        | 1.038                     | 0.08             | 0.756                  | 1.006                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 126 | 5630        | 18.58               | 20.00               | 1.387                  | 96.31        | 1.038                     | 0.07             | 0.704                  | 1.013                  |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 134 | 5670        | 18.73               | 20.00               | 1.340                  | 96.31        | 1.038                     | 0.03             | 0.729                  | 1.014                  |
| 69       | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 142 | 5710        | 18.48               | 20.00               | 1.419                  | 96.31        | 1.038                     | 0.01             | 0.701                  | <b>1.033</b>           |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Front         | 15       | Full       | 151 | 5755        | 17.43               | 19.00               | 1.435                  | 96.31        | 1.038                     | 0.01             | 0.001                  | 0.001                  |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 151 | 5755        | 17.43               | 19.00               | 1.435                  | 96.31        | 1.038                     | 0.03             | 0.613                  | 0.913                  |
| 70       | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 159 | 5795        | 17.36               | 19.00               | 1.459                  | 96.31        | 1.038                     | -0.03            | 0.613                  | <b>0.928</b>           |

**<Bluetooth SAR>**

| Plot No. | Band      | Mode  | Test Position | Gap (mm) | 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) |
|----------|-----------|-------|---------------|----------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
|          | Bluetooth | 1Mbps | Front         | 15       | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.09             | 0.024                  | 0.035                  |
| 71       | Bluetooth | 1Mbps | Back          | 15       | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.05             | 0.041                  | <b>0.060</b>           |
|          | Bluetooth | 1Mbps | Back          | 15       | 0   | 2402        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.11             | 0.037                  | 0.054                  |
|          | Bluetooth | 1Mbps | Back          | 15       | 78  | 2480        | 13.40               | 15.40               | 1.585                  | 76.87        | 1.084                     | 0.14             | 0.031                  | 0.053                  |



**14.4 Product specific 10g SAR**

**<WCDMA SAR>**

| Plot No. | Antenna | Band          | Mode         | Test Position | Gap (mm) | Power Mode | Ch.  | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|---------------|--------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|-------------------------|-------------------------|
|          | 3       | WCDMA Band V  | RMC 12.2Kbps | Left Side     | 0        | Full       | 4132 | 826.4       | 24.20               | 24.80               | 1.148                  | 0.11             | 1.560                   | 1.791                   |
|          | 3       | WCDMA Band V  | RMC 12.2Kbps | Left Side     | 0        | Full       | 4182 | 836.4       | 24.02               | 24.80               | 1.197                  | 0.05             | 1.530                   | 1.831                   |
| 72       | 3       | WCDMA Band V  | RMC 12.2Kbps | Left Side     | 0        | Full       | 4233 | 846.6       | 23.90               | 24.80               | 1.230                  | 0.06             | 1.560                   | <b>1.919</b>            |
|          | 1       | WCDMA Band IV | RMC 12.2Kbps | Bottom Side   | 0        | Reduced    | 1413 | 1732.6      | 22.31               | 22.80               | 1.119                  | 0.12             | 1.890                   | 2.116                   |
|          | 1       | WCDMA Band IV | RMC 12.2Kbps | Bottom Side   | 0        | Reduced    | 1312 | 1712.4      | 22.14               | 22.80               | 1.164                  | 0.05             | 1.990                   | 2.317                   |
| 73       | 1       | WCDMA Band IV | RMC 12.2Kbps | Bottom Side   | 0        | Reduced    | 1513 | 1752.6      | 22.29               | 22.80               | 1.125                  | 0.01             | 2.090                   | <b>2.350</b>            |
| 74       | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 0        | Reduced    | 9400 | 1880        | 21.19               | 21.80               | 1.151                  | 0.01             | 2.250                   | <b>2.589</b>            |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 0        | Reduced    | 9262 | 1852.4      | 21.05               | 21.80               | 1.189                  | 0.05             | 2.170                   | 2.579                   |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 0        | Reduced    | 9538 | 1907.6      | 21.18               | 21.80               | 1.153                  | 0.09             | 2.160                   | 2.491                   |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Bottom Side   | 0        | Reduced    | 9400 | 1880        | 21.19               | 21.80               | 1.151                  | 0.03             | 1.950                   | 2.244                   |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Bottom Side   | 0        | Reduced    | 9262 | 1852.4      | 21.05               | 21.80               | 1.189                  | 0.11             | 1.920                   | 2.282                   |
|          | 1       | WCDMA Band II | RMC 12.2Kbps | Bottom Side   | 0        | Reduced    | 9538 | 1907.6      | 21.18               | 21.80               | 1.153                  | 0.02             | 2.020                   | 2.330                   |

**<CDMA2000 SAR>**

| Plot No. | Antenna | Band          | Mode           | Test Position | Gap (mm) | Power Mode | Ch.  | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|---------------|----------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|-------------------------|-------------------------|
| 75       | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 0        | Full       | 1013 | 824.7       | 23.91               | 24.80               | 1.227                  | 0.09             | 1.380                   | <b>1.694</b>            |
|          | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 0        | Full       | 777  | 848.31      | 23.83               | 24.80               | 1.250                  | 0.11             | 1.200                   | 1.500                   |
|          | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 0        | Full       | 384  | 836.52      | 23.90               | 24.80               | 1.230                  | 0.06             | 1.310                   | 1.612                   |
| 76       | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 0        | Full       | 580  | 820.5       | 24.06               | 24.80               | 1.186                  | 0.08             | 1.450                   | <b>1.719</b>            |
|          | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 0        | Full       | 476  | 817.9       | 24.05               | 24.80               | 1.189                  | 0.11             | 1.420                   | 1.688                   |
|          | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 0        | Full       | 684  | 823.1       | 24.01               | 24.80               | 1.199                  | 0.03             | 1.410                   | 1.691                   |
| 77       | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Back          | 0        | Reduced    | 1175 | 1908.75     | 19.95               | 20.80               | 1.216                  | 0.11             | 1.700                   | <b>2.068</b>            |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Bottom Side   | 0        | Reduced    | 1175 | 1908.75     | 19.95               | 20.80               | 1.216                  | 0.03             | 1.540                   | 1.873                   |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Back          | 0        | Reduced    | 25   | 1851.25     | 19.79               | 20.80               | 1.262                  | 0.13             | 1.510                   | 1.905                   |
|          | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Back          | 0        | Reduced    | 600  | 1880        | 19.88               | 20.80               | 1.236                  | 0.05             | 1.610                   | 1.990                   |



**<FDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Mode | Ch.                     | Freq. (MHz)             | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|------------|-------------------------|-------------------------|---------------------|---------------------|------------------------|------------------|-------------------------|-------------------------|
|          | 3       | LTE Band 13 | 10M      | QPSK       | 1       | 0         | Left Side     | 0        | Full       | 23230                   | 782                     | 22.95               | 23.80               | 1.216                  | -0.06            | 1.130                   | 1.374                   |
| 78       | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Left Side     | 0        | Full       | 23230                   | 782                     | 22.05               | 22.80               | 1.189                  | 0.03             | 1.320                   | 1.569                   |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 0        | Full       | 26865                   | 831.5                   | 22.99               | 23.80               | 1.205                  | 0.01             | 1.430                   | 1.723                   |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 0        | Full       | 26765                   | 821.5                   | 22.97               | 23.80               | 1.211                  | 0.06             | 1.370                   | 1.659                   |
| 79       | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 0        | Full       | 26965                   | 841.5                   | 22.91               | 23.80               | 1.227                  | 0.04             | 1.520                   | 1.866                   |
|          | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Left Side     | 0        | Full       | 26865                   | 831.5                   | 22.06               | 22.80               | 1.186                  | 0.04             | 1.110                   | 1.316                   |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 0        | Reduced    | 132322                  | 1745                    | 21.26               | 21.80               | 1.132                  | 0.08             | 2.030                   | 2.299                   |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 0        | Reduced    | 132072                  | 1720                    | 21.05               | 21.80               | 1.189                  | 0.11             | 2.230                   | 2.650                   |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 0        | Reduced    | 132572                  | 1770                    | 21.22               | 21.80               | 1.143                  | 0.02             | 2.100                   | 2.400                   |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 132322                  | 1745                    | 21.24               | 21.80               | 1.138                  | -0.03            | 2.110                   | 2.400                   |
| 80       | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 132072                  | 1720                    | 21.20               | 21.80               | 1.148                  | 0.16             | 2.320                   | 2.664                   |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 132572                  | 1770                    | 21.23               | 21.80               | 1.140                  | 0.05             | 2.260                   | 2.577                   |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 100     | 0         | Bottom Side   | 0        | Reduced    | 132322                  | 1745                    | 21.19               | 21.80               | 1.151                  | 0.06             | 1.900                   | 2.187                   |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 0        | Reduced    | 26140                   | 1860                    | 20.09               | 20.80               | 1.178                  | 0.01             | 1.850                   | 2.179                   |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 0        | Reduced    | 26340                   | 1880                    | 20.04               | 20.80               | 1.191                  | 0.19             | 1.730                   | 2.061                   |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Bottom Side   | 0        | Reduced    | 26590                   | 1905                    | 20.03               | 20.80               | 1.194                  | 0.16             | 1.680                   | 2.006                   |
| 81       | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 26140                   | 1860                    | 20.08               | 20.80               | 1.180                  | 0.07             | 2.030                   | 2.396                   |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 26340                   | 1880                    | 20.07               | 20.80               | 1.183                  | 0.02             | 1.890                   | 2.236                   |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 26590                   | 1905                    | 20.02               | 20.80               | 1.197                  | 0.09             | 1.760                   | 2.106                   |
|          | 1       | LTE Band 25 | 20M      | QPSK       | 100     | 0         | Bottom Side   | 0        | Reduced    | 26140                   | 1860                    | 20.08               | 20.80               | 1.180                  | 0.09             | 1.810                   | 2.136                   |
|          | 2       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Top Side      | 0        | Full       | 21350                   | 2560                    | 21.30               | 22.00               | 1.175                  | 0.08             | 2.070                   | 2.432                   |
| 82       | 2       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Top Side      | 0        | Full       | 20850                   | 2510                    | 21.00               | 22.00               | 1.259                  | 0.02             | 2.020                   | 2.543                   |
|          | 2       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Top Side      | 0        | Full       | 21100                   | 2535                    | 21.25               | 22.00               | 1.189                  | 0.03             | 2.010                   | 2.389                   |
|          | 2       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Top Side      | 0        | Full       | 21350                   | 2560                    | 20.42               | 21.00               | 1.143                  | 0.09             | 1.610                   | 1.840                   |
|          | 2       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Top Side      | 0        | Full       | 20850                   | 2510                    | 20.18               | 21.00               | 1.208                  | 0.04             | 1.680                   | 2.029                   |
|          | 2       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Top Side      | 0        | Full       | 21100                   | 2535                    | 20.33               | 21.00               | 1.167                  | 0.07             | 1.580                   | 1.844                   |
|          | 2       | LTE Band 7  | 20M      | QPSK       | 100     | 0         | Top Side      | 0        | Full       | 21350                   | 2560                    | 20.41               | 21.00               | 1.146                  | 0.06             | 1.560                   | 1.787                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Front         | 0        | Reduced    | 21350                   | 2560                    | 17.74               | 18.30               | 1.138                  | 0.06             | 1.480                   | 1.684                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Back          | 0        | Reduced    | 21350                   | 2560                    | 17.74               | 18.30               | 1.138                  | 0.05             | 1.930                   | 2.196                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Bottom Side   | 0        | Reduced    | 21350                   | 2560                    | 17.74               | 18.30               | 1.138                  | 0.01             | 1.160                   | 1.320                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Back          | 0        | Reduced    | 20850                   | 2510                    | 17.51               | 18.30               | 1.199                  | 0.02             | 1.890                   | 2.267                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Back          | 0        | Reduced    | 21100                   | 2535                    | 17.61               | 18.30               | 1.172                  | 0.09             | 1.910                   | 2.239                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Front         | 0        | Reduced    | 21350                   | 2560                    | 17.72               | 18.30               | 1.143                  | -0.05            | 1.520                   | 1.737                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 0        | Reduced    | 21350                   | 2560                    | 17.72               | 18.30               | 1.143                  | 0.06             | 1.990                   | 2.274                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 21350                   | 2560                    | 17.72               | 18.30               | 1.143                  | 0.09             | 1.200                   | 1.371                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 0        | Reduced    | 20850                   | 2510                    | 17.54               | 18.30               | 1.191                  | 0.03             | 1.870                   | 2.228                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 0        | Reduced    | 21100                   | 2535                    | 17.67               | 18.30               | 1.156                  | 0.11             | 1.770                   | 2.046                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 0        | Reduced    | 21350(PCC) + 21152(SCC) | 2560(PCC) + 2540.2(SCC) | 17.92               | 18.30               | 1.091                  | 0.02             | 2.060                   | 2.248                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 0        | Reduced    | 20850(PCC) + 21048(SCC) | 2510(PCC) + 2529.8(SCC) | 17.73               | 18.30               | 1.140                  | -0.06            | 1.750                   | 1.995                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 0        | Reduced    | 21100(PCC) + 20902(SCC) | 2535(PCC) + 2515.2(SCC) | 17.79               | 18.30               | 1.125                  | 0.09             | 2.020                   | 2.272                   |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 100     | 0         | Back          | 0        | Reduced    | 21350                   | 2560                    | 17.71               | 18.30               | 1.146                  | 0.04             | 1.620                   | 1.856                   |



<TDD LTE SAR>

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Class | Power Mode | Ch.                     | Freq. (MHz)               | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-------------|------------|-------------------------|---------------------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 3           | Full       | 40620                   | 2593                      | 21.68               | 22.00               | 1.076                  | 62.9         | 1.006                     | 0.05             | 1.060                   | 1.148                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 3           | Full       | 39750                   | 2506                      | 21.58               | 22.00               | 1.102                  | 62.9         | 1.006                     | 0.03             | 0.873                   | 0.967                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 3           | Full       | 40185                   | 2549.5                    | 21.55               | 22.00               | 1.109                  | 62.9         | 1.006                     | 0.12             | 0.932                   | 1.040                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 3           | Full       | 41055                   | 2636.5                    | 21.15               | 22.00               | 1.216                  | 62.9         | 1.006                     | 0.02             | 1.260                   | 1.542                   |
| 83       | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 41055                   | 2636.5                    | 23.28               | 24.50               | 1.324                  | 42.9         | 1.009                     | -0.15            | 1.510                   | 2.018                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 40620                   | 2593                      | 24.17               | 24.50               | 1.079                  | 42.9         | 1.009                     | 0.06             | 1.350                   | 1.470                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 39750                   | 2506                      | 24.14               | 24.50               | 1.086                  | 42.9         | 1.009                     | 0.09             | 1.310                   | 1.436                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 40185                   | 2549.5                    | 24.00               | 24.50               | 1.122                  | 42.9         | 1.009                     | 0.03             | 1.320                   | 1.494                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 41490                   | 2680                      | 23.75               | 24.50               | 1.189                  | 42.9         | 1.009                     | 0.07             | 1.370                   | 1.643                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 41490                   | 2680                      | 21.13               | 22.00               | 1.222                  | 62.9         | 1.006                     | 0.09             | 1.200                   | 1.475                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 41055(PCC) + 40857(SCC) | 2636.5(PCC) + 2616.7(SCC) | 21.11               | 22.00               | 1.227                  | 62.9         | 1.006                     | 0.12             | 1.150                   | 1.420                   |
|          | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 0        | 3           | Full       | 40620                   | 2593                      | 20.78               | 21.00               | 1.052                  | 62.9         | 1.006                     | 0.06             | 0.888                   | 0.940                   |
| 84       | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | -           | Full       | 55830                   | 3609                      | 23.53               | 23.80               | 1.064                  | 62.9         | 1.006                     | 0.05             | 2.220                   | 2.377                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | -           | Full       | 55340                   | 3660                      | 23.39               | 23.80               | 1.099                  | 62.9         | 1.006                     | 0.07             | 2.100                   | 2.322                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | -           | Full       | 56150                   | 3641                      | 23.41               | 23.80               | 1.094                  | 62.9         | 1.006                     | 0.08             | 2.120                   | 2.333                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | -           | Full       | 56640                   | 3690                      | 23.42               | 23.80               | 1.091                  | 62.9         | 1.006                     | 0.07             | 2.090                   | 2.295                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 0        | -           | Full       | 55830                   | 3609                      | 22.61               | 22.80               | 1.045                  | 62.9         | 1.006                     | 0.07             | 2.030                   | 2.134                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 0        | -           | Full       | 55340                   | 3560                      | 22.34               | 22.80               | 1.112                  | 62.9         | 1.006                     | -0.02            | 2.070                   | 2.315                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 0        | -           | Full       | 56150                   | 3641                      | 22.55               | 22.80               | 1.059                  | 62.9         | 1.006                     | 0.02             | 1.980                   | 2.110                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Top Side      | 0        | -           | Full       | 56640                   | 3690                      | 22.50               | 22.80               | 1.072                  | 62.9         | 1.006                     | -0.05            | 1.820                   | 1.962                   |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 100     | 0         | Top Side      | 0        | -           | Full       | 55830                   | 3609                      | 22.58               | 22.80               | 1.052                  | 62.9         | 1.006                     | 0.01             | 2.170                   | 2.296                   |



## &lt;WLAN 2.4GHz SAR&gt;

| Plot No. | Antenna | Band       | Mode          | Test Position | Gap (mm) | 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 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|------------|---------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 0        | Full            | 11  | 2462        | 20.76               | 22.00               | 1.330                  | 99.3         | 1.007                     | 0.04             | 1.380                   | 1.849                   |
|          | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 0        | Full            | 1   | 2412        | 20.66               | 22.00               | 1.361                  | 99.3         | 1.007                     | -0.07            | 1.350                   | 1.851                   |
| 85       | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 0        | Full            | 6   | 2437        | 20.71               | 22.00               | 1.344                  | 99.3         | 1.007                     | 0.03             | 1.830                   | 2.477                   |

## &lt;WLAN 5GHz SAR&gt;

| Plot No. | Antenna | Band       | Mode              | Test Position | Gap (mm) | 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 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|------------|-------------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
|          | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 38  | 5190        | 18.54               | 20.00               | 1.400                  | 96.3         | 1.038                     | 0.05             | 1.330                   | 1.933                   |
| 86       | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 46  | 5230        | 18.24               | 20.00               | 1.501                  | 96.3         | 1.038                     | 0.09             | 1.370                   | 2.134                   |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Front         | 0        | Full            | 54  | 5270        | 18.11               | 20.00               | 1.545                  | 96.3         | 1.038                     | 0.09             | 0.325                   | 0.521                   |
| 87       | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 54  | 5270        | 18.11               | 20.00               | 1.545                  | 96.3         | 1.038                     | 0.01             | 1.470                   | 2.358                   |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Right Side    | 0        | Full            | 54  | 5270        | 18.11               | 20.00               | 1.545                  | 96.3         | 1.038                     | 0.09             | 0.480                   | 0.770                   |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Top Side      | 0        | Full            | 54  | 5270        | 18.11               | 20.00               | 1.545                  | 96.3         | 1.038                     | -0.19            | 0.395                   | 0.634                   |
|          | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 62  | 5310        | 18.06               | 20.00               | 1.563                  | 96.3         | 1.038                     | 0.12             | 1.300                   | 2.109                   |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Front         | 0        | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.3         | 1.038                     | 0.06             | 0.096                   | 0.119                   |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.3         | 1.038                     | 0.04             | 1.930                   | 2.392                   |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Right Side    | 0        | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.3         | 1.038                     | 0.09             | 0.758                   | 0.939                   |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Top Side      | 0        | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.3         | 1.038                     | -0.16            | 0.280                   | 0.347                   |
| 88       | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 102 | 5510        | 18.92               | 20.00               | 1.282                  | 96.3         | 1.038                     | 0.05             | 1.860                   | 2.476                   |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 126 | 5630        | 18.58               | 20.00               | 1.387                  | 96.3         | 1.038                     | 0.07             | 1.600                   | 2.303                   |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 134 | 5670        | 18.73               | 20.00               | 1.340                  | 96.3         | 1.038                     | 0.15             | 1.540                   | 2.141                   |
|          | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 142 | 5710        | 18.48               | 20.00               | 1.419                  | 96.3         | 1.038                     | 0.02             | 1.360                   | 2.003                   |
|          | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 151 | 5755        | 17.43               | 19.00               | 1.435                  | 96.3         | 1.038                     | -0.14            | 1.230                   | 1.833                   |
| 89       | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 159 | 5795        | 17.36               | 19.00               | 1.459                  | 96.3         | 1.038                     | 0.06             | 1.470                   | 2.226                   |

**14.5 TDD LTE Band 41(HPUE) Linearity Data Analysis**
**Top Antenna**

| LTE Band 41(HPUE)-Linearity Data for Head |                                |                                |
|-------------------------------------------|--------------------------------|--------------------------------|
|                                           | LTE Band 41<br>(Power Class 3) | LTE Band 41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)               | 18.00                          | 20.00                          |
| Reported 1g SAR (W/kg)                    | 0.756                          | 0.758                          |
| Duty Cycle                                | 63.30%                         | 43.30%                         |
| Frame Averaged (mW)                       | 39.94                          | 43.30                          |
| Linearity SAR (W/kg)                      | 0.820                          |                                |
| % deviation from expected linearity       |                                | -7.52%                         |

| LTE Band 41(HPUE)-Linearity Data for Hotspot |                                |                                |
|----------------------------------------------|--------------------------------|--------------------------------|
|                                              | LTE Band 41<br>(Power Class 3) | LTE Band 41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                  | 18.50                          | 21.50                          |
| Reported 1g SAR (W/kg)                       | 0.695                          | 0.870                          |
| Duty Cycle                                   | 63.30%                         | 43.30%                         |
| Frame Averaged (mW)                          | 44.81                          | 61.16                          |
| Linearity SAR (W/kg)                         | 0.949                          |                                |
| % deviation from expected linearity          |                                | -8.28%                         |

| LTE Band 41(HPUE)-Linearity Data for Body-worn |                                |                                |
|------------------------------------------------|--------------------------------|--------------------------------|
|                                                | LTE Band 41<br>(Power Class 3) | LTE Band 41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                    | 22.00                          | 24.50                          |
| Reported 1g SAR (W/kg)                         | 0.352                          | 0.398                          |
| Duty Cycle                                     | 63.30%                         | 43.30%                         |
| Frame Averaged (mW)                            | 100.32                         | 122.04                         |
| Linearity SAR (W/kg)                           | 0.428                          |                                |
| % deviation from expected linearity            |                                | -7.05%                         |

| LTE Band 41(HPUE)-Linearity Data for Product specific 10g SAR |                                |                                |
|---------------------------------------------------------------|--------------------------------|--------------------------------|
|                                                               | LTE Band 41<br>(Power Class 3) | LTE Band 41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                                   | 22.00                          | 24.50                          |
| Reported 1g SAR (W/kg)                                        | 1.542                          | 2.018                          |
| Duty Cycle                                                    | 63.30%                         | 43.30%                         |
| Frame Averaged (mW)                                           | 100.32                         | 122.04                         |
| Linearity SAR (W/kg)                                          | 1.876                          |                                |
| % deviation from expected linearity                           |                                | 7.59%                          |

**Bottom Antenna**

| LTE Band 41(HPUE)-Linearity Data for Head |                                |                                |
|-------------------------------------------|--------------------------------|--------------------------------|
|                                           | LTE Band 41<br>(Power Class 3) | LTE Band 41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)               | 23.80                          | 26.30                          |
| Reported 1g SAR (W/kg)                    | 0.237                          | 0.268                          |
| Duty Cycle                                | 63.30%                         | 43.30%                         |
| Frame Averaged (mW)                       | 151.85                         | 184.71                         |
| Linearity SAR (W/kg)                      | 0.288                          |                                |
| % deviation from expected linearity       |                                | -7.04%                         |

| LTE Band 41(HPUE)-Linearity Data for Hotspot |                                |                                |
|----------------------------------------------|--------------------------------|--------------------------------|
|                                              | LTE Band 41<br>(Power Class 3) | LTE Band 41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                  | 21.80                          | 24.30                          |
| Reported 1g SAR (W/kg)                       | 0.721                          | 0.809                          |
| Duty Cycle                                   | 63.30%                         | 43.30%                         |
| Frame Averaged (mW)                          | 95.81                          | 116.54                         |
| Linearity SAR (W/kg)                         | 0.877                          |                                |
| % deviation from expected linearity          |                                | -7.76%                         |

| LTE Band 41(HPUE)-Linearity Data for Body-worn |                                |                                |
|------------------------------------------------|--------------------------------|--------------------------------|
|                                                | LTE Band 41<br>(Power Class 3) | LTE Band 41<br>(Power Class 2) |
| Maximum Tune up Power (dBm)                    | 23.80                          | 26.30                          |
| Reported 1g SAR (W/kg)                         | 0.450                          | 0.499                          |
| Duty Cycle                                     | 63.30%                         | 43.30%                         |
| Frame Averaged (mW)                            | 151.85                         | 184.71                         |
| Linearity SAR (W/kg)                           | 0.547                          |                                |
| % deviation from expected linearity            |                                | -8.84%                         |

**General Note:**

1. The device can adjust uplink/downlink configuration automatically according to the transmitting power class level for LTE band 41.
2. According to TCB Workshop May 2017, Rel. 14 has introduced HPUE Power Class 2 for Band 41. HPUE Power Class 2 does not support uplink downlink configurations 0 and 6.
3. Power class 3 is expected to be the dominant use configuration; therefore, SAR should be tested as normally required.
4. Power class 2 is tested using the highest SAR test configuration in power class 3 of each LTE configuration and exposure condition combination, according to the highest time averaged power for all applicable uplink-downlink configurations in power class 2.
5. Separate SAR testing for Power Class 2 is not required when
  - the reported SAR vs. output power can be linearly scaled with < 10%
  - discrepancy between power classes and all *reported* 1g SAR are < 1.4 W/kg (The same procedures should be adapted for measurements according to extremity limits by applying a factor of 2.5 for extremity exposure.)



## 15. Spot Check Verification Data Section

This is a variant report for HD1905, change from single SIM card to dual SIM cards mobile, So we spot check the worst case of original report which can be referred to Sporton Report Number FA970213.

### 15.1 Head SAR

#### <GSM SAR>

| Plot No. | Antenna | Band    | Mode             | Test Position | 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) |
|----------|---------|---------|------------------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 01-1     | 3       | GSM850  | GPRS(4 Tx slot)  | Left Cheek    | Reduced         | 251 | 848.8       | 24.05               | 25.30               | 1.334                  | 0.06             | 0.563                  | 0.751                  |
| 02-1     | 2       | GSM1900 | GPRS(3 Tx slots) | Right Cheek   | Full            | 661 | 1880        | 24.39               | 25.10               | 1.178                  | -0.11            | 0.401                  | 0.472                  |

#### <WCDMA SAR>

| Plot No. | Antenna | Band     | Mode         | Test Position | 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) |
|----------|---------|----------|--------------|---------------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 03-1     | 3       | WCDMA V  | RMC 12.2Kbps | Left Cheek    | Reduced         | 4233 | 846.6       | 20.59               | 21.30               | 1.178                  | 0.13             | 0.736                  | 0.867                  |
| 04-1     | 2       | WCDMA IV | RMC 12.2Kbps | Right Cheek   | Reduced         | 1513 | 1752.6      | 20.21               | 20.40               | 1.045                  | 0.12             | 0.620                  | 0.648                  |
| 05-1     | 2       | WCDMA II | RMC 12.2Kbps | Right Cheek   | Reduced         | 9262 | 1852.4      | 20.01               | 20.40               | 1.094                  | 0.04             | 0.573                  | 0.627                  |

#### <CDMA2000 SAR>

| Plot No. | Antenna | Band          | Mode     | Test Position | 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) |
|----------|---------|---------------|----------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 06-1     | 3       | CDMA2000 BC0  | RC3+SO55 | Left Cheek    | Reduced         | 777 | 848.31      | 20.84               | 21.80               | 1.247                  | 0.14             | 0.849                  | 1.059                  |
| 07-1     | 3       | CDMA2000 BC10 | RC3+SO55 | Left Cheek    | Reduced         | 580 | 820.5       | 21.25               | 21.80               | 1.135                  | 0.09             | 0.809                  | 0.918                  |
| 08-1     | 2       | CDMA2000 BC1  | RC3+SO55 | Right Cheek   | Reduced         | 600 | 1880        | 20.17               | 20.90               | 1.183                  | 0.03             | 0.622                  | 0.736                  |

#### <FDD LTE SAR>

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 09-1     | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Left Cheek    | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  | -0.01            | 0.873                  | 0.942                  |
| 10-1     | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Left Cheek    | Reduced         | 23095  | 707.5       | 19.93               | 20.80               | 1.222                  | 0.19             | 0.601                  | 0.734                  |
| 11-1     | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Left Cheek    | Reduced         | 23230  | 782         | 20.66               | 21.30               | 1.159                  | 0.12             | 0.796                  | 0.922                  |
| 12-1     | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Left Cheek    | Reduced         | 20525  | 836.5       | 19.06               | 19.80               | 1.186                  | 0.09             | 0.636                  | 0.754                  |
| 13-1     | 3       | LTE Band 26 | 15M      | QPSK       | 36      | 0         | Left Cheek    | Reduced         | 26965  | 841.5       | 19.00               | 19.80               | 1.202                  | 0.11             | 0.604                  | 0.726                  |
| 14-1     | 2       | LTE Band 66 | 20M      | QPSK       | 100     | 0         | Right Cheek   | Reduced         | 132322 | 1745        | 18.61               | 18.90               | 1.069                  | 0.06             | 0.555                  | 0.593                  |
| 15-1     | 2       | LTE Band 25 | 20M      | QPSK       | 100     | 0         | Right Cheek   | Reduced         | 26140  | 1860        | 18.94               | 19.40               | 1.112                  | 0.02             | 0.562                  | 0.625                  |
| 16-1     | 2       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Right Tilted  | Reduced         | 27710  | 2310        | 14.94               | 16.00               | 1.276                  | 0.05             | 0.794                  | 1.013                  |
| 17-1     | 2       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Right Cheek   | Reduced         | 20850  | 2510        | 14.64               | 15.50               | 1.219                  | 0.03             | 0.749                  | 0.913                  |

#### <TDD LTE SAR>

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 18-1     | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 41490 | 2680        | 19.18               | 20.00               | 1.208                  | 42.9         | 1.009                     | 0.11             | 0.547                  | 0.667                  |
| 19-1     | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 56640 | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | 0.04             | 0.964                  | 1.037                  |
|          | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | Right Cheek   | Reduced         | 56640 | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | 0.03             | 0.672                  | 0.723                  |

**<WLAN 2.4GHz SAR>**

| Plot No. | Antenna | Band       | Mode          | Test Position | 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) |
|----------|---------|------------|---------------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 20-1     | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Left Cheek    | Reduced         | 11  | 2462        | 14.76               | 16.00               | 1.330                  | 99.31        | 1.007                     | 0.16             | 0.371                  | <b>0.497</b>           |

**<Bluetooth SAR>**

| Plot No. | Antenna | Band      | Mode      | Test Position | 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) |
|----------|---------|-----------|-----------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 21-1     | 1       | Bluetooth | DH5 1Mbps | Left Cheek    | Full            | 78  | 2480        | 13.40               | 15.40               | 1.585                  | 76.87        | 1.084                     | -0.03            | 0.284                  | <b>0.488</b>           |

**<WLAN 5GHz SAR>**

| Plot No. | Antenna | Band       | Mode              | Test Position | 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) |
|----------|---------|------------|-------------------|---------------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 22-1     | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Left Cheek    | Reduced         | 62  | 5310        | 16.08               | 18.00               | 1.557                  | 96.31        | 1.038                     | -0.16            | 0.271                  | <b>0.438</b>           |
| 23-1     | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 110 | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | 0.04             | 0.377                  | <b>0.467</b>           |
| 24-1     | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Left Cheek    | Full            | 159 | 5795        | 17.36               | 19.00               | 1.459                  | 96.31        | 1.038                     | 0.04             | 0.061                  | <b>0.092</b>           |



## 15.2 Hotspot SAR

### <GSM SAR>

| Plot No. | Antenna | Band    | Mode             | Test Position | Gap (mm) | 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) |
|----------|---------|---------|------------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 25-1     | 3       | GSM850  | GPRS(3 Tx slots) | Left Side     | 10       | Reduced         | 251 | 848.8       | 26.35               | 27.80               | 1.396                  | 0.05             | 0.408                  | <b>0.570</b>           |
| 26-1     | 1       | GSM1900 | GPRS(3 Tx slots) | Bottom Side   | 10       | Full            | 661 | 1880        | 25.45               | 26.50               | 1.274                  | 0.08             | 0.534                  | <b>0.680</b>           |

### <WCDMA SAR>

| Plot No. | Antenna | Band     | Mode         | Test Position | Gap (mm) | 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) |
|----------|---------|----------|--------------|---------------|----------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 27-1     | 3       | WCDMA V  | RMC 12.2Kbps | Left Side     | 10       | Reduced         | 4132 | 826.4       | 21.72               | 22.30               | 1.143                  | 0.17             | 0.669                  | <b>0.765</b>           |
| 28-1     | 1       | WCDMA IV | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 1513 | 1752.6      | 21.76               | 22.30               | 1.132                  | 0.18             | 0.702                  | <b>0.795</b>           |
| 29-1     | 2       | WCDMA II | RMC 12.2Kbps | Top Side      | 10       | Full            | 9262 | 1852.4      | 22.82               | 23.40               | 1.143                  | 0.16             | 0.674                  | <b>0.770</b>           |
|          | 1       | WCDMA II | RMC 12.2Kbps | Bottom Side   | 10       | Reduced         | 9538 | 1907.6      | 20.69               | 21.30               | 1.151                  | 0.04             | 0.607                  | 0.699                  |

### <CDMA2000 SAR>

| Plot No. | Antenna | Band          | Mode           | Test Position | Gap (mm) | 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) |
|----------|---------|---------------|----------------|---------------|----------|-----------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 30-1     | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 384  | 836.52      | 21.95               | 22.80               | 1.216                  | 0.12             | 0.738                  | <b>0.898</b>           |
| 31-1     | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 10       | Reduced         | 580  | 820.5       | 21.68               | 22.30               | 1.153                  | 0.16             | 0.714                  | <b>0.824</b>           |
| 32-1     | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Bottom Side   | 10       | Reduced         | 1175 | 1908.75     | 20.37               | 21.30               | 1.239                  | -0.1             | 0.655                  | <b>0.811</b>           |

### <FDD LTE SAR>

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 33-1     | 3       | LTE Band 71 | 20M      | QPSK       | 50      | 0         | Left Side     | 10       | Reduced         | 133322 | 683         | 22.44               | 22.80               | 1.086                  | 0.08             | 0.712                  | <b>0.774</b>           |
| 34-1     | 3       | LTE Band 12 | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Reduced         | 23095  | 707.5       | 20.42               | 21.30               | 1.225                  | 0.03             | 0.611                  | <b>0.748</b>           |
| 35-1     | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Reduced         | 23230  | 782         | 20.10               | 20.80               | 1.175                  | 0.16             | 0.570                  | <b>0.670</b>           |
| 36-1     | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         | Left Side     | 10       | Reduced         | 20525  | 836.5       | 21.56               | 22.30               | 1.186                  | 0.17             | 0.901                  | <b>1.068</b>           |
| 37-1     | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 10       | Reduced         | 26865  | 831.5       | 20.78               | 21.30               | 1.127                  | 0.16             | 0.667                  | <b>0.752</b>           |
| 38-1     | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 10       | Reduced         | 132322 | 1745        | 20.72               | 21.30               | 1.143                  | 0.02             | 0.679                  | <b>0.776</b>           |
| 39-1     | 2       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Top Side      | 10       | Full            | 26590  | 1905        | 21.72               | 22.40               | 1.169                  | 0.02             | 0.667                  | <b>0.780</b>           |
| 40-1     | 1       | LTE Band 30 | 10M      | QPSK       | 25      | 0         | Front         | 10       | Reduced         | 27710  | 2310        | 21.53               | 22.80               | 1.340                  | 0.07             | 0.616                  | <b>0.825</b>           |
| 41-1     | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 21350  | 2560        | 21.39               | 21.80               | 1.099                  | 0.01             | 0.956                  | <b>1.051</b>           |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | Back          | 10       | Reduced         | 21350  | 2560        | 21.39               | 21.80               | 1.099                  | 0.06             | 0.932                  | 1.024                  |

### <TDD LTE SAR>

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-----------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 42-1     | 2       | LTE Band 41 | 20M      | QPSK       | 50      | 24        | Top Side      | 10       | Reduced         | 41055 | 2636.5      | 20.76               | 21.50               | 1.186                  | 42.9         | 1.009                     | -0.14            | 0.557                  | <b>0.666</b>           |
| 43-1     | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 10       | Reduced         | 56640 | 3690        | 22.25               | 22.80               | 1.135                  | 62.9         | 1.006                     | 0.08             | 0.571                  | <b>0.652</b>           |

**<WLAN 2.4GHz SAR>**

| Plot No. | Antenna | Band       | Mode          | Test Position | Gap (mm) | 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) |
|----------|---------|------------|---------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 44-1     | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 10       | Reduced         | 6   | 2437        | 17.71               | 19.00               | 1.346                  | 99.31        | 1.007                     | 0.05             | 0.405                  | <b>0.549</b>           |

**<Bluetooth SAR>**

| Plot No. | Antenna | Band      | Mode      | Test Position | Gap (mm) | 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) |
|----------|---------|-----------|-----------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 45-1     | 1       | Bluetooth | DH5 1Mbps | Back          | 10       | Full            | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.09             | 0.087                  | <b>0.127</b>           |

**<WLAN 5GHz SAR>**

| Plot No. | Antenna | Band       | Mode              | Test Position | Gap (mm) | 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) |
|----------|---------|------------|-------------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 46-1     | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Back          | 10       | Reduced         | 46  | 5230        | 15.25               | 17.00               | 1.496                  | 96.31        | 1.038                     | 0.06             | 0.212                  | <b>0.329</b>           |
| 47-1     | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 10       | Reduced         | 159 | 5795        | 14.41               | 16.00               | 1.442                  | 96.31        | 1.038                     | 0.07             | 0.466                  | <b>0.698</b>           |



### 15.3 Body Worn Accessory SAR

#### <GSM SAR>

| Plot No. | Antenna | Band    | Mode             | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|---------|------------------|---------------|----------|------------|-----|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 48-1     | 3       | GSM850  | GPRS(3 Tx slots) | Back          | 15       | Full       | 251 | 848.8       | 28.45               | 29.80               | 1.365                  | -0.09            | 0.348                  | <b>0.475</b>           |
| 49-1     | 1       | GSM1900 | GPRS(3 Tx slots) | Back          | 15       | Full       | 512 | 1850.2      | 25.47               | 26.50               | 1.268                  | -0.08            | 0.147                  | <b>0.186</b>           |

#### <WCDMA SAR>

| Plot No. | Antenna | Band          | Mode         | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|---------------|--------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 50-1     | 3       | WCDMA Band V  | RMC 12.2Kbps | Back          | 15       | Full       | 4182 | 836.4       | 24.02               | 24.80               | 1.197                  | -0.11            | 0.619                  | <b>0.741</b>           |
| 51-1     | 1       | WCDMA Band IV | RMC 12.2Kbps | Back          | 15       | Full       | 1312 | 1712.4      | 24.09               | 24.80               | 1.178                  | 0.01             | 0.381                  | <b>0.449</b>           |
| 52-1     | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 15       | Full       | 9538 | 1907.6      | 24.20               | 24.80               | 1.148                  | -0.03            | 0.465                  | <b>0.534</b>           |

#### <CDMA2000 SAR>

| Plot No. | Antenna | Band          | Mode             | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|---------------|------------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 53-1     | 3       | CDMA2000 BC0  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 1013 | 824.7       | 23.97               | 24.80               | 1.211                  | -0.11            | 0.529                  | <b>0.640</b>           |
| 54-1     | 3       | CDMA2000 BC10 | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 580  | 820.5       | 24.07               | 24.80               | 1.183                  | -0.1             | 0.560                  | <b>0.663</b>           |
| 55-1     | 1       | CDMA2000 BC1  | RC3 SO32 (F+SCH) | Back          | 15       | Full       | 1175 | 1908.75     | 23.90               | 24.80               | 1.230                  | 0.1              | 0.431                  | <b>0.530</b>           |

#### <FDD LTE SAR>

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|------------|--------|-------------|---------------------|---------------------|------------------------|------------------|------------------------|------------------------|
| 56-1     | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 133322 | 683         | 23.47               | 23.80               | 1.079                  | -0.08            | 0.360                  | <b>0.388</b>           |
| 57-1     | 3       | LTE Band 12 | 10M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 23095  | 707.5       | 22.91               | 23.80               | 1.227                  | 0.02             | 0.391                  | <b>0.480</b>           |
| 58-1     | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Back          | 15       | Full       | 23230  | 782         | 22.05               | 22.80               | 1.189                  | -0.07            | 0.454                  | <b>0.540</b>           |
| 59-1     | 3       | LTE Band 5  | 10M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 20525  | 836.5       | 22.86               | 23.80               | 1.242                  | 0.12             | 0.560                  | <b>0.695</b>           |
| 60-1     | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26965  | 841.5       | 22.91               | 23.80               | 1.227                  | 0.02             | 0.494                  | <b>0.606</b>           |
| 61-1     | 1       | LTE Band 66 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 132572 | 1770        | 23.12               | 23.80               | 1.169                  | 0.08             | 0.435                  | <b>0.509</b>           |
| 62-1     | 1       | LTE Band 25 | 20M      | QPSK       | 1       | 0         | Back          | 15       | Full       | 26590  | 1905        | 22.90               | 23.80               | 1.230                  | 0.05             | 0.479                  | <b>0.589</b>           |
| 63-1     | 1       | LTE Band 30 | 10M      | QPSK       | 1       | 25        | Front         | 15       | Full       | 27710  | 2310        | 22.68               | 23.80               | 1.294                  | 0.04             | 0.439                  | <b>0.568</b>           |
| 64-1     | 1       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 21350  | 2560        | 23.45               | 23.80               | 1.084                  | 0.09             | 0.857                  | <b>0.929</b>           |
|          | 1       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Front         | 15       | Full       | 21350  | 2560        | 23.45               | 23.80               | 1.084                  | 0.01             | 0.853                  | 0.925                  |

#### <TDD LTE SAR>

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Class | Power Mode | 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) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-------------|------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 65-1     | 1       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Front         | 15       | 2           | Full       | 41490 | 2680        | 25.52               | 26.30               | 1.197                  | 42.9         | 1.009                     | 0.04             | 0.416                  | <b>0.502</b>           |
| 66-1     | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Back          | 15       | 3           | Full       | 56640 | 3690        | 23.42               | 23.80               | 1.091                  | 62.9         | 1.006                     | -0.06            | 0.231                  | <b>0.254</b>           |

**<WLAN 2.4GHz SAR>**

| Plot No. | Antenna | Band       | Mode          | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|------------|---------------|---------------|----------|------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 67-1     | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 15       | Full       | 6   | 2437        | 20.71               | 22.00               | 1.344                  | 99.31        | 1.007                     | 0.13             | 0.184                  | <b>0.249</b>           |

**<WLAN 5GHz SAR>**

| Plot No. | Antenna | Band       | Mode              | Test Position | Gap (mm) | Power Mode | 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) |
|----------|---------|------------|-------------------|---------------|----------|------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 68-1     | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 62  | 5310        | 18.06               | 20.00               | 1.563                  | 96.31        | 1.038                     | 0.07             | 0.284                  | <b>0.461</b>           |
| 69-1     | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 142 | 5710        | 18.48               | 20.00               | 1.419                  | 96.31        | 1.038                     | 0.09             | 0.699                  | <b>1.030</b>           |
| 70-1     | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 15       | Full       | 159 | 5795        | 17.36               | 19.00               | 1.459                  | 96.31        | 1.038                     | -0.08            | 0.670                  | <b>1.015</b>           |

**<Bluetooth SAR>**

| Plot No. | Band      | Mode  | Test Position | Gap (mm) | 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) |
|----------|-----------|-------|---------------|----------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|------------------------|------------------------|
| 71-1     | Bluetooth | 1Mbps | Back          | 15       | 39  | 2441        | 14.10               | 15.40               | 1.349                  | 76.87        | 1.084                     | 0.04             | 0.044                  | <b>0.064</b>           |



**15.4 Product specific 10g SAR**

**<WCDMA SAR>**

| Plot No. | Antenna | Band          | Mode         | Test Position | Gap (mm) | Power Mode | Ch.  | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|---------------|--------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|-------------------------|-------------------------|
| 72-1     | 3       | WCDMA Band V  | RMC 12.2Kbps | Left Side     | 0        | Full       | 4233 | 846.6       | 23.90               | 24.80               | 1.230                  | 0.08             | 1.650                   | <b>2.030</b>            |
| 73-1     | 1       | WCDMA Band IV | RMC 12.2Kbps | Bottom Side   | 0        | Reduced    | 1513 | 1752.6      | 22.29               | 22.80               | 1.125                  | -0.01            | 2.360                   | <b>2.654</b>            |
| 74-1     | 1       | WCDMA Band II | RMC 12.2Kbps | Back          | 0        | Reduced    | 9400 | 1880        | 21.19               | 21.80               | 1.151                  | -0.05            | 2.030                   | <b>2.336</b>            |

**<CDMA2000 SAR>**

| Plot No. | Antenna | Band          | Mode           | Test Position | Gap (mm) | Power Mode | Ch.  | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|---------------|----------------|---------------|----------|------------|------|-------------|---------------------|---------------------|------------------------|------------------|-------------------------|-------------------------|
| 75-1     | 3       | CDMA2000 BC0  | RTAP 153.6Kbps | Left Side     | 0        | Full       | 1013 | 824.7       | 23.91               | 24.80               | 1.227                  | 0.09             | 1.480                   | <b>1.817</b>            |
| 76-1     | 3       | CDMA2000 BC10 | RTAP 153.6Kbps | Left Side     | 0        | Full       | 580  | 820.5       | 24.06               | 24.80               | 1.186                  | 0.05             | 1.480                   | <b>1.755</b>            |
| 77-1     | 1       | CDMA2000 BC1  | RTAP 153.6Kbps | Back          | 0        | Reduced    | 1175 | 1908.75     | 19.95               | 20.80               | 1.216                  | 0.07             | 1.850                   | <b>2.250</b>            |

**<FDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Mode | Ch.    | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|------------|--------|-------------|---------------------|---------------------|------------------------|------------------|-------------------------|-------------------------|
| 78-1     | 3       | LTE Band 13 | 10M      | QPSK       | 25      | 0         | Left Side     | 0        | Full       | 23230  | 782         | 22.05               | 22.80               | 1.189                  | 0.11             | 1.160                   | <b>1.379</b>            |
| 79-1     | 3       | LTE Band 26 | 15M      | QPSK       | 1       | 0         | Left Side     | 0        | Full       | 26965  | 841.5       | 22.91               | 23.80               | 1.227                  | 0.02             | 1.580                   | <b>1.939</b>            |
| 80-1     | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 132072 | 1720        | 21.20               | 21.80               | 1.148                  | 0.06             | 2.310                   | <b>2.652</b>            |
|          | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 132072 | 1720        | 21.20               | 21.80               | 1.148                  | 0.06             | 2.200                   | 2.526                   |
| 81-1     | 1       | LTE Band 25 | 20M      | QPSK       | 50      | 0         | Bottom Side   | 0        | Reduced    | 26140  | 1860        | 20.08               | 20.80               | 1.180                  | 0.03             | 1.400                   | <b>1.652</b>            |
| 82-1     | 2       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | Top Side      | 0        | Full       | 20850  | 2510        | 21.00               | 22.00               | 1.259                  | -0.09            | 1.940                   | <b>2.442</b>            |

**<TDD LTE SAR>**

| Plot No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Test Position | Gap (mm) | Power Class | Power Mode | Ch.   | Freq. (MHz) | Average Power (dBm) | Tune-Up Limit (dBm) | Tune-up Scaling Factor | Duty Cycle % | Duty Cycle Scaling Factor | Power Drift (dB) | Measured 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|-------------|----------|------------|---------|-----------|---------------|----------|-------------|------------|-------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
| 83-1     | 2       | LTE Band 41 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | 2           | Full       | 41055 | 2636.5      | 23.28               | 24.50               | 1.324                  | 42.9         | 1.009                     | 0.11             | 1.270                   | <b>1.697</b>            |
| 84-1     | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | Top Side      | 0        | -           | Full       | 55830 | 3609        | 23.53               | 23.80               | 1.064                  | 62.9         | 1.006                     | 0.07             | 1.550                   | <b>1.659</b>            |

**<WLAN 2.4GHz SAR>**

| Plot No. | Antenna | Band       | Mode          | Test Position | Gap (mm) | 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 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|------------|---------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
| 85-1     | 1+2     | WLAN2.4GHz | 802.11b 1Mbps | Back          | 0        | Full            | 6   | 2437        | 20.71               | 22.00               | 1.344                  | 99.3         | 1.007                     | 0.07             | 1.360                   | <b>1.841</b>            |

**<WLAN 5GHz SAR>**

| Plot No. | Antenna | Band       | Mode              | Test Position | Gap (mm) | 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 10g SAR (W/kg) | Reported 10g SAR (W/kg) |
|----------|---------|------------|-------------------|---------------|----------|-----------------|-----|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------------------------|
| 86-1     | 1+2     | WLAN5.2GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 46  | 5230        | 18.24               | 20.00               | 1.501                  | 96.3         | 1.038                     | 0.09             | 0.798                   | <b>1.243</b>            |
| 87-1     | 1+2     | WLAN5.3GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 54  | 5270        | 18.11               | 20.00               | 1.545                  | 96.3         | 1.038                     | 0.09             | 0.621                   | <b>0.996</b>            |
| 88-1     | 1+2     | WLAN5.5GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 102 | 5510        | 18.92               | 20.00               | 1.282                  | 96.3         | 1.038                     | 0.05             | 1.340                   | <b>1.784</b>            |
| 89-1     | 1+2     | WLAN5.8GHz | 802.11n-HT40 MCS0 | Back          | 0        | Full            | 159 | 5795        | 17.36               | 19.00               | 1.459                  | 96.3         | 1.038                     | 0.06             | 1.410                   | <b>2.135</b>            |

**15.5 Repeated SAR Measurement****<1g SAR>**

| No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Mode              | Test Position | Gap (mm) | 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 | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | -                 | Right Cheek   | 0        | Reduced         | 132322 | 1745        | 18.69               | 18.90               | 1.050                  | -            | 1.000                     | 0.04             | 0.889                  | 1     | 0.933                  |
| 2nd | 2       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | -                 | Right Cheek   | 0        | Reduced         | 132322 | 1745        | 18.69               | 18.90               | 1.050                  | -            | 1.000                     | -0.03            | 0.879                  | 1.011 | 0.923                  |
| 1st | 2       | LTE Band 25 | 20M      | QPSK       | 100     | 0         | -                 | Right Cheek   | 0        | Reduced         | 26140  | 1860        | 18.94               | 19.40               | 1.112                  | -            | 1.000                     | 0.05             | 0.913                  | 1     | 1.015                  |
| 2nd | 2       | LTE Band 25 | 20M      | QPSK       | 100     | 0         | -                 | Right Cheek   | 0        | Reduced         | 26140  | 1860        | 18.94               | 19.40               | 1.112                  | -            | 1.000                     | -0.02            | 0.908                  | 1.006 | 1.009                  |
| 1st | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | -                 | Right Cheek   | 0        | Reduced         | 56640  | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | 0.02             | 0.998                  | 1     | 1.073                  |
| 2nd | 2       | LTE Band 48 | 20M      | QPSK       | 50      | 24        | -                 | Right Cheek   | 0        | Reduced         | 56640  | 3690        | 16.51               | 16.80               | 1.069                  | 62.9         | 1.006                     | -0.07            | 0.983                  | 1.015 | 1.057                  |
| 1st | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | -                 | Back          | 10       | Reduced         | 21350  | 2560        | 21.39               | 21.80               | 1.099                  | -            | 1.000                     | -0.18            | 0.998                  | 1     | 1.097                  |
| 2nd | 1       | LTE Band 7  | 20M      | QPSK       | 50      | 0         | -                 | Back          | 10       | Reduced         | 21350  | 2560        | 21.39               | 21.80               | 1.099                  | -            | 1.000                     | 0.12             | 0.988                  | 1.010 | 1.086                  |
| 1st | 1+2     | WLAN5.5GHz  | -        | -          | -       | -         | 802.11n-HT40 MCS0 | Back          | 15       | Full            | 110    | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | 0.06             | 0.809                  | 1     | 1.003                  |
| 2nd | 1+2     | WLAN5.5GHz  | -        | -          | -       | -         | 802.11n-HT40 MCS0 | Back          | 15       | Full            | 110    | 5550        | 19.23               | 20.00               | 1.194                  | 96.31        | 1.038                     | -0.11            | 0.796                  | 1.016 | 0.987                  |
| 1st | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         |                   | Left Cheek    | 0        | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  |              | 1.000                     | -0.01            | 0.873                  | 1     | 0.942                  |
| 2nd | 3       | LTE Band 71 | 20M      | QPSK       | 1       | 0         |                   | Left Cheek    | 0        | Reduced         | 133322 | 683         | 22.47               | 22.80               | 1.079                  |              | 1.000                     | -0.05            | 0.846                  | 1.032 | 0.913                  |
| 1st | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         |                   | Left Side     | 10       | Reduced         | 20525  | 836.5       | 21.56               | 22.30               | 1.186                  |              | 1.000                     | 0.17             | 0.901                  | 1     | 1.068                  |
| 2nd | 3       | LTE Band 5  | 10M      | QPSK       | 25      | 0         |                   | Left Side     | 10       | Reduced         | 20525  | 836.5       | 21.56               | 22.30               | 1.186                  |              | 1.000                     | 0.05             | 0.894                  | 1.008 | 1.060                  |

**<10g SAR>**

| No. | Antenna | Band        | BW (MHz) | Modulation | RB Size | RB Offset | Mode         | Test Position | Gap (mm) | 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 10g SAR (W/kg) | Ratio | Reported 10g SAR (W/kg) |
|-----|---------|-------------|----------|------------|---------|-----------|--------------|---------------|----------|-----------------|--------|-------------|---------------------|---------------------|------------------------|--------------|---------------------------|------------------|-------------------------|-------|-------------------------|
| 1st | 1       | WCDMA II    | -        | -          | -       | -         | RMC 12.2Kbps | Back          | 0        | Reduced         | 9400   | 1880        | 21.19               | 21.80               | 1.151                  | -            | 1.000                     | 0.01             | 2.250                   | 1     | 2.589                   |
| 2nd | 1       | WCDMA II    | -        | -          | -       | -         | RMC 12.2Kbps | Back          | 0        | Reduced         | 9400   | 1880        | 21.19               | 21.80               | 1.151                  | -            | 1.000                     | -0.06            | 2.190                   | 1.027 | 2.520                   |
| 1st | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | -            | Bottom Side   | 0        | Reduced         | 132072 | 1720        | 21.20               | 21.80               | 1.148                  | -            | 1.000                     | 0.16             | 2.320                   | 1     | 2.664                   |
| 2nd | 1       | LTE Band 66 | 20M      | QPSK       | 50      | 0         | -            | Bottom Side   | 0        | Reduced         | 132072 | 1720        | 21.20               | 21.80               | 1.148                  | -            | 1.000                     | 0.05             | 2.290                   | 1.013 | 2.629                   |
| 1st | 2       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | -            | Top Side      | 0        | Full            | 21350  | 2560        | 21.30               | 22.00               | 1.175                  | -            | 1.000                     | 0.08             | 2.070                   | 1     | 2.432                   |
| 2nd | 2       | LTE Band 7  | 20M      | QPSK       | 1       | 0         | -            | Top Side      | 0        | Full            | 21350  | 2560        | 21.30               | 22.00               | 1.175                  | -            | 1.000                     | -0.06            | 2.010                   | 1.030 | 2.362                   |
| 1st | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | -            | Top Side      | 0        | Full            | 55830  | 3609        | 23.53               | 23.80               | 1.064                  | 62.9         | 1.006                     | 0.05             | 2.220                   | 1     | 2.377                   |
| 2nd | 2       | LTE Band 48 | 20M      | QPSK       | 1       | 99        | -            | Top Side      | 0        | Full            | 55830  | 3609        | 23.53               | 23.80               | 1.064                  | 62.9         | 1.006                     | 0.01             | 2.170                   | 1.023 | 2.323                   |
| 1st | 1       | WCDMA IV    | -        | -          | -       | -         | RMC 12.2Kbps | Bottom Side   | 0        | Reduced         | 1513   | 1752.6      | 22.29               | 22.80               | 1.125                  | -            | 1.000                     | -0.01            | 2.360                   | 1     | 2.654                   |
| 2nd | 1       | WCDMA IV    | -        | -          | -       | -         | RMC 12.2Kbps | Bottom Side   | 0        | Reduced         | 1513   | 1752.6      | 22.29               | 22.80               | 1.125                  | -            | 1.000                     | 0.06             | 2.310                   | 1.022 | 2.598                   |

**General Note:**

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is  $\geq 0.8$ W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is  $\leq 1.2$  and the measured SAR  $< 1.45$ W/kg, only one repeated measurement is required.
3. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, the same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.
4. The ratio is the difference in percentage between original and repeated *measured SAR*.
5. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

## 16. Simultaneous Transmission Analysis

| No. | Simultaneous Transmission Configurations      | Portable Handset |           |         |                          | Note      |
|-----|-----------------------------------------------|------------------|-----------|---------|--------------------------|-----------|
|     |                                               | Head             | Body-worn | Hotspot | Product specific 10g SAR |           |
| 1.  | GSM Voice + WLAN2.4GHz (MIMO)                 | Yes              | Yes       |         | Yes                      |           |
| 2.  | GPRS/EDGE + WLAN2.4GHz (MIMO)                 | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 3.  | WCDMA + WLAN2.4GHz (MIMO)                     | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 4.  | CDMA + WLAN2.4GHz (MIMO)                      | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 5.  | LTE + WLAN2.4GHz (MIMO)                       | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 6.  | GSM Voice + WLAN5.3/5.5GHz (MIMO)             | Yes              | Yes       |         | Yes                      |           |
| 7.  | GPRS/EDGE + WLAN5.3/5.5GHz (MIMO)             | Yes              | Yes       |         | Yes                      | WWAN VoIP |
| 8.  | WCDMA + WLAN5.3/5.5GHz (MIMO)                 | Yes              | Yes       |         | Yes                      | WWAN VoIP |
| 9.  | CDMA + WLAN5.3/5.5GHz (MIMO)                  | Yes              | Yes       |         | Yes                      | WWAN VoIP |
| 10. | LTE + WLAN5.3/5.5GHz (MIMO)                   | Yes              | Yes       |         | Yes                      | WWAN VoIP |
| 11. | GSM Voice + WLAN5.2/5.8GHz (MIMO)             | Yes              | Yes       |         | Yes                      |           |
| 12. | GPRS/EDGE + WLAN5.2/5.8GHz (MIMO)             | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 13. | WCDMA + WLAN5.2/5.8GHz (MIMO)                 | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 14. | CDMA + WLAN5.2/5.8GHz (MIMO)                  | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 15. | LTE + WLAN5.2/5.8GHz (MIMO)                   | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 16. | GSM Voice + Bluetooth                         | Yes              | Yes       |         | Yes                      |           |
| 17. | GPRS/EDGE + Bluetooth                         | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 18. | WCDMA + Bluetooth                             | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 19. | CDMA + Bluetooth                              | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 20. | LTE + Bluetooth                               | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 21. | GSM Voice + WLAN5.2/5.8GHz (MIMO) + Bluetooth | Yes              | Yes       |         | Yes                      |           |
| 22. | GPRS/EDGE + WLAN5.2/5.8GHz (MIMO) + Bluetooth | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 23. | WCDMA + WLAN5.2/5.8GHz (MIMO) + Bluetooth     | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 24. | CDMA + WLAN5.2/5.8GHz (MIMO) + Bluetooth      | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 25. | LTE + WLAN5.2/5.8GHz (MIMO) + Bluetooth       | Yes              | Yes       | Yes     | Yes                      | WWAN VoIP |
| 26. | GSM Voice + WLAN5.3/5.5GHz (MIMO) + Bluetooth | Yes              | Yes       | Yes     | Yes                      |           |
| 27. | GPRS/EDGE + WLAN5.3/5.5GHz (MIMO) + Bluetooth | Yes              | Yes       |         | Yes                      |           |
| 28. | WCDMA + WLAN5.3/5.5GHz (MIMO) + Bluetooth     | Yes              | Yes       |         | Yes                      | WWAN VoIP |
| 29. | CDMA + WLAN5.3/5.5GHz (MIMO) + Bluetooth      | Yes              | Yes       |         | Yes                      | WWAN VoIP |
| 30. | LTE + WLAN5.3/5.5GHz (MIMO) + Bluetooth       | Yes              | Yes       |         | Yes                      | WWAN VoIP |

**General Note:**

- This device supports VoIP in GPRS, EGPRS, WCDMA and LTE (e.g. for 3rd-party VoIP), LTE supports VoLTE operation.
- EUT will choose each GSM, CDMA, WCDMA and LTE according to the network signal condition; therefore, they will not operate simultaneously at any moment.
- For 2.4GHz/5GHz WLAN, SAR testing was performed on MIMO mode since it can't transmit in SISO mode, so only evaluate MIMO mode SAR.
- According to the character of EUT, WLAN 2.4GHz MIMO Antenna and Bluetooth can't transmit simultaneously.
- This device 2.4GHz WLAN/ 5.2GHz WLAN/5.8GHz WLAN support hotspot operation, and 5.2GHz WLAN/5.8GHz WLAN supports WiFi Direct (GC/GO), and 5.3GHz / 5.5GHz supports WiFi Direct (GC only).
- EUT will choose either WLAN 2.4GHz or WLAN 5GHz according to the network signal condition; therefore, 2.4GHz WLAN and 5GHz WLAN will not operate simultaneously at any moment though they have independent antenna.
- The worst case 5 GHz WLAN reported SAR for each configuration was used for SAR summation, regardless of whether the WLAN channel has WiFi Direct and Hotspot capability. Therefore, the following summations represent the absolute worst cases for simultaneous transmission with 5 GHz WLAN.
- This device has three WWAN transmitter antennas. WWAN antenna 1, WWAN antenna 2 and WWAN antenna 3. All of them couldn't transmit simultaneously.
- For simultaneously analysis, since the SAR summation of 3 transmitters can cover others combination of 2 transmitters, therefore in the follow section would not additional to evaluate 2Tx combination of simultaneously transmission.
- Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
  - 1g Scalar SAR summation < 1.6W/kg and 10g Scalar SAR summation < 4.0W/kg.
  - $SPLSR = (SAR_1 + SAR_2) \cdot 1.5 / (\min. \text{ separation distance, mm})$ , and the peak separation distance is determined from the square root of  $[(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2]$ , where  $(x_1, y_1, z_1)$  and  $(x_2, y_2, z_2)$  are the coordinates of the extrapolated peak SAR locations in the zoom scan.
  - If  $SPLSR \leq 0.04$  for 1g SAR,  $SPLSR \leq 0.10$  for 10g SAR simultaneously transmission SAR measurement is not necessary.



iv) The SPLSR calculated results please refer to section 16.5.

## 16.1 Head Exposure Conditions

### <WWAN Top Antenna>

| WWAN Band |         | Exposure Position | 1                   | 2                         | 3                       | 4                   | 1+2<br>Summed<br>1g SAR | 1+3+4            |            |             |
|-----------|---------|-------------------|---------------------|---------------------------|-------------------------|---------------------|-------------------------|------------------|------------|-------------|
|           |         |                   | WWAN                | 2.4GHz<br>WLAN<br>Ant.1+2 | 5GHz<br>WLAN<br>Ant.1+2 | Bluetooth           |                         | Summed<br>1g SAR | Case<br>No | SPLSR       |
|           |         |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg)       | 1g<br>SAR<br>(W/kg)     | 1g<br>SAR<br>(W/kg) |                         |                  |            |             |
| GSM       | GSM850  | Right Cheek       | 0.361               | 0.161                     | 0.238                   | 0.187               | 0.52                    | 0.79             |            |             |
|           |         | Right Tilted      | 0.066               | 0.177                     | 0.190                   | 0.193               | 0.24                    | 0.45             |            |             |
|           |         | Left Cheek        | 0.775               | 0.497                     | 0.614                   | 0.488               | 1.27                    | <b>1.88</b>      | <b>#01</b> | <b>0.03</b> |
|           |         | Left Tilted       | 0.082               | 0.304                     | 0.521                   | 0.303               | 0.39                    | 0.91             |            |             |
|           | GSM1900 | Right Cheek       | 0.929               | 0.161                     | 0.238                   | 0.187               | 1.09                    | 1.35             |            |             |
|           |         | Right Tilted      | 0.681               | 0.177                     | 0.190                   | 0.193               | 0.86                    | 1.06             |            |             |
|           |         | Left Cheek        | 0.356               | 0.497                     | 0.614                   | 0.488               | 0.85                    | 1.46             |            |             |
|           |         | Left Tilted       | 0.540               | 0.304                     | 0.521                   | 0.303               | 0.84                    | 1.36             |            |             |
| WCDMA     | Band V  | Right Cheek       | 0.495               | 0.161                     | 0.238                   | 0.187               | 0.66                    | 0.92             |            |             |
|           |         | Right Tilted      | 0.094               | 0.177                     | 0.190                   | 0.193               | 0.27                    | 0.48             |            |             |
|           |         | Left Cheek        | 0.867               | 0.497                     | 0.614                   | 0.488               | 1.36                    | <b>1.97</b>      | <b>#02</b> | <b>0.03</b> |
|           |         | Left Tilted       | 0.115               | 0.304                     | 0.521                   | 0.303               | 0.42                    | 0.94             |            |             |
|           | Band IV | Right Cheek       | 0.915               | 0.161                     | 0.238                   | 0.187               | 1.08                    | 1.34             |            |             |
|           |         | Right Tilted      | 0.587               | 0.177                     | 0.190                   | 0.193               | 0.76                    | 0.97             |            |             |
|           |         | Left Cheek        | 0.336               | 0.497                     | 0.614                   | 0.488               | 0.83                    | 1.44             |            |             |
|           |         | Left Tilted       | 0.429               | 0.304                     | 0.521                   | 0.303               | 0.73                    | 1.25             |            |             |
|           | Band II | Right Cheek       | 0.874               | 0.161                     | 0.238                   | 0.187               | 1.04                    | 1.30             |            |             |
|           |         | Right Tilted      | 0.645               | 0.177                     | 0.190                   | 0.193               | 0.82                    | 1.03             |            |             |
|           |         | Left Cheek        | 0.398               | 0.497                     | 0.614                   | 0.488               | 0.90                    | 1.50             |            |             |
|           |         | Left Tilted       | 0.583               | 0.304                     | 0.521                   | 0.303               | 0.89                    | 1.41             |            |             |
| CDMA2000  | BC0     | Right Cheek       | 0.592               | 0.161                     | 0.238                   | 0.187               | 0.75                    | 1.02             |            |             |
|           |         | Right Tilted      | 0.115               | 0.177                     | 0.190                   | 0.193               | 0.29                    | 0.50             |            |             |
|           |         | Left Cheek        | 1.059               | 0.497                     | 0.614                   | 0.488               | <b>1.56</b>             | <b>2.16</b>      | <b>#03</b> | <b>0.03</b> |
|           |         | Left Tilted       | 0.145               | 0.304                     | 0.521                   | 0.303               | 0.45                    | 0.97             |            |             |
|           | BC10    | Right Cheek       | 0.611               | 0.161                     | 0.238                   | 0.187               | 0.77                    | 1.04             |            |             |
|           |         | Right Tilted      | 0.121               | 0.177                     | 0.190                   | 0.193               | 0.30                    | 0.50             |            |             |
|           |         | Left Cheek        | 0.918               | 0.497                     | 0.614                   | 0.488               | 1.42                    | <b>2.02</b>      | <b>#04</b> | <b>0.03</b> |
|           |         | Left Tilted       | 0.154               | 0.304                     | 0.521                   | 0.303               | 0.46                    | 0.98             |            |             |
|           | BC1     | Right Cheek       | 0.835               | 0.161                     | 0.238                   | 0.187               | 1.00                    | 1.26             |            |             |
|           |         | Right Tilted      | 0.496               | 0.177                     | 0.190                   | 0.193               | 0.67                    | 0.88             |            |             |
|           |         | Left Cheek        | 0.490               | 0.497                     | 0.614                   | 0.488               | 0.99                    | <b>1.59</b>      |            |             |
|           |         | Left Tilted       | 0.695               | 0.304                     | 0.521                   | 0.303               | 1.00                    | 1.52             |            |             |



| WWAN Band |         | Exposure Position | 1                   | 2                         | 3                       | 4                   | 1+2<br>Summed<br>1g SAR | 1+3+4            |            |       |
|-----------|---------|-------------------|---------------------|---------------------------|-------------------------|---------------------|-------------------------|------------------|------------|-------|
|           |         |                   | WWAN                | 2.4GHz<br>WLAN<br>Ant.1+2 | 5GHz<br>WLAN<br>Ant.1+2 | Bluetooth           |                         | Summed<br>1g SAR | Case<br>No | SPLSR |
|           |         |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg)       | 1g<br>SAR<br>(W/kg)     | 1g<br>SAR<br>(W/kg) |                         |                  |            |       |
| LTE       | Band 71 | Right Cheek       | 0.475               | 0.161                     | 0.238                   | 0.187               | 0.64                    | 0.90             |            |       |
|           |         | Right Tilted      | 0.099               | 0.177                     | 0.190                   | 0.193               | 0.28                    | 0.48             |            |       |
|           |         | Left Cheek        | 0.942               | 0.497                     | 0.614                   | 0.488               | 1.44                    | 2.04             | #05        | 0.03  |
|           |         | Left Tilted       | 0.138               | 0.304                     | 0.521                   | 0.303               | 0.44                    | 0.96             |            |       |
|           | Band 12 | Right Cheek       | 0.393               | 0.161                     | 0.238                   | 0.187               | 0.55                    | 0.82             |            |       |
|           |         | Right Tilted      | 0.078               | 0.177                     | 0.190                   | 0.193               | 0.26                    | 0.46             |            |       |
|           |         | Left Cheek        | 0.734               | 0.497                     | 0.614                   | 0.488               | 1.23                    | 1.84             | #06        | 0.03  |
|           |         | Left Tilted       | 0.101               | 0.304                     | 0.521                   | 0.303               | 0.41                    | 0.93             |            |       |
|           | Band 13 | Right Cheek       | 0.599               | 0.161                     | 0.238                   | 0.187               | 0.76                    | 1.02             |            |       |
|           |         | Right Tilted      | 0.123               | 0.177                     | 0.190                   | 0.193               | 0.30                    | 0.51             |            |       |
|           |         | Left Cheek        | 0.922               | 0.497                     | 0.614                   | 0.488               | 1.42                    | 2.02             | #07        | 0.03  |
|           |         | Left Tilted       | 0.162               | 0.304                     | 0.521                   | 0.303               | 0.47                    | 0.99             |            |       |
|           | Band 5  | Right Cheek       | 0.433               | 0.161                     | 0.238                   | 0.187               | 0.59                    | 0.86             |            |       |
|           |         | Right Tilted      | 0.088               | 0.177                     | 0.190                   | 0.193               | 0.27                    | 0.47             |            |       |
|           |         | Left Cheek        | 0.754               | 0.497                     | 0.614                   | 0.488               | 1.25                    | 1.86             | #08        | 0.03  |
|           |         | Left Tilted       | 0.101               | 0.304                     | 0.521                   | 0.303               | 0.41                    | 0.93             |            |       |
|           | Band 26 | Right Cheek       | 0.440               | 0.161                     | 0.238                   | 0.187               | 0.60                    | 0.87             |            |       |
|           |         | Right Tilted      | 0.084               | 0.177                     | 0.190                   | 0.193               | 0.26                    | 0.47             |            |       |
|           |         | Left Cheek        | 0.726               | 0.497                     | 0.614                   | 0.488               | 1.22                    | 1.83             | #09        | 0.02  |
|           |         | Left Tilted       | 0.102               | 0.304                     | 0.521                   | 0.303               | 0.41                    | 0.93             |            |       |
|           | Band 66 | Right Cheek       | 0.947               | 0.161                     | 0.238                   | 0.187               | 1.11                    | 1.37             |            |       |
|           |         | Right Tilted      | 0.648               | 0.177                     | 0.190                   | 0.193               | 0.83                    | 1.03             |            |       |
|           |         | Left Cheek        | 0.320               | 0.497                     | 0.614                   | 0.488               | 0.82                    | 1.42             |            |       |
|           |         | Left Tilted       | 0.431               | 0.304                     | 0.521                   | 0.303               | 0.74                    | 1.26             |            |       |
|           | Band 25 | Right Cheek       | 1.015               | 0.161                     | 0.238                   | 0.187               | 1.18                    | 1.44             |            |       |
|           |         | Right Tilted      | 0.669               | 0.177                     | 0.190                   | 0.193               | 0.85                    | 1.05             |            |       |
|           |         | Left Cheek        | 0.413               | 0.497                     | 0.614                   | 0.488               | 0.91                    | 1.52             |            |       |
|           |         | Left Tilted       | 0.573               | 0.304                     | 0.521                   | 0.303               | 0.88                    | 1.40             |            |       |
|           | Band 30 | Right Cheek       | 0.733               | 0.161                     | 0.238                   | 0.187               | 0.89                    | 1.16             |            |       |
|           |         | Right Tilted      | 1.013               | 0.177                     | 0.190                   | 0.193               | 1.19                    | 1.40             |            |       |
|           |         | Left Cheek        | 0.465               | 0.497                     | 0.614                   | 0.488               | 0.96                    | 1.57             |            |       |
|           |         | Left Tilted       | 0.668               | 0.304                     | 0.521                   | 0.303               | 0.97                    | 1.49             |            |       |
|           | Band 7  | Right Cheek       | 0.913               | 0.161                     | 0.238                   | 0.187               | 1.07                    | 1.34             |            |       |
|           |         | Right Tilted      | 0.720               | 0.177                     | 0.190                   | 0.193               | 0.90                    | 1.10             |            |       |
|           |         | Left Cheek        | 0.474               | 0.497                     | 0.614                   | 0.488               | 0.97                    | 1.58             |            |       |
|           |         | Left Tilted       | 0.633               | 0.304                     | 0.521                   | 0.303               | 0.94                    | 1.46             |            |       |
|           | Band 41 | Right Cheek       | 0.758               | 0.161                     | 0.238                   | 0.187               | 0.92                    | 1.18             |            |       |
|           |         | Right Tilted      | 0.519               | 0.177                     | 0.190                   | 0.193               | 0.70                    | 0.90             |            |       |
|           |         | Left Cheek        | 0.423               | 0.497                     | 0.614                   | 0.488               | 0.92                    | 1.53             |            |       |
|           |         | Left Tilted       | 0.560               | 0.304                     | 0.521                   | 0.303               | 0.86                    | 1.38             |            |       |
|           | Band 48 | Right Cheek       | 1.073               | 0.161                     | 0.238                   | 0.187               | 1.23                    | 1.50             |            |       |
|           |         | Right Tilted      | 0.897               | 0.177                     | 0.190                   | 0.193               | 1.07                    | 1.28             |            |       |
|           |         | Left Cheek        | 0.291               | 0.497                     | 0.614                   | 0.488               | 0.79                    | 1.39             |            |       |
|           |         | Left Tilted       | 0.355               | 0.304                     | 0.521                   | 0.303               | 0.66                    | 1.18             |            |       |



**<WWAN Bottom Antenna>**

| WWAN Band |         | Exposure Position | 1                   | 2                         | 3                    | 4                   | 1+2<br>Summed<br>1g SAR | 1+3+4            |
|-----------|---------|-------------------|---------------------|---------------------------|----------------------|---------------------|-------------------------|------------------|
|           |         |                   | WWAN                | 2.4GHz<br>WLAN<br>Ant.1+2 | 5GHz WLAN<br>Ant.1+2 | Bluetooth           |                         | Summed<br>1g SAR |
|           |         |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg)       | 1g<br>SAR<br>(W/kg)  | 1g<br>SAR<br>(W/kg) |                         |                  |
| GSM       | GSM1900 | Right Cheek       | 0.081               | 0.161                     | 0.238                | 0.187               | 0.24                    | 0.51             |
|           |         | Right Tilted      | 0.075               | 0.177                     | 0.190                | 0.193               | 0.25                    | 0.46             |
|           |         | Left Cheek        | 0.096               | 0.497                     | 0.614                | 0.488               | 0.59                    | 1.20             |
|           |         | Left Tilted       | 0.067               | 0.304                     | 0.521                | 0.303               | 0.37                    | 0.89             |
| WCDMA     | Band IV | Right Cheek       | 0.284               | 0.161                     | 0.238                | 0.187               | 0.45                    | 0.71             |
|           |         | Right Tilted      | 0.138               | 0.177                     | 0.190                | 0.193               | 0.32                    | 0.52             |
|           |         | Left Cheek        | 0.165               | 0.497                     | 0.614                | 0.488               | 0.66                    | 1.27             |
|           |         | Left Tilted       | 0.131               | 0.304                     | 0.521                | 0.303               | 0.44                    | 0.96             |
|           | Band II | Right Cheek       | 0.191               | 0.161                     | 0.238                | 0.187               | 0.35                    | 0.62             |
|           |         | Right Tilted      | 0.142               | 0.177                     | 0.190                | 0.193               | 0.32                    | 0.53             |
|           |         | Left Cheek        | 0.209               | 0.497                     | 0.614                | 0.488               | 0.71                    | 1.31             |
|           |         | Left Tilted       | 0.133               | 0.304                     | 0.521                | 0.303               | 0.44                    | 0.96             |
| CDMA2000  | BC1     | Right Cheek       | 0.178               | 0.161                     | 0.238                | 0.187               | 0.34                    | 0.60             |
|           |         | Right Tilted      | 0.074               | 0.177                     | 0.190                | 0.193               | 0.25                    | 0.46             |
|           |         | Left Cheek        | 0.200               | 0.497                     | 0.614                | 0.488               | 0.70                    | 1.30             |
|           |         | Left Tilted       | 0.126               | 0.304                     | 0.521                | 0.303               | 0.43                    | 0.95             |
| LTE       | Band 66 | Right Cheek       | 0.267               | 0.161                     | 0.238                | 0.187               | 0.43                    | 0.69             |
|           |         | Right Tilted      | 0.114               | 0.177                     | 0.190                | 0.193               | 0.29                    | 0.50             |
|           |         | Left Cheek        | 0.154               | 0.497                     | 0.614                | 0.488               | 0.65                    | 1.26             |
|           |         | Left Tilted       | 0.131               | 0.304                     | 0.521                | 0.303               | 0.44                    | 0.96             |
|           | Band 25 | Right Cheek       | 0.152               | 0.161                     | 0.238                | 0.187               | 0.31                    | 0.58             |
|           |         | Right Tilted      | 0.107               | 0.177                     | 0.190                | 0.193               | 0.28                    | 0.49             |
|           |         | Left Cheek        | 0.203               | 0.497                     | 0.614                | 0.488               | 0.70                    | 1.31             |
|           |         | Left Tilted       | 0.114               | 0.304                     | 0.521                | 0.303               | 0.42                    | 0.94             |
|           | Band 30 | Right Cheek       | 0.168               | 0.161                     | 0.238                | 0.187               | 0.33                    | 0.59             |
|           |         | Right Tilted      | 0.162               | 0.177                     | 0.190                | 0.193               | 0.34                    | 0.55             |
|           |         | Left Cheek        | 0.234               | 0.497                     | 0.614                | 0.488               | 0.73                    | 1.34             |
|           |         | Left Tilted       | 0.153               | 0.304                     | 0.521                | 0.303               | 0.46                    | 0.98             |
|           | Band 7  | Right Cheek       | 0.216               | 0.161                     | 0.238                | 0.187               | 0.38                    | 0.64             |
|           |         | Right Tilted      | 0.243               | 0.177                     | 0.190                | 0.193               | 0.42                    | 0.63             |
|           |         | Left Cheek        | 0.343               | 0.497                     | 0.614                | 0.488               | 0.84                    | 1.45             |
|           |         | Left Tilted       | 0.254               | 0.304                     | 0.521                | 0.303               | 0.56                    | 1.08             |
|           | Band 41 | Right Cheek       | 0.147               | 0.161                     | 0.238                | 0.187               | 0.31                    | 0.57             |
|           |         | Right Tilted      | 0.120               | 0.177                     | 0.190                | 0.193               | 0.30                    | 0.50             |
|           |         | Left Cheek        | 0.268               | 0.497                     | 0.614                | 0.488               | 0.77                    | 1.37             |
|           |         | Left Tilted       | 0.095               | 0.304                     | 0.521                | 0.303               | 0.40                    | 0.92             |

## 16.2 Hotspot Exposure Conditions

### <WWAN Top Antenna>

| WWAN Band |         | Exposure Position | 1                   | 2                         | 3                       | 4                   | 1+2<br>Summed<br>1g SAR<br>(W/kg) | 1+3+4                      |         |
|-----------|---------|-------------------|---------------------|---------------------------|-------------------------|---------------------|-----------------------------------|----------------------------|---------|
|           |         |                   | WWAN                | 2.4GHz<br>WLAN<br>Ant.1+2 | 5GHz<br>WLAN<br>Ant.1+2 | Bluetooth           |                                   | Summed<br>1g SAR<br>(W/kg) | Case No |
|           |         |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg)       | 1g<br>SAR<br>(W/kg)     | 1g<br>SAR<br>(W/kg) |                                   |                            |         |
| GSM       | GSM850  | Front             | 0.324               | 0.132                     | 0.162                   | 0.083               | 0.46                              | 0.57                       |         |
|           |         | Back              | 0.439               | 0.712                     | 0.836                   | 0.127               | 1.15                              | 1.40                       |         |
|           |         | Left Side         | 0.667               |                           |                         |                     | 0.67                              | 0.67                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.039               | 0.182                     | 0.103                   | 0.110               | 0.22                              | 0.25                       |         |
|           | GSM1900 | Front             | 0.133               | 0.132                     | 0.162                   | 0.083               | 0.27                              | 0.38                       |         |
|           |         | Back              | 0.223               | 0.712                     | 0.836                   | 0.127               | 0.94                              | 1.19                       |         |
|           |         | Left Side         | 0.114               |                           |                         |                     | 0.11                              | 0.11                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.491               | 0.182                     | 0.103                   | 0.110               | 0.67                              | 0.70                       |         |
| WCDMA     | Band V  | Front             | 0.511               | 0.132                     | 0.162                   | 0.083               | 0.64                              | 0.76                       |         |
|           |         | Back              | 0.617               | 0.712                     | 0.836                   | 0.127               | 1.33                              | 1.58                       |         |
|           |         | Left Side         | 0.765               |                           |                         |                     | 0.77                              | 0.77                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.027               | 0.182                     | 0.103                   | 0.110               | 0.21                              | 0.24                       |         |
|           | Band IV | Front             | 0.289               | 0.132                     | 0.162                   | 0.083               | 0.42                              | 0.53                       |         |
|           |         | Back              | 0.395               | 0.712                     | 0.836                   | 0.127               | 1.11                              | 1.36                       |         |
|           |         | Left Side         | 0.267               |                           |                         |                     | 0.27                              | 0.27                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.697               | 0.182                     | 0.103                   | 0.110               | 0.88                              | 0.91                       |         |
|           | Band II | Front             | 0.297               | 0.132                     | 0.162                   | 0.083               | 0.43                              | 0.54                       |         |
|           |         | Back              | 0.522               | 0.712                     | 0.836                   | 0.127               | 1.23                              | 1.49                       |         |
|           |         | Left Side         | 0.225               |                           |                         |                     | 0.23                              | 0.23                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.969               | 0.182                     | 0.103                   | 0.110               | 1.15                              | 1.18                       |         |
| CDMA2000  | BC0     | Front             | 0.562               | 0.132                     | 0.162                   | 0.083               | 0.69                              | 0.81                       |         |
|           |         | Back              | 0.641               | 0.712                     | 0.836                   | 0.127               | 1.35                              | 1.60                       | #10     |
|           |         | Left Side         | 0.908               |                           |                         |                     | 0.91                              | 0.91                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.021               | 0.182                     | 0.103                   | 0.110               | 0.20                              | 0.23                       |         |
|           | BC10    | Front             | 0.548               | 0.132                     | 0.162                   | 0.083               | 0.68                              | 0.79                       |         |
|           |         | Back              | 0.614               | 0.712                     | 0.836                   | 0.127               | 1.33                              | 1.58                       |         |
|           |         | Left Side         | 0.824               |                           |                         |                     | 0.82                              | 0.82                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.024               | 0.182                     | 0.103                   | 0.110               | 0.21                              | 0.24                       |         |
|           | BC1     | Front             | 0.284               | 0.132                     | 0.162                   | 0.083               | 0.42                              | 0.53                       |         |
|           |         | Back              | 0.517               | 0.712                     | 0.836                   | 0.127               | 1.23                              | 1.48                       |         |
|           |         | Left Side         | 0.190               |                           |                         |                     | 0.19                              | 0.19                       |         |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |         |
|           |         | Top Side          | 0.950               | 0.182                     | 0.103                   | 0.110               | 1.13                              | 1.16                       |         |



| WWAN Band |         | Exposure Position | 1                   | 2                         | 3                       | 4                   | 1+2<br>Summed<br>1g SAR<br>(W/kg) | 1+3+4                      |            |
|-----------|---------|-------------------|---------------------|---------------------------|-------------------------|---------------------|-----------------------------------|----------------------------|------------|
|           |         |                   | WWAN                | 2.4GHz<br>WLAN<br>Ant.1+2 | 5GHz<br>WLAN<br>Ant.1+2 | Bluetooth           |                                   | Summed<br>1g SAR<br>(W/kg) | Case No    |
|           |         |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg)       | 1g<br>SAR<br>(W/kg)     | 1g<br>SAR<br>(W/kg) |                                   |                            |            |
| LTE       | Band 71 | Front             | 0.475               | 0.132                     | 0.162                   | 0.083               | 0.61                              | 0.72                       |            |
|           |         | Back              | 0.581               | 0.712                     | 0.836                   | 0.127               | 1.29                              | 1.54                       |            |
|           |         | Left Side         | 0.862               |                           |                         |                     | 0.86                              | 0.86                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.020               | 0.182                     | 0.103                   | 0.110               | 0.20                              | 0.23                       |            |
|           | Band 12 | Front             | 0.364               | 0.132                     | 0.162                   | 0.083               | 0.50                              | 0.61                       |            |
|           |         | Back              | 0.413               | 0.712                     | 0.836                   | 0.127               | 1.13                              | 1.38                       |            |
|           |         | Left Side         | 0.748               |                           |                         |                     | 0.75                              | 0.75                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.032               | 0.182                     | 0.103                   | 0.110               | 0.21                              | 0.25                       |            |
|           | Band 13 | Front             | 0.416               | 0.132                     | 0.162                   | 0.083               | 0.55                              | 0.66                       |            |
|           |         | Back              | 0.513               | 0.712                     | 0.836                   | 0.127               | 1.23                              | 1.48                       |            |
|           |         | Left Side         | 0.697               |                           |                         |                     | 0.70                              | 0.70                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.020               | 0.182                     | 0.103                   | 0.110               | 0.20                              | 0.23                       |            |
|           | Band 5  | Front             | 0.572               | 0.132                     | 0.162                   | 0.083               | 0.70                              | 0.82                       |            |
|           |         | Back              | 0.643               | 0.712                     | 0.836                   | 0.127               | 1.36                              | <b>1.61</b>                | <b>#11</b> |
|           |         | Left Side         | 1.068               |                           |                         |                     | 1.07                              | 1.07                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.034               | 0.182                     | 0.103                   | 0.110               | 0.22                              | 0.25                       |            |
|           | Band 26 | Front             | 0.438               | 0.132                     | 0.162                   | 0.083               | 0.57                              | 0.68                       |            |
|           |         | Back              | 0.536               | 0.712                     | 0.836                   | 0.127               | 1.25                              | 1.50                       |            |
|           |         | Left Side         | 0.759               |                           |                         |                     | 0.76                              | 0.76                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.041               | 0.182                     | 0.103                   | 0.110               | 0.22                              | 0.25                       |            |
|           | Band 66 | Front             | 0.292               | 0.132                     | 0.162                   | 0.083               | 0.42                              | 0.54                       |            |
|           |         | Back              | 0.482               | 0.712                     | 0.836                   | 0.127               | 1.19                              | 1.45                       |            |
|           |         | Left Side         | 0.261               |                           |                         |                     | 0.26                              | 0.26                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.668               | 0.182                     | 0.103                   | 0.110               | 0.85                              | 0.88                       |            |
|           | Band 25 | Front             | 0.306               | 0.132                     | 0.162                   | 0.083               | 0.44                              | 0.55                       |            |
|           |         | Back              | 0.517               | 0.712                     | 0.836                   | 0.127               | 1.23                              | 1.48                       |            |
|           |         | Left Side         | 0.243               |                           |                         |                     | 0.24                              | 0.24                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 1.001               | 0.182                     | 0.103                   | 0.110               | 1.18                              | 1.21                       |            |
|           | Band 30 | Front             | 0.336               | 0.132                     | 0.162                   | 0.083               | 0.47                              | 0.58                       |            |
|           |         | Back              | 0.476               | 0.712                     | 0.836                   | 0.127               | 1.19                              | 1.44                       |            |
|           |         | Left Side         | 0.317               |                           |                         |                     | 0.32                              | 0.32                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.805               | 0.182                     | 0.103                   | 0.110               | 0.99                              | 1.02                       |            |
|           | Band 7  | Front             | 0.204               | 0.132                     | 0.162                   | 0.083               | 0.34                              | 0.45                       |            |
|           |         | Back              | 0.322               | 0.712                     | 0.836                   | 0.127               | 1.03                              | 1.29                       |            |
|           |         | Left Side         | 0.130               |                           |                         |                     | 0.13                              | 0.13                       |            |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                       |            |
|           |         | Top Side          | 0.912               | 0.182                     | 0.103                   | 0.110               | 1.09                              | 1.13                       |            |

| WWAN Band |         | Exposure Position | 1                   | 2                         | 3                       | 4                   | 1+2<br>Summed<br>1g SAR<br>(W/kg) | 1+3+4<br>Summed<br>1g SAR<br>(W/kg) |
|-----------|---------|-------------------|---------------------|---------------------------|-------------------------|---------------------|-----------------------------------|-------------------------------------|
|           |         |                   | WWAN                | 2.4GHz<br>WLAN<br>Ant.1+2 | 5GHz<br>WLAN<br>Ant.1+2 | Bluetooth           |                                   |                                     |
|           |         |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg)       | 1g<br>SAR<br>(W/kg)     | 1g<br>SAR<br>(W/kg) |                                   |                                     |
| LTE       | Band 41 | Front             | 0.153               | 0.132                     | 0.162                   | 0.083               | 0.29                              | 0.40                                |
|           |         | Back              | 0.292               | 0.712                     | 0.836                   | 0.127               | 1.00                              | 1.26                                |
|           |         | Left Side         | 0.074               |                           |                         |                     | 0.07                              | 0.07                                |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                                |
|           |         | Top Side          | 0.870               | 0.182                     | 0.103                   | 0.110               | 1.05                              | 1.08                                |
|           | Band 48 | Front             | 0.369               | 0.132                     | 0.162                   | 0.083               | 0.50                              | 0.61                                |
|           |         | Back              | 0.473               | 0.712                     | 0.836                   | 0.127               | 1.19                              | 1.44                                |
|           |         | Left Side         | 0.250               |                           |                         |                     | 0.25                              | 0.25                                |
|           |         | Right Side        |                     | 0.158                     | 0.215                   | 0.051               | 0.16                              | 0.27                                |
|           |         | Top Side          | 0.990               | 0.182                     | 0.103                   | 0.110               | 1.17                              | 1.20                                |

**<WWAN Bottom Antenna>**

| WWAN Band |         | Exposure Position | 1             | 2                   | 3                 | 4             | 1+2           | 1+3+4         |            |
|-----------|---------|-------------------|---------------|---------------------|-------------------|---------------|---------------|---------------|------------|
|           |         |                   | WWAN          | 2.4GHz WLAN Ant.1+2 | 5GHz WLAN Ant.1+2 | Bluetooth     | Summed 1g SAR | Summed 1g SAR | Case No    |
|           |         |                   | 1g SAR (W/kg) | 1g SAR (W/kg)       | 1g SAR (W/kg)     | 1g SAR (W/kg) |               |               |            |
| GSM       | GSM1900 | Front             | 0.338         | 0.132               | 0.162             | 0.083         | 0.47          | 0.58          |            |
|           |         | Back              | 0.544         | 0.712               | 0.836             | 0.127         | 1.26          | 1.51          |            |
|           |         | Left Side         | 0.188         |                     |                   |               | 0.19          | 0.19          |            |
|           |         | Right Side        | 0.085         | 0.158               | 0.215             | 0.051         | 0.24          | 0.35          |            |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          | 0.21          |            |
|           |         | Bottom side       | 0.788         |                     |                   |               | 0.79          | 0.79          |            |
| WCDMA     | Band IV | Front             | 0.440         | 0.132               | 0.162             | 0.083         | 0.57          | 0.69          |            |
|           |         | Back              | 0.558         | 0.712               | 0.836             | 0.127         | 1.27          | 1.52          |            |
|           |         | Left Side         | 0.187         |                     |                   |               | 0.19          | 0.19          |            |
|           |         | Right Side        | 0.136         | 0.158               | 0.215             | 0.051         | 0.29          | 0.40          |            |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          | 0.21          |            |
|           |         | Bottom side       | 0.795         |                     |                   |               | 0.80          | 0.80          |            |
|           | Band II | Front             | 0.286         | 0.132               | 0.162             | 0.083         | 0.42          | 0.53          |            |
|           |         | Back              | 0.543         | 0.712               | 0.836             | 0.127         | 1.26          | 1.51          |            |
|           |         | Left Side         | 0.170         |                     |                   |               | 0.17          | 0.17          |            |
|           |         | Right Side        | 0.088         | 0.158               | 0.215             | 0.051         | 0.25          | 0.35          |            |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          | 0.21          |            |
|           |         | Bottom side       | 0.852         |                     |                   |               | 0.85          | 0.85          |            |
| CDMA2000  | BC1     | Front             | 0.468         | 0.132               | 0.162             | 0.083         | 0.60          | 0.71          |            |
|           |         | Back              | 0.798         | 0.712               | 0.836             | 0.127         | 1.51          | <b>1.76</b>   | <b>#12</b> |
|           |         | Left Side         | 0.192         |                     |                   |               | 0.19          | 0.19          |            |
|           |         | Right Side        | 0.141         | 0.158               | 0.215             | 0.051         | 0.30          | 0.41          |            |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          | 0.21          |            |
|           |         | Bottom side       | 1.010         |                     |                   |               | 1.01          | 1.01          |            |



| WWAN Band |         | Exposure Position | 1             | 2                   | 3                 | 4             | 1+2           |         |       | 1+3+4         |         |       |
|-----------|---------|-------------------|---------------|---------------------|-------------------|---------------|---------------|---------|-------|---------------|---------|-------|
|           |         |                   | WWAN          | 2.4GHz WLAN Ant.1+2 | 5GHz WLAN Ant.1+2 | Bluetooth     | Summed 1g SAR | Case No | SPLSR | Summed 1g SAR | Case No | SPLSR |
|           |         |                   | 1g SAR (W/kg) | 1g SAR (W/kg)       | 1g SAR (W/kg)     | 1g SAR (W/kg) |               |         |       |               |         |       |
| LTE       | Band 66 | Front             | 0.455         | 0.132               | 0.162             | 0.083         | 0.59          |         |       | 0.70          |         |       |
|           |         | Back              | 0.586         | 0.712               | 0.836             | 0.127         | 1.30          |         |       | 1.55          |         |       |
|           |         | Left Side         | 0.200         |                     |                   |               | 0.20          |         |       | 0.20          |         |       |
|           |         | Right Side        | 0.130         | 0.158               | 0.215             | 0.051         | 0.29          |         |       | 0.40          |         |       |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          |         |       | 0.21          |         |       |
|           |         | Bottom side       | 0.776         |                     |                   |               | 0.78          |         |       | 0.78          |         |       |
|           | Band 25 | Front             | 0.377         | 0.132               | 0.162             | 0.083         | 0.51          |         |       | 0.62          |         |       |
|           |         | Back              | 0.562         | 0.712               | 0.836             | 0.127         | 1.27          |         |       | 1.53          |         |       |
|           |         | Left Side         | 0.177         |                     |                   |               | 0.18          |         |       | 0.18          |         |       |
|           |         | Right Side        | 0.099         | 0.158               | 0.215             | 0.051         | 0.26          |         |       | 0.37          |         |       |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          |         |       | 0.21          |         |       |
|           |         | Bottom side       | 0.989         |                     |                   |               | 0.99          |         |       | 0.99          |         |       |
|           | Band 30 | Front             | 0.860         | 0.132               | 0.162             | 0.083         | 0.99          |         |       | 1.11          |         |       |
|           |         | Back              | 0.622         | 0.712               | 0.836             | 0.127         | 1.33          |         |       | 1.59          |         |       |
|           |         | Left Side         | 0.257         |                     |                   |               | 0.26          |         |       | 0.26          |         |       |
|           |         | Right Side        | 0.221         | 0.158               | 0.215             | 0.051         | 0.38          |         |       | 0.49          |         |       |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          |         |       | 0.21          |         |       |
|           |         | Bottom side       | 0.485         |                     |                   |               | 0.49          |         |       | 0.49          |         |       |
|           | Band 7  | Front             | 0.856         | 0.132               | 0.162             | 0.083         | 0.99          |         |       | 1.10          |         |       |
|           |         | Back              | 1.097         | 0.712               | 0.836             | 0.127         | 1.81          | #13     | 0.02  | 2.06          | #14     | 0.02  |
|           |         | Left Side         | 0.262         |                     |                   |               | 0.26          |         |       | 0.26          |         |       |
|           |         | Right Side        | 0.215         | 0.158               | 0.215             | 0.051         | 0.37          |         |       | 0.48          |         |       |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          |         |       | 0.21          |         |       |
|           |         | Bottom side       | 1.056         |                     |                   |               | 1.06          |         |       | 1.06          |         |       |
|           | Band 41 | Front             | 0.395         | 0.132               | 0.162             | 0.083         | 0.53          |         |       | 0.64          |         |       |
|           |         | Back              | 0.708         | 0.712               | 0.836             | 0.127         | 1.42          |         |       | 1.67          | #15     | 0.01  |
|           |         | Left Side         | 0.139         |                     |                   |               | 0.14          |         |       | 0.14          |         |       |
|           |         | Right Side        | 0.122         | 0.158               | 0.215             | 0.051         | 0.28          |         |       | 0.39          |         |       |
|           |         | Top side          |               | 0.182               | 0.103             | 0.110         | 0.18          |         |       | 0.21          |         |       |
|           |         | Bottom side       | 0.809         |                     |                   |               | 0.81          |         |       | 0.81          |         |       |



### 16.3 Body-Worn Accessory Exposure Conditions

#### <WWAN Top Antenna>

| WWAN Band |         | Exposure Position | 1             | 2                   | 3                 | 4             | 1+2 Summed 1g SAR (W/kg) | 1+3+4         |         |       |
|-----------|---------|-------------------|---------------|---------------------|-------------------|---------------|--------------------------|---------------|---------|-------|
|           |         |                   | WWAN          | 2.4GHz WLAN Ant.1+2 | 5GHz WLAN Ant.1+2 | Bluetooth     |                          | Summed 1g SAR | Case No | SPLSR |
|           |         |                   | 1g SAR (W/kg) | 1g SAR (W/kg)       | 1g SAR (W/kg)     | 1g SAR (W/kg) |                          |               |         |       |
| GSM       | GSM850  | Front             | 0.455         | 0.128               | 0.054             | 0.035         | 0.58                     | 0.54          |         |       |
|           |         | Back              | 0.591         | 0.546               | 1.033             | 0.064         | 1.14                     | 1.69          | #16     | 0.02  |
|           | GSM1900 | Front             | 0.073         | 0.128               | 0.054             | 0.035         | 0.20                     | 0.16          |         |       |
|           |         | Back              | 0.113         | 0.546               | 1.033             | 0.064         | 0.66                     | 1.21          |         |       |
| WCDMA     | Band V  | Front             | 0.529         | 0.128               | 0.054             | 0.035         | 0.66                     | 0.62          |         |       |
|           |         | Back              | 0.741         | 0.546               | 1.033             | 0.064         | 1.29                     | 1.84          | #17     | 0.04  |
|           | Band IV | Front             | 0.165         | 0.128               | 0.054             | 0.035         | 0.29                     | 0.25          |         |       |
|           |         | Back              | 0.265         | 0.546               | 1.033             | 0.064         | 0.81                     | 1.36          |         |       |
|           | Band II | Front             | 0.166         | 0.128               | 0.054             | 0.035         | 0.29                     | 0.26          |         |       |
|           |         | Back              | 0.302         | 0.546               | 1.033             | 0.064         | 0.85                     | 1.40          |         |       |
| CDMA2000  | BC0     | Front             | 0.345         | 0.128               | 0.054             | 0.035         | 0.47                     | 0.43          |         |       |
|           |         | Back              | 0.640         | 0.546               | 1.033             | 0.064         | 1.19                     | 1.74          | #18     | 0.03  |
|           | BC10    | Front             | 0.354         | 0.128               | 0.054             | 0.035         | 0.48                     | 0.44          |         |       |
|           |         | Back              | 0.663         | 0.546               | 1.033             | 0.064         | 1.21                     | 1.76          | #19     | 0.03  |
|           | BC1     | Front             | 0.101         | 0.128               | 0.054             | 0.035         | 0.23                     | 0.19          |         |       |
|           |         | Back              | 0.262         | 0.546               | 1.033             | 0.064         | 0.81                     | 1.36          |         |       |
| LTE       | Band 71 | Front             | 0.274         | 0.128               | 0.054             | 0.035         | 0.40                     | 0.36          |         |       |
|           |         | Back              | 0.388         | 0.546               | 1.033             | 0.064         | 0.93                     | 1.49          |         |       |
|           | Band 12 | Front             | 0.383         | 0.128               | 0.054             | 0.035         | 0.51                     | 0.47          |         |       |
|           |         | Back              | 0.480         | 0.546               | 1.033             | 0.064         | 1.03                     | 1.58          |         |       |
|           | Band 13 | Front             | 0.372         | 0.128               | 0.054             | 0.035         | 0.50                     | 0.46          |         |       |
|           |         | Back              | 0.540         | 0.546               | 1.033             | 0.064         | 1.09                     | 1.64          | #20     | 0.02  |
|           | Band 5  | Front             | 0.428         | 0.128               | 0.054             | 0.035         | 0.56                     | 0.52          |         |       |
|           |         | Back              | 0.695         | 0.546               | 1.033             | 0.064         | 1.24                     | 1.79          | #21     | 0.03  |
|           | Band 26 | Front             | 0.466         | 0.128               | 0.054             | 0.035         | 0.59                     | 0.56          |         |       |
|           |         | Back              | 0.644         | 0.546               | 1.033             | 0.064         | 1.19                     | 1.74          | #22     | 0.02  |
|           | Band 66 | Front             | 0.164         | 0.128               | 0.054             | 0.035         | 0.29                     | 0.25          |         |       |
|           |         | Back              | 0.280         | 0.546               | 1.033             | 0.064         | 0.83                     | 1.38          |         |       |
|           | Band 25 | Front             | 0.165         | 0.128               | 0.054             | 0.035         | 0.29                     | 0.25          |         |       |
|           |         | Back              | 0.281         | 0.546               | 1.033             | 0.064         | 0.83                     | 1.38          |         |       |
|           | Band 30 | Front             | 0.267         | 0.128               | 0.054             | 0.035         | 0.40                     | 0.36          |         |       |
|           |         | Back              | 0.403         | 0.546               | 1.033             | 0.064         | 0.95                     | 1.50          |         |       |
|           | Band 7  | Front             | 0.340         | 0.128               | 0.054             | 0.035         | 0.47                     | 0.43          |         |       |
|           |         | Back              | 0.496         | 0.546               | 1.033             | 0.064         | 1.04                     | 1.59          |         |       |
|           | Band 41 | Front             | 0.168         | 0.128               | 0.054             | 0.035         | 0.30                     | 0.26          |         |       |
|           |         | Back              | 0.398         | 0.546               | 1.033             | 0.064         | 0.94                     | 1.50          |         |       |
|           | Band 48 | Front             | 0.208         | 0.128               | 0.054             | 0.035         | 0.34                     | 0.30          |         |       |
|           |         | Back              | 0.330         | 0.546               | 1.033             | 0.064         | 0.88                     | 1.43          |         |       |

**<WWAN Bottom Antenna>**

| WWAN Band |         | Exposure Position | 1                   | 2                         | 3                       | 4                   | 1+2<br>Summed<br>1g SAR<br>(W/kg) | 1+3+4            |            |             |
|-----------|---------|-------------------|---------------------|---------------------------|-------------------------|---------------------|-----------------------------------|------------------|------------|-------------|
|           |         |                   | WWAN                | 2.4GHz<br>WLAN<br>Ant.1+2 | 5GHz<br>WLAN<br>Ant.1+2 | Bluetooth           |                                   | Summed<br>1g SAR | Case<br>No | SPLSR       |
|           |         |                   | 1g<br>SAR<br>(W/kg) | 1g<br>SAR<br>(W/kg)       | 1g<br>SAR<br>(W/kg)     | 1g<br>SAR<br>(W/kg) |                                   |                  |            |             |
| GSM       | GSM1900 | Front             | 0.180               | 0.128                     | 0.054                   | 0.035               | 0.31                              | 0.27             |            |             |
|           |         | Back              | 0.293               | 0.546                     | 1.033                   | 0.064               | 0.84                              | 1.39             |            |             |
| WCDMA     | Band IV | Front             | 0.397               | 0.128                     | 0.054                   | 0.035               | 0.53                              | 0.49             |            |             |
|           |         | Back              | 0.466               | 0.546                     | 1.033                   | 0.064               | 1.01                              | 1.56             |            |             |
|           | Band II | Front             | 0.389               | 0.128                     | 0.054                   | 0.035               | 0.52                              | 0.48             |            |             |
|           |         | Back              | 0.702               | 0.546                     | 1.033                   | 0.064               | 1.25                              | <b>1.80</b>      | <b>#23</b> | <b>0.02</b> |
| CDMA2000  | BC1     | Front             | 0.384               | 0.128                     | 0.054                   | 0.035               | 0.51                              | 0.47             |            |             |
|           |         | Back              | 0.642               | 0.546                     | 1.033                   | 0.064               | 1.19                              | <b>1.74</b>      | <b>#24</b> | <b>0.01</b> |
| LTE       | Band 66 | Front             | 0.380               | 0.128                     | 0.054                   | 0.035               | 0.51                              | 0.47             |            |             |
|           |         | Back              | 0.543               | 0.546                     | 1.033                   | 0.064               | 1.09                              | <b>1.64</b>      | <b>#25</b> | <b>0.01</b> |
|           | Band 25 | Front             | 0.374               | 0.128                     | 0.054                   | 0.035               | 0.50                              | 0.46             |            |             |
|           |         | Back              | 0.663               | 0.546                     | 1.033                   | 0.064               | 1.21                              | <b>1.76</b>      | <b>#26</b> | <b>0.01</b> |
|           | Band 30 | Front             | 0.568               | 0.128                     | 0.054                   | 0.035               | 0.70                              | 0.66             |            |             |
|           |         | Back              | 0.414               | 0.546                     | 1.033                   | 0.064               | 0.96                              | 1.51             |            |             |
|           | Band 7  | Front             | 0.929               | 0.128                     | 0.054                   | 0.035               | 1.06                              | 1.02             |            |             |
|           |         | Back              | 0.675               | 0.546                     | 1.033                   | 0.064               | 1.22                              | <b>1.77</b>      | <b>#27</b> | <b>0.02</b> |
|           | Band 41 | Front             | 0.502               | 0.128                     | 0.054                   | 0.035               | 0.63                              | 0.59             |            |             |
|           |         | Back              | 0.336               | 0.546                     | 1.033                   | 0.064               | 0.88                              | 1.43             |            |             |

**16.4 Product specific 10g SAR Exposure Conditions**
**<WWAN Top Antenna>**

| WWAN Band |         | Exposure Position | 1              | 2                   | 3                 | 1+2 Summed 10g SAR (W/kg) | 1+3 Summed 10g SAR (W/kg) |
|-----------|---------|-------------------|----------------|---------------------|-------------------|---------------------------|---------------------------|
|           |         |                   | WWAN           | 2.4GHz WLAN Ant.1+2 | 5GHz WLAN Ant.1+2 |                           |                           |
|           |         |                   | 10g SAR (W/kg) | 10g SAR (W/kg)      | 10g SAR (W/kg)    |                           |                           |
| WCDMA     | Band V  | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Left side         | 2.030          |                     |                   | 2.03                      | 2.03                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
|           |         | Top side          |                |                     | 0.634             |                           | 0.63                      |
| CDMA2000  | BC0     | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Left side         | 1.817          |                     |                   | 1.82                      | 1.82                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
|           |         | Top side          |                |                     | 0.634             |                           | 0.63                      |
|           | BC10    | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Left side         | 1.755          |                     |                   | 1.76                      | 1.76                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
| LTE       | Band 13 | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Left side         | 1.569          |                     |                   | 1.57                      | 1.57                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
|           |         | Top side          |                |                     | 0.634             |                           | 0.63                      |
|           | Band 26 | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Left side         | 1.939          |                     |                   | 1.94                      | 1.94                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
|           |         | Top side          |                |                     | 0.634             |                           | 0.63                      |
|           | Band 7  | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
|           |         | Top side          | 2.543          |                     | 0.634             | 2.54                      | 3.18                      |
|           | Band 41 | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
|           |         | Top side          | 2.018          |                     | 0.634             | 2.02                      | 2.65                      |
|           | Band 48 | Front             |                |                     | 0.521             |                           | 0.52                      |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                      | 2.48                      |
|           |         | Right side        |                |                     | 0.939             |                           | 0.94                      |
|           |         | Top side          | 2.377          |                     | 0.634             | 2.38                      | 3.01                      |



**<WWAN Bottom Antenna>**

| WWAN Band |         | Exposure Position | 1              | 2                   | 3                 | 1+2                   |         |       | 1+3                   |         |       |
|-----------|---------|-------------------|----------------|---------------------|-------------------|-----------------------|---------|-------|-----------------------|---------|-------|
|           |         |                   | WWAN           | 2.4GHz WLAN Ant.1+2 | 5GHz WLAN Ant.1+2 |                       |         |       |                       |         |       |
|           |         |                   | 10g SAR (W/kg) | 10g SAR (W/kg)      | 10g SAR (W/kg)    | Summed 10g SAR (W/kg) | Case No | SPLSR | Summed 10g SAR (W/kg) | Case No | SPLSR |
| WCDMA     | Band IV | Front             |                |                     | 0.521             |                       |         |       | 0.52                  |         |       |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                  |         |       | 2.48                  |         |       |
|           |         | Right side        |                |                     | 0.939             |                       |         |       | 0.94                  |         |       |
|           |         | Top side          |                |                     | 0.634             |                       |         |       | 0.63                  |         |       |
|           |         | Bottom side       | 2.654          |                     |                   | 2.65                  |         |       | 2.65                  |         |       |
|           | Band II | Front             |                |                     | 0.521             |                       |         |       | 0.52                  |         |       |
|           |         | Back              | 2.589          | 2.477               | 2.476             | 5.07                  | #28     | 0.09  | 5.07                  | #29     | 0.08  |
|           |         | Right side        |                |                     | 0.939             |                       |         |       | 0.94                  |         |       |
|           |         | Top side          |                |                     | 0.634             |                       |         |       | 0.63                  |         |       |
|           |         | Bottom side       | 2.330          |                     |                   | 2.33                  |         |       | 2.33                  |         |       |
| CDMA      | BC1     | Front             |                |                     | 0.521             |                       |         |       | 0.52                  |         |       |
|           |         | Back              | 2.250          | 2.477               | 2.476             | 4.73                  | #30     | 0.08  | 4.73                  | #31     | 0.07  |
|           |         | Right side        |                |                     | 0.939             |                       |         |       | 0.94                  |         |       |
|           |         | Top side          |                |                     | 0.634             |                       |         |       | 0.63                  |         |       |
|           |         | Bottom side       | 1.873          |                     |                   | 1.87                  |         |       | 1.87                  |         |       |
| LTE       | Band 66 | Front             |                |                     | 0.521             |                       |         |       | 0.52                  |         |       |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                  |         |       | 2.48                  |         |       |
|           |         | Right side        |                |                     | 0.939             |                       |         |       | 0.94                  |         |       |
|           |         | Top side          |                |                     | 0.634             |                       |         |       | 0.63                  |         |       |
|           |         | Bottom side       | 2.664          |                     |                   | 2.66                  |         |       | 2.66                  |         |       |
|           | Band 25 | Front             |                |                     | 0.521             |                       |         |       | 0.52                  |         |       |
|           |         | Back              |                | 2.477               | 2.476             | 2.48                  |         |       | 2.48                  |         |       |
|           |         | Right side        |                |                     | 0.939             |                       |         |       | 0.94                  |         |       |
|           |         | Top side          |                |                     | 0.634             |                       |         |       | 0.63                  |         |       |
|           |         | Bottom side       | 2.396          |                     |                   | 2.40                  |         |       | 2.40                  |         |       |
|           | Band 7  | Front             | 1.737          |                     | 0.521             | 1.74                  |         |       | 2.26                  |         |       |
|           |         | Back              | 2.274          | 2.477               | 2.476             | 4.75                  | #32     | 0.08  | 4.75                  | #33     | 0.07  |
|           |         | Right side        |                |                     | 0.939             |                       |         |       | 0.94                  |         |       |
|           |         | Top side          |                |                     | 0.634             |                       |         |       | 0.63                  |         |       |
|           |         | Bottom side       | 1.371          |                     |                   | 1.37                  |         |       | 1.37                  |         |       |

**Remark:**

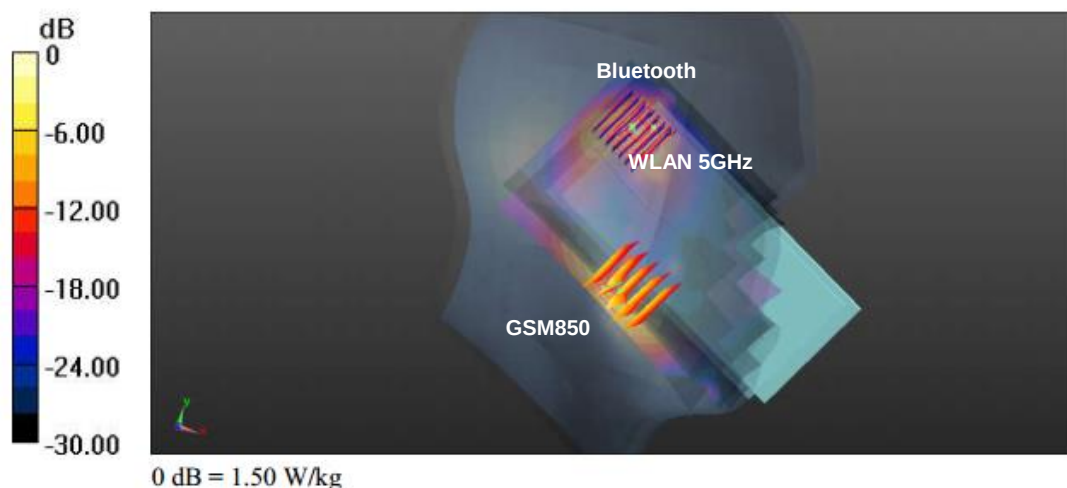
1. For Bluetooth/WLAN 2.4GHz Product specific 10g stand-alone SAR is not required for a transmitter or antenna, due to 1g hotspot SAR is <1.2W/kg.
2. SPLSR ≤ 0.10 for 10g SAR, simultaneously transmission SAR measurement is not necessary.

## 16.5 SPLSR Evaluation and Analysis

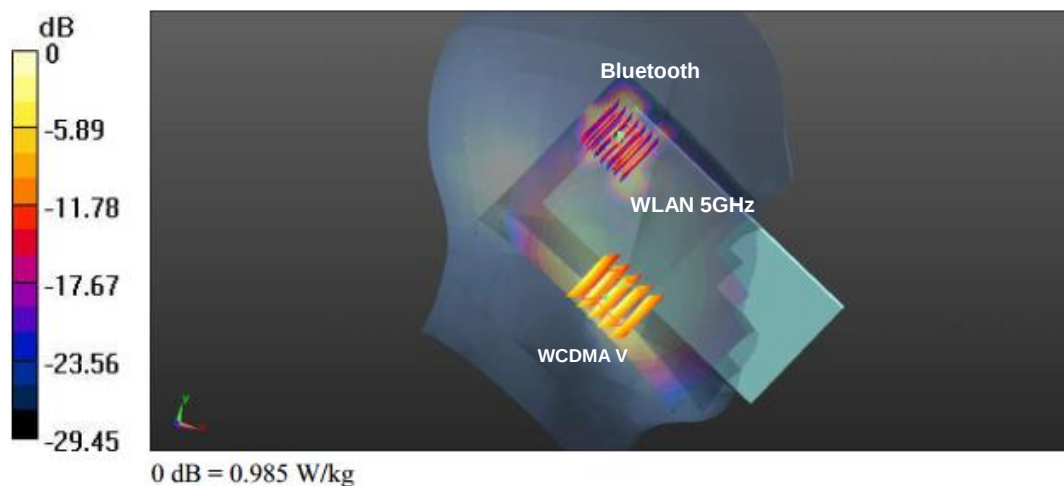
### General Note:

1. When standalone SAR is measured for both antennas in the pair, the peak location separation distance is computed by the square root of  $[(x_1-x_2)^2 + (y_1-y_2)^2 + (z_1-z_2)^2]$ , where  $(x_1, y_1, z_1)$  and  $(x_2, y_2, z_2)$  are the coordinates in the area scans or extrapolated peak SAR locations in the zoom scans, as appropriate.
2.  $SPLSR = (SAR_1 + SAR_2)^{1.5} / (min. \text{ separation distance, mm})$ . If  $SPLSR \leq 0.04$  for 1g SAR and  $SPLSR \leq 0.10$  for 10g SAR, simultaneously transmission SAR measurement is not necessary.

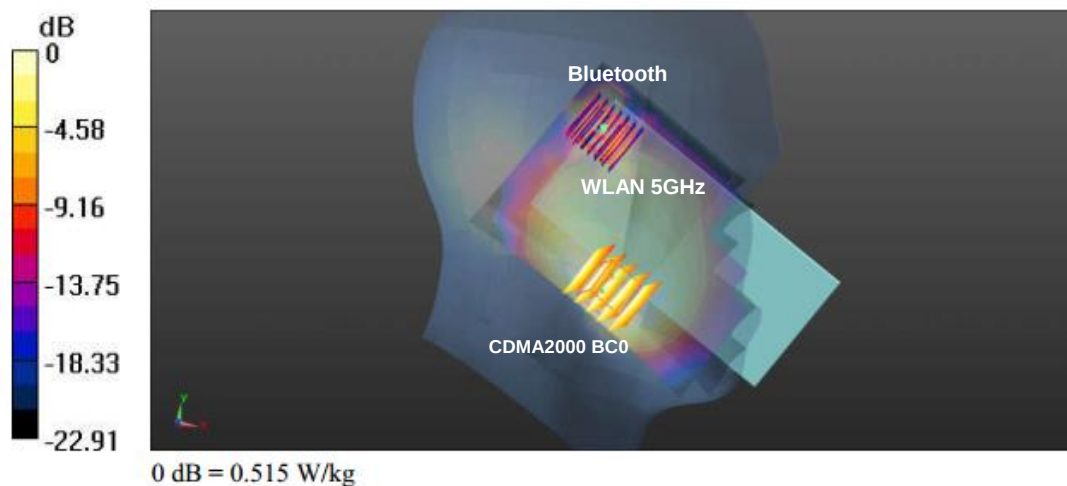
|          | Band      | Position   | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-----------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          |           |            |            |          | X                     | Y     | Z      |                  |                   |               |                  |
| Case #01 | GSM850    | Left Cheek | 0.775      | 0        | 0.0315                | 0.235 | -0.173 | 93.4             | 1.88              | 0.03          | Not required     |
|          | Bluetooth |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |
|          | WLAN5GHz  |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | GSM850    |            | 0.775      | 0        | 0.0315                | 0.235 | -0.173 | 89.3             | 1.88              | 0.03          | Not required     |
|          | WLAN5GHz  |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | Bluetooth |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |



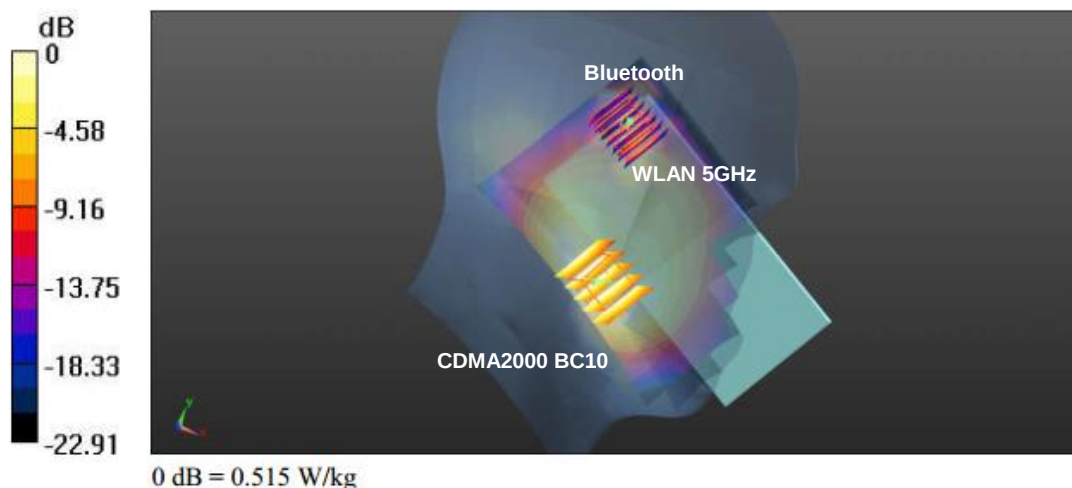
| Case #02 | Band      | Position   | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-----------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          |           |            |            |          | X                     | Y     | Z      |                  |                   |               |                  |
| Case #02 | WCDMA V   | Left Cheek | 0.867      | 0        | 0.0459                | 0.244 | -0.172 | 86.9             | 1.97              | 0.03          | Not required     |
|          | Bluetooth |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |
|          | WLAN5GHz  |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | WCDMA V   |            | 0.867      | 0        | 0.0459                | 0.244 | -0.172 | 82.8             | 1.97              | 0.03          | Not required     |
|          | WLAN5GHz  |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | Bluetooth |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |



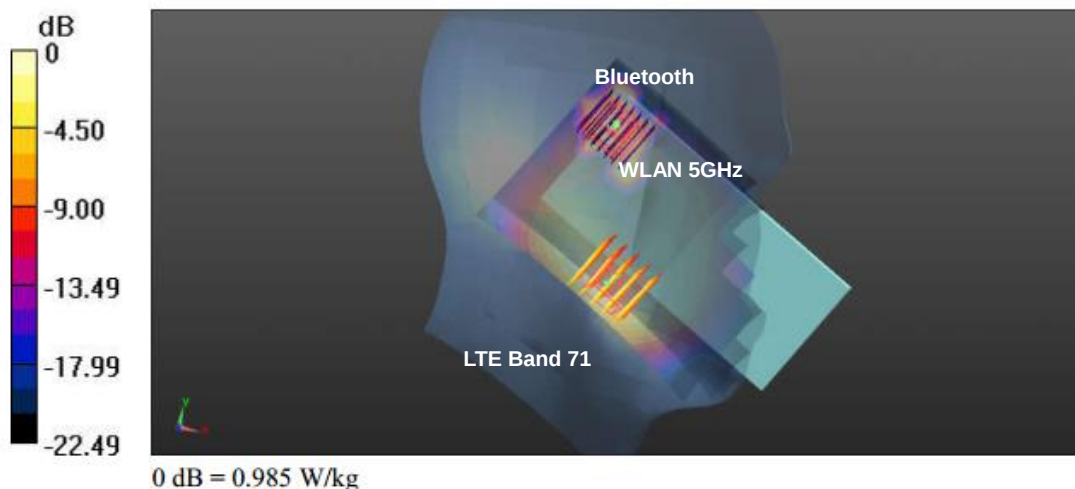
| Case #03 | Band         | Position   | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|--------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          |              |            |            |          | X                     | Y     | Z      |                  |                   |               |                  |
| Case #03 | CDMA2000 BC0 | Left Cheek | 1.059      | 0        | 0.0459                | 0.235 | -0.172 | 95.7             | 2.16              | 0.03          | Not required     |
|          | Bluetooth    |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |
|          | WLAN5GHz     |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | CDMA2000 BC0 |            | 1.059      | 0        | 0.0459                | 0.235 | -0.172 | 91.5             | 2.16              | 0.03          | Not required     |
|          | WLAN5GHz     |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | Bluetooth    |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |



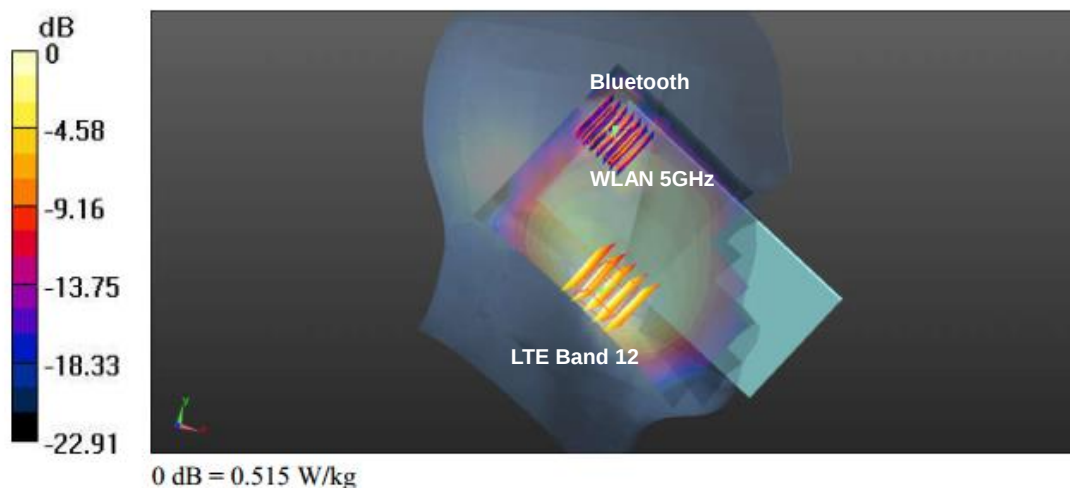
| Case #04 | Band          | Position   | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|---------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          |               |            |            |          | X                     | Y     | Z      |                  |                   |               |                  |
|          | CDMA2000 BC10 | Left Cheek | 0.918      | 0        | 0.042                 | 0.237 | -0.169 | 92.9             | 2.02              | 0.03          | Not required     |
|          | Bluetooth     |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |
|          | WLAN5GHz      |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | CDMA2000 BC10 |            | 0.918      | 0        | 0.042                 | 0.237 | -0.169 | 88.9             | 2.02              | 0.03          | Not required     |
|          | WLAN5GHz      |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | Bluetooth     |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |



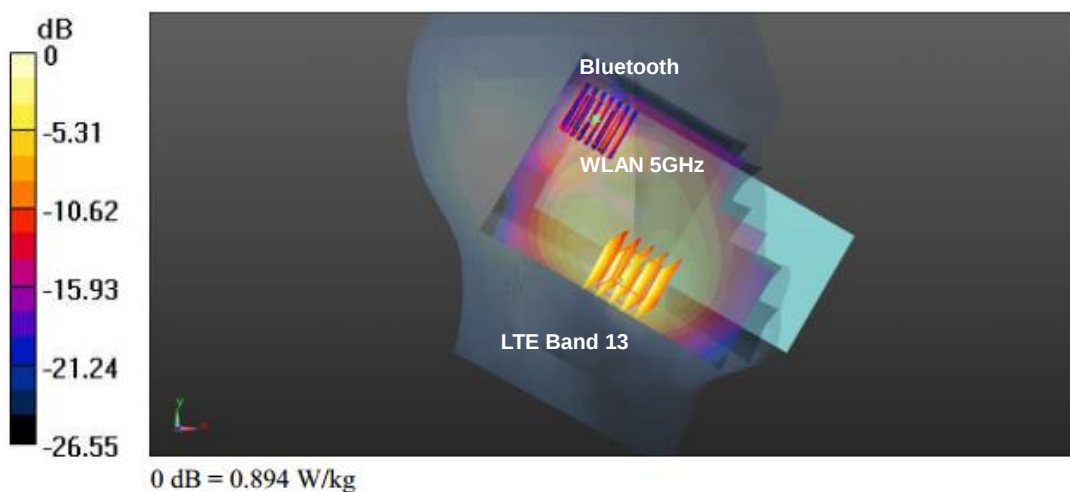
| Case #05 | Band        | Position   | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          |             |            |            |          | X                     | Y     | Z      |                  |                   |               |                  |
|          | LTE Band 71 | Left Cheek | 0.942      | 0        | 0.0402                | 0.24  | -0.169 | 89.6             | 2.04              | 0.03          | Not required     |
|          | Bluetooth   |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |
|          | WLAN5GHz    |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | LTE Band 71 |            | 0.942      | 0        | 0.0402                | 0.24  | -0.169 | 85.6             | 2.04              | 0.03          | Not required     |
|          | WLAN5GHz    |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | Bluetooth   |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |



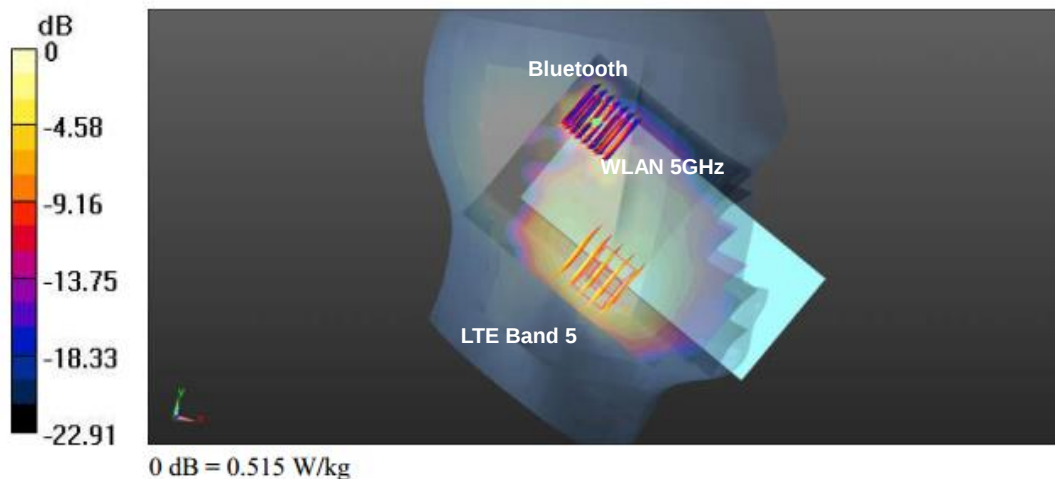
| Case #06 | Band        | Position   | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          |             |            |            |          | X                     | Y     | Z      |                  |                   |               |                  |
|          | LTE Band 12 | Left Cheek | 0.734      | 0        | 0.0352                | 0.234 | -0.175 | 94.8             | 1.84              | 0.03          | Not required     |
|          | Bluetooth   |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |
|          | WLAN5GHz    |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | LTE Band 12 |            | 0.734      | 0        | 0.0352                | 0.234 | -0.175 | 90.6             | 1.84              | 0.03          | Not required     |
|          | WLAN5GHz    |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | Bluetooth   |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |



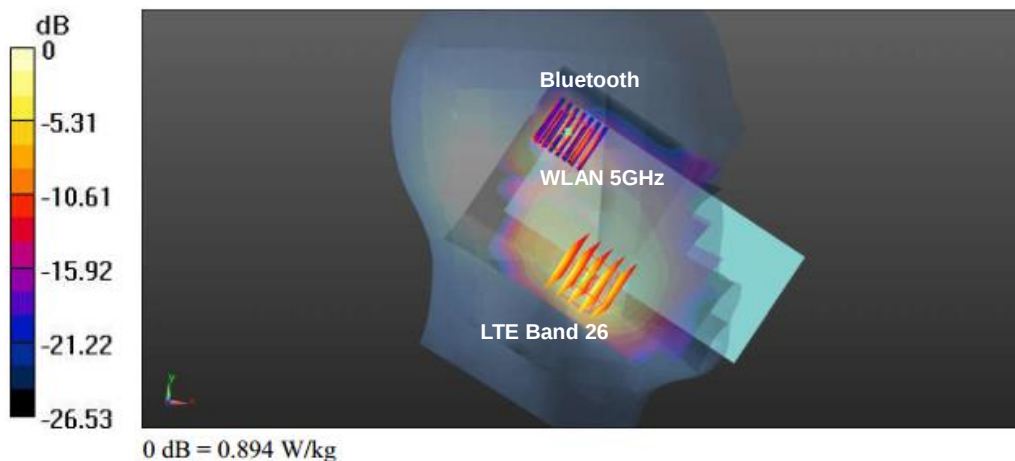
| Case #07 | Band        | Position   | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|------------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          |             |            |            |          | X                     | Y     | Z      |                  |                   |               |                  |
|          | LTE Band 13 | Left Cheek | 0.922      | 0        | 0.0459                | 0.234 | -0.172 | 96.6             | 2.02              | 0.03          | Not required     |
|          | Bluetooth   |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |
|          | WLAN5GHz    |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | LTE Band 13 |            | 0.922      | 0        | 0.0459                | 0.234 | -0.172 | 92.5             | 2.02              | 0.03          | Not required     |
|          | WLAN5GHz    |            | 0.614      | 0        | 0.0247                | 0.324 | -0.175 |                  |                   |               |                  |
|          | Bluetooth   |            | 0.488      | 0        | 0.0235                | 0.328 | -0.171 |                  |                   |               |                  |



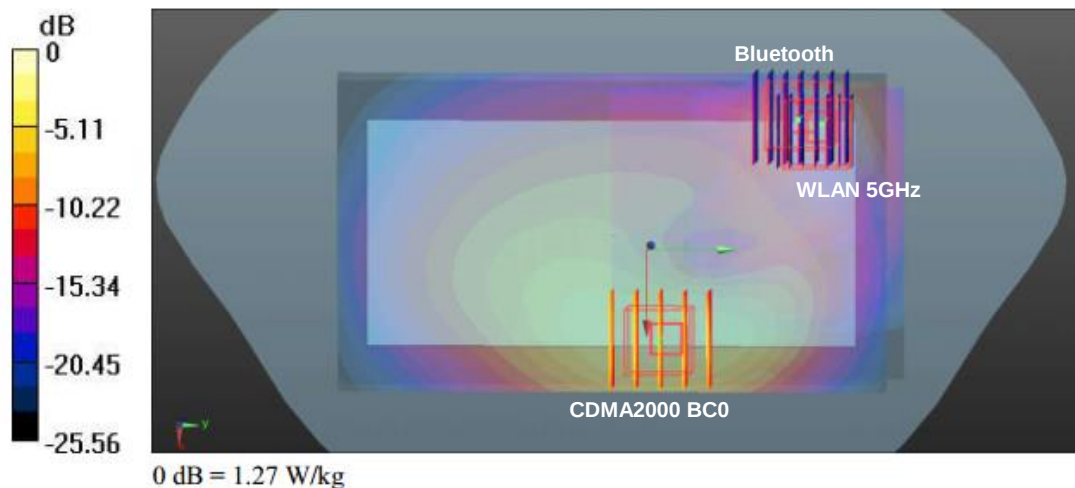
| Case | Band       | Position   | SAR<br>(W/kg) | Gap<br>(mm) | SAR peak location (m) |       |        | 3D<br>distance<br>(mm) | Summed<br>SAR<br>(W/kg) | SPLSR<br>Results | Simultaneous<br>SAR |
|------|------------|------------|---------------|-------------|-----------------------|-------|--------|------------------------|-------------------------|------------------|---------------------|
|      |            |            |               |             | X                     | Y     | Z      |                        |                         |                  |                     |
| #08  | LTE Band 5 | Left Cheek | 0.754         | 0           | 0.0426                | 0.244 | -0.171 | 86.1                   | 1.86                    | 0.03             | Not required        |
|      | Bluetooth  |            | 0.488         | 0           | 0.0235                | 0.328 | -0.171 |                        |                         |                  |                     |
|      | WLAN5GHz   |            | 0.614         | 0           | 0.0247                | 0.324 | -0.175 |                        |                         |                  |                     |
|      | LTE Band 5 |            | 0.754         | 0           | 0.0426                | 0.244 | -0.171 | 82.1                   | 1.86                    | 0.03             | Not required        |
|      | WLAN5GHz   |            | 0.614         | 0           | 0.0247                | 0.324 | -0.175 |                        |                         |                  |                     |
|      | Bluetooth  |            | 0.488         | 0           | 0.0235                | 0.328 | -0.171 |                        |                         |                  |                     |



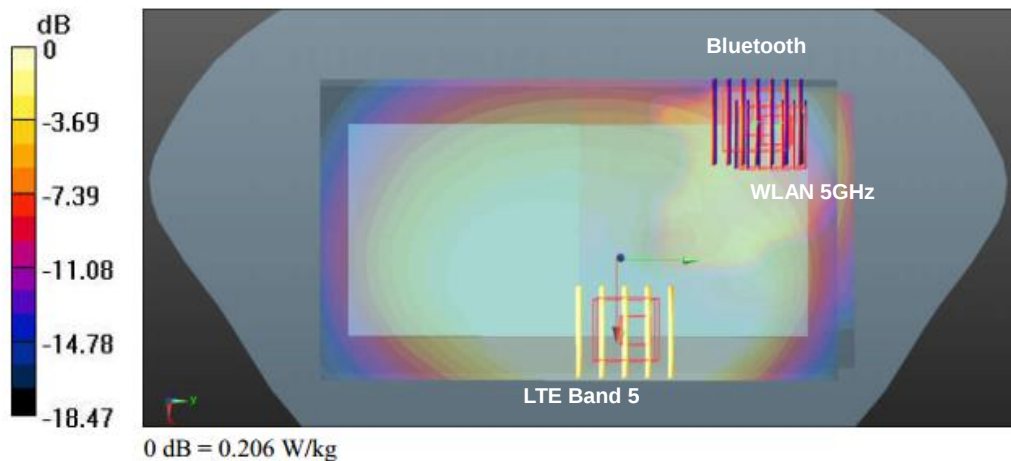
| Case | Band        | Position   | SAR<br>(W/kg) | Gap<br>(mm) | SAR peak location (m) |       |        | 3D<br>distance<br>(mm) | Summed<br>SAR<br>(W/kg) | SPLSR<br>Results | Simultaneous<br>SAR |
|------|-------------|------------|---------------|-------------|-----------------------|-------|--------|------------------------|-------------------------|------------------|---------------------|
|      |             |            |               |             | X                     | Y     | Z      |                        |                         |                  |                     |
| #09  | LTE Band 26 | Left Cheek | 0.726         | 0           | 0.0352                | 0.224 | -0.175 | 104.7                  | 1.83                    | 0.02             | Not required        |
|      | Bluetooth   |            | 0.488         | 0           | 0.0235                | 0.328 | -0.171 |                        |                         |                  |                     |
|      | WLAN5GHz    |            | 0.614         | 0           | 0.0247                | 0.324 | -0.175 |                        |                         |                  |                     |
|      | LTE Band 26 |            | 0.726         | 0           | 0.0352                | 0.224 | -0.175 | 100.5                  | 1.83                    | 0.02             | Not required        |
|      | WLAN5GHz    |            | 0.614         | 0           | 0.0247                | 0.324 | -0.175 |                        |                         |                  |                     |
|      | Bluetooth   |            | 0.488         | 0           | 0.0235                | 0.328 | -0.171 |                        |                         |                  |                     |



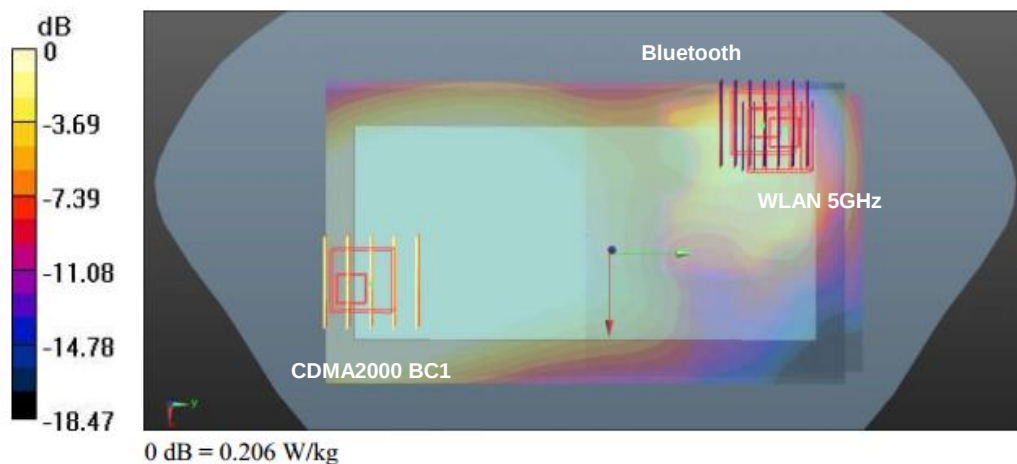
| Case #10 | Band         | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|--------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |              |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | CDMA2000 BC0 | Back     | 0.641      | 10       | 0.019                 | 0.015  | -0.204 | 86.6             | 1.60              | 0.04          | Not required     |
|          | WLAN5GHz     |          | 0.836      | 10       | -0.054                | 0.07   | -0.207 |                  |                   |               |                  |
|          | Bluetooth    |          | 0.127      | 10       | -0.0542               | 0.0612 | -0.206 |                  |                   |               |                  |
|          | CDMA2000 BC0 |          | 0.641      | 10       | 0.019                 | 0.015  | -0.204 | 91.4             | 1.60              | 0.02          | Not required     |
|          | Bluetooth    |          | 0.127      | 10       | -0.0542               | 0.0612 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz     |          | 0.836      | 10       | -0.054                | 0.07   | -0.207 |                  |                   |               |                  |



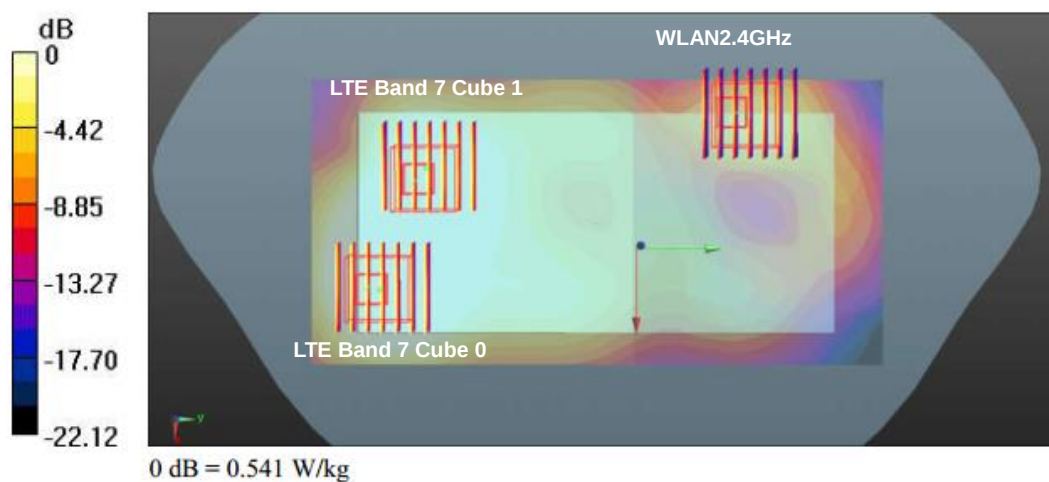
| Case #11 | Band       | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |            |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | LTE Band 5 | Back     | 0.643      | 10       | 0.019                 | 0.015  | -0.204 | 91.4             | 1.61              | 0.02          | Not required     |
|          | WLAN5GHz   |          | 0.836      | 10       | -0.054                | 0.07   | -0.207 |                  |                   |               |                  |
|          | Bluetooth  |          | 0.127      | 10       | -0.0542               | 0.0612 | -0.206 |                  |                   |               |                  |
|          | LTE Band 5 |          | 0.643      | 10       | 0.019                 | 0.015  | -0.204 | 86.6             | 1.61              | 0.02          | Not required     |
|          | Bluetooth  |          | 0.127      | 10       | -0.0542               | 0.0612 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz   |          | 0.836      | 10       | -0.054                | 0.07   | -0.207 |                  |                   |               |                  |



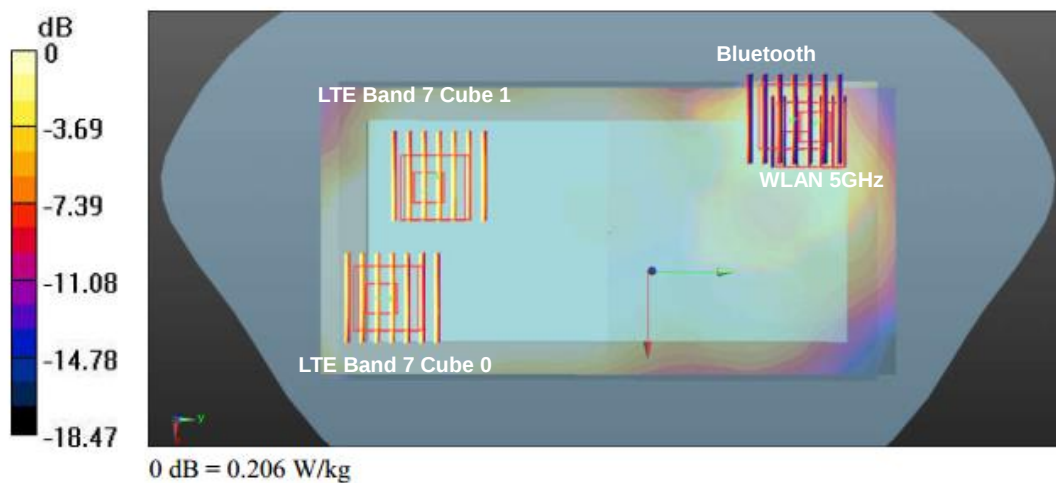
| Case #12 | Band         | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|--------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |              |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | CDMA2000 BC1 | Back     | 0.798      | 10       | 0.001                 | -0.083 | -0.206 | 162.6            | 1.76              | 0.01          | Not required     |
|          | WLAN5GHz     |          | 0.836      | 10       | -0.054                | 0.07   | -0.207 |                  |                   |               |                  |
|          | Bluetooth    |          | 0.127      | 10       | -0.0542               | 0.0612 | -0.206 |                  |                   |               |                  |
|          | CDMA2000 BC1 |          | 0.798      | 10       | 0.001                 | -0.083 | -0.206 | 154.4            | 1.76              | 0.02          | Not required     |
|          | Bluetooth    |          | 0.127      | 10       | -0.0542               | 0.0612 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz     |          | 0.836      | 10       | -0.054                | 0.07   | -0.207 |                  |                   |               |                  |



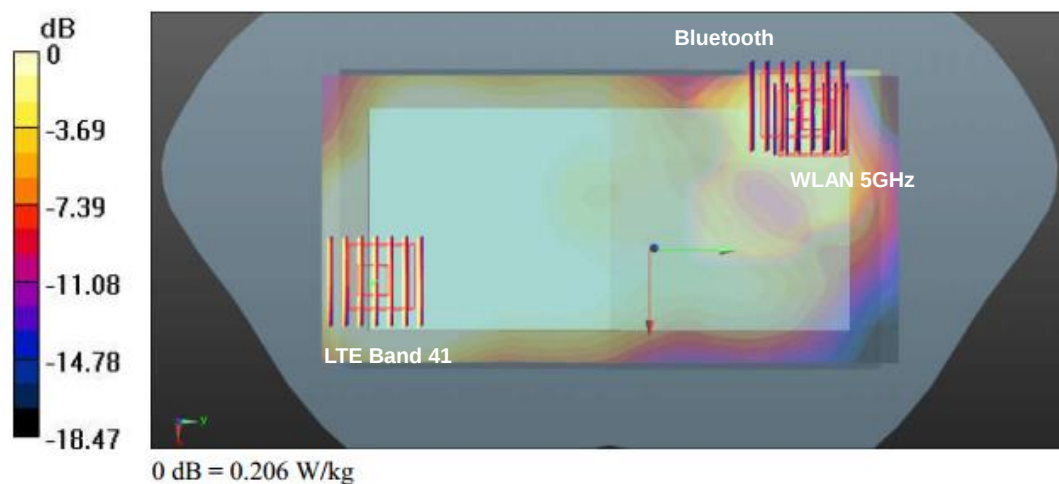
| Case #13 | Band             | Position | SAR (W/kg) | Gap (mm) | SAR peak location (mm) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|------------------|----------|------------|----------|------------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |                  |          |            |          | X                      | Y       | Z      |                  |                   |               |                  |
|          | LTE Band 7 Cube0 | Back     | 1.097      | 10       | 0.0058                 | -0.0782 | -0.206 | 136.9            | 1.81              | 0.02          | Not required     |
|          | WLAN2.4GHz       |          | 0.712      | 10       | -0.053                 | 0.0454  | -0.205 |                  |                   |               |                  |
|          | LTE Band 7 Cube1 |          | 0.85       | 10       | -0.03                  | -0.0626 | -0.206 | 110.4            | 1.56              | 0.02          | Not required     |
|          | WLAN2.4GHz       |          | 0.712      | 10       | -0.053                 | 0.0454  | -0.205 |                  |                   |               |                  |



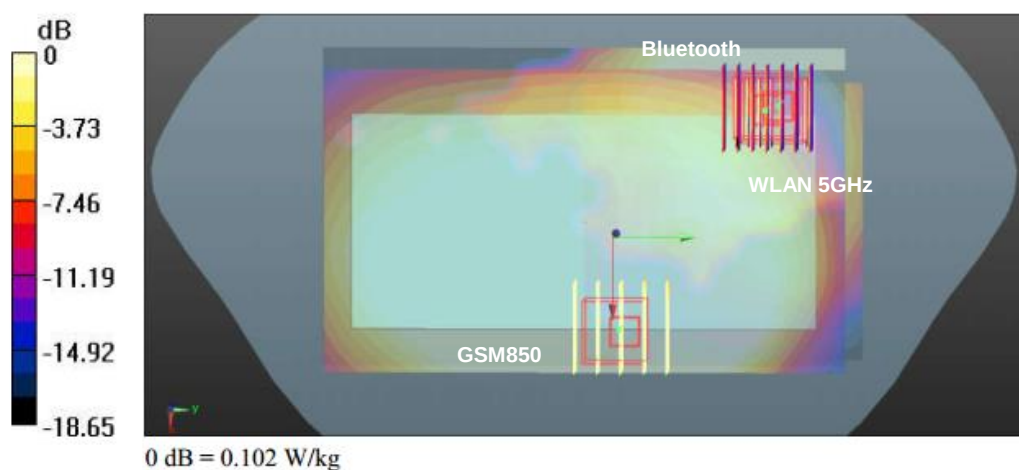
|          | Band             | Position | SAR<br>(W/kg) | Gap<br>(mm) | SAR peak location (m) |         |        | 3D<br>distance<br>(mm) | Summed<br>SAR<br>(W/kg) | SPLSR<br>Results | Simultaneous<br>SAR |
|----------|------------------|----------|---------------|-------------|-----------------------|---------|--------|------------------------|-------------------------|------------------|---------------------|
|          |                  |          |               |             | X                     | Y       | Z      |                        |                         |                  |                     |
| Case #14 | LTE Band 7 Cube0 | Back     | 1.097         | 10          | 0.0058                | -0.0782 | -0.206 | 159.8                  | 2.06                    | 0.02             | Not required        |
|          | WLAN5GHz         |          | 0.836         | 10          | -0.054                | 0.07    | -0.207 |                        |                         |                  |                     |
|          | Bluetooth        |          | 0.127         | 10          | -0.0542               | 0.0612  | -0.206 |                        |                         |                  |                     |
|          | LTE Band 7 Cube0 |          | 1.097         | 10          | 0.0058                | -0.0782 | -0.206 | 151.8                  | 2.06                    | 0.02             | Not required        |
|          | Bluetooth        |          | 0.127         | 10          | -0.0542               | 0.0612  | -0.206 |                        |                         |                  |                     |
|          | WLAN5GHz         |          | 0.836         | 10          | -0.054                | 0.07    | -0.207 |                        |                         |                  |                     |
|          | LTE Band 7 Cube1 |          | 0.85          | 10          | -0.03                 | -0.0626 | -0.206 | 134.8                  | 1.81                    | 0.02             | Not required        |
|          | WLAN5GHz         |          | 0.836         | 10          | -0.054                | 0.07    | -0.207 |                        |                         |                  |                     |
|          | Bluetooth        |          | 0.127         | 10          | -0.0542               | 0.0612  | -0.206 |                        |                         |                  |                     |
|          | LTE Band 7 Cube1 |          | 0.85          | 10          | -0.03                 | -0.0626 | -0.206 | 126.1                  | 1.81                    | 0.02             | Not required        |
|          | Bluetooth        |          | 0.127         | 10          | -0.0542               | 0.0612  | -0.206 |                        |                         |                  |                     |
|          | WLAN5GHz         |          | 0.836         | 10          | -0.054                | 0.07    | -0.207 |                        |                         |                  |                     |



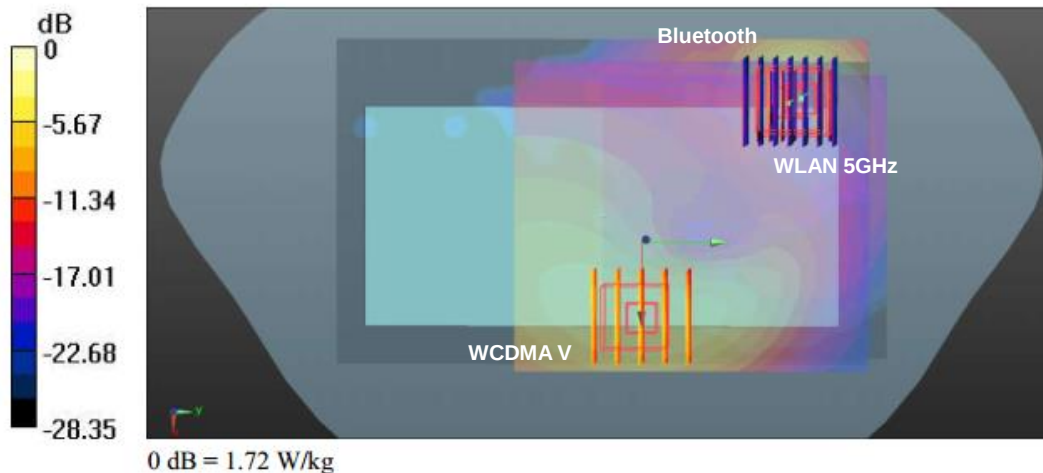
| Case #15 | Band        | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|----------|------------|----------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |             |          |            |          | X                     | Y       | Z      |                  |                   |               |                  |
|          | LTE Band 41 | Back     | 0.708      | 10       | 0.0046                | -0.0792 | -0.206 | 160.3            | 1.67              | 0.01          | Not required     |
|          | WLAN5GHz    |          | 0.836      | 10       | -0.054                | 0.07    | -0.207 |                  |                   |               |                  |
|          | Bluetooth   |          | 0.127      | 10       | -0.0542               | 0.0612  | -0.206 |                  |                   |               |                  |
|          | LTE Band 41 |          | 0.708      | 10       | 0.0046                | -0.0792 | -0.206 | 152.2            | 1.67              | 0.01          | Not required     |
|          | Bluetooth   |          | 0.127      | 10       | -0.0542               | 0.0612  | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz    |          | 0.836      | 10       | -0.054                | 0.07    | -0.207 |                  |                   |               |                  |



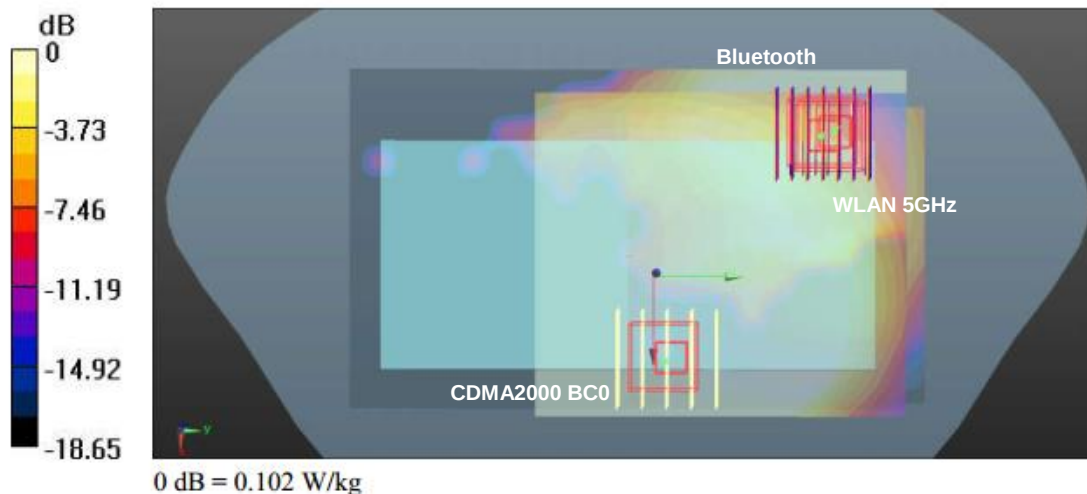
| Case #16 | Band      | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-----------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |           |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | GSM850    | Back     | 0.591      | 15       | 0.0205                | 0.012  | -0.206 | 96.4             | 1.69              | 0.02          | Not required     |
|          | WLAN5GHz  |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | GSM850    |          | 0.591      | 15       | 0.0205                | 0.012  | -0.206 | 91.1             | 1.69              | 0.02          | Not required     |
|          | Bluetooth |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz  |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |



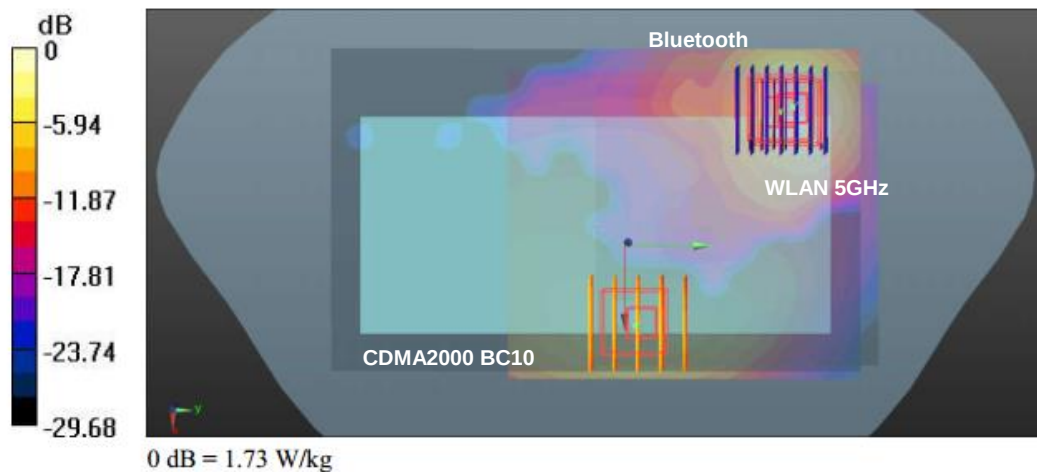
| Case #17 | Band      | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-----------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |           |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | WCDMA V   | Back     | 0.741      | 15       | 0.0175                | 0.012  | -0.206 | 88.6             | 1.84              | 0.04          | Not required     |
|          | WLAN5GHz  |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WCDMA V   |          | 0.741      | 15       | 0.0175                | 0.012  | -0.206 | 94.0             | 1.84              | 0.03          | Not required     |
|          | Bluetooth |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz  |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |



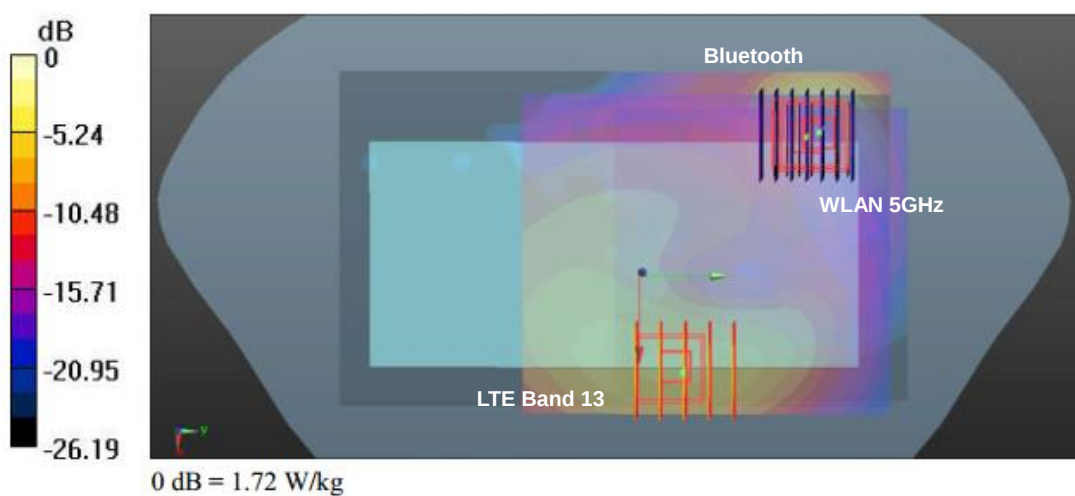
| Case #18 | Band         | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|--------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |              |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | CDMA2000 BC0 | Back     | 0.64       | 15       | 0.0175                | 0.012  | -0.206 | 94.0             | 1.74              | 0.02          | Not required     |
|          | WLAN5GHz     |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth    |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | CDMA2000 BC0 |          | 0.64       | 15       | 0.0175                | 0.012  | -0.206 | 88.6             | 1.74              | 0.03          | Not required     |
|          | Bluetooth    |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz     |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |



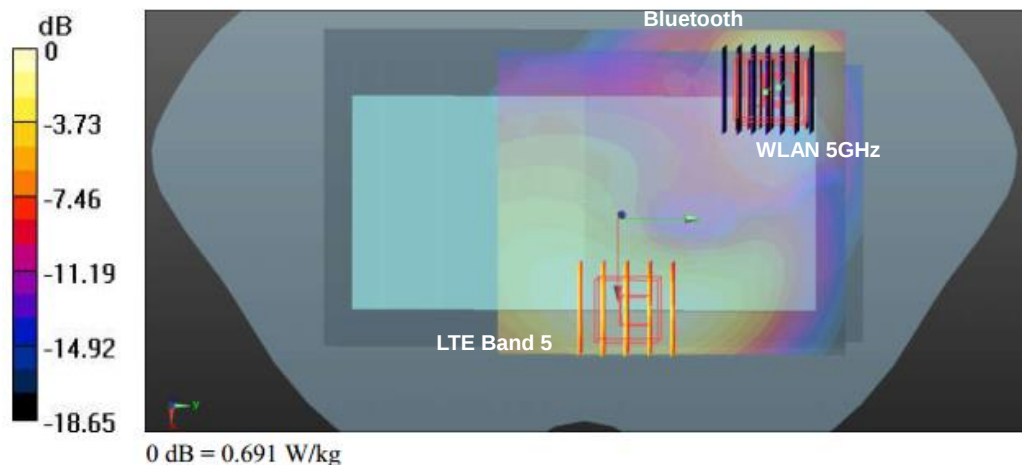
| Case #19 | Band          | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|---------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |               |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | CDMA2000 BC10 | Back     | 0.663      | 15       | 0.0175                | 0.0135 | -0.206 | 93.1             | 1.76              | 0.03          | Not required     |
|          | WLAN5GHz      |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth     |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | CDMA2000 BC10 | Back     | 0.663      | 15       | 0.0175                | 0.0135 | -0.206 | 87.8             | 1.76              | 0.03          | Not required     |
|          | Bluetooth     |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz      |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |



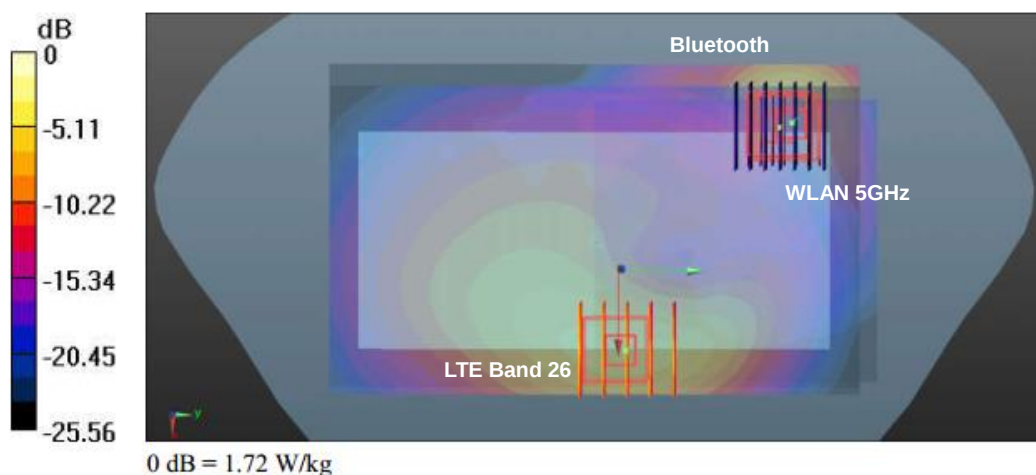
| Case #20 | Band        | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |             |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | LTE Band 13 | Back     | 0.54       | 15       | 0.022                 | 0.0225 | -0.206 | 92.0             | 1.64              | 0.02          | Not required     |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | LTE Band 13 | Back     | 0.54       | 15       | 0.022                 | 0.0225 | -0.206 | 87.1             | 1.64              | 0.02          | Not required     |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |



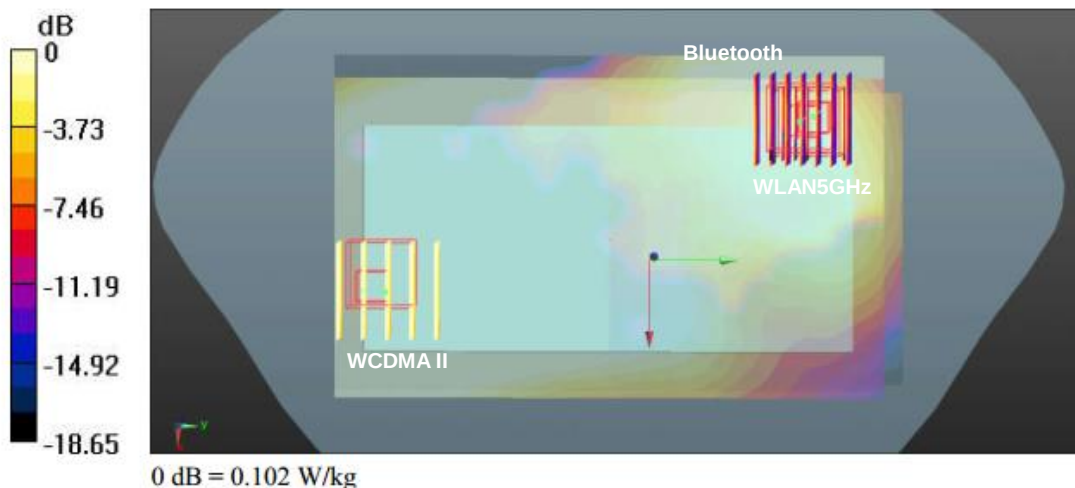
| Case #21 | Band       | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |            |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | LTE Band 5 | Back     | 0.695      | 15       | 0.0205                | 0.0215 | -0.206 | 91.2             | 1.79              | 0.03          | Not required     |
|          | WLAN5GHz   |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth  |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | LTE Band 5 |          | 0.695      | 15       | 0.0205                | 0.0215 | -0.206 | 86.2             | 1.79              | 0.03          | Not required     |
|          | Bluetooth  |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz   |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |



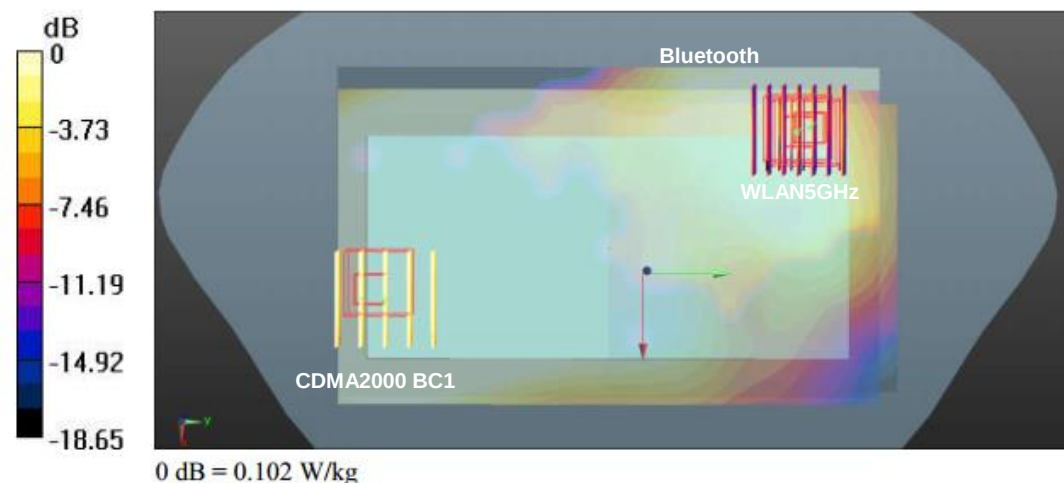
| Case #22 | Band        | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |             |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | LTE Band 26 | Back     | 0.644      | 15       | 0.0205                | 0.0105 | -0.206 | 97.3             | 1.74              | 0.02          | Not required     |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | LTE Band 26 |          | 0.644      | 15       | 0.0205                | 0.0105 | -0.206 | 91.9             | 1.74              | 0.02          | Not required     |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |



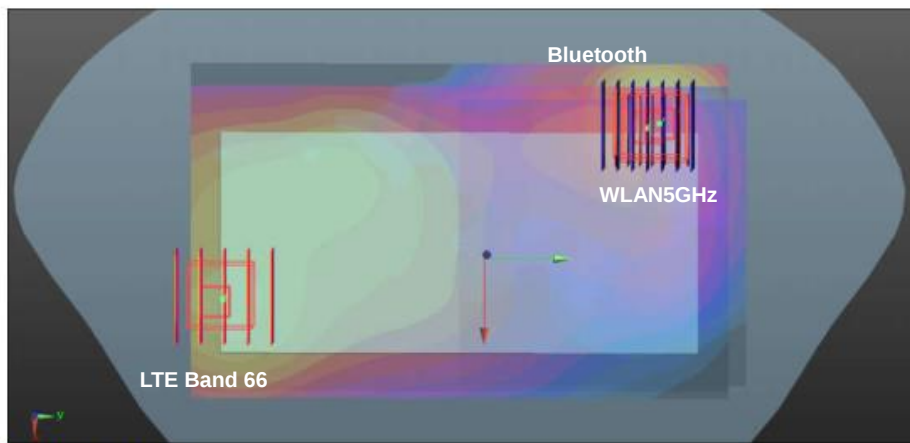
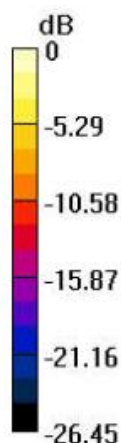
| Case #23 | Band      | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-----------|----------|------------|----------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |           |          |            |          | X                     | Y       | Z      |                  |                   |               |                  |
|          |           |          |            |          |                       |         |        |                  |                   |               |                  |
|          | WCDMA II  | Back     | 0.702      | 15       | 0.001                 | -0.0815 | -0.206 | 160.7            | 1.80              | 0.02          | Not required     |
|          | WLAN5GHz  |          | 1.033      | 15       | -0.058                | 0.068   | -0.207 |                  |                   |               |                  |
|          | Bluetooth |          | 0.064      | 15       | -0.0554               | 0.0624  | -0.206 |                  |                   |               |                  |
|          | WCDMA II  |          | 0.702      | 15       | 0.001                 | -0.0815 | -0.206 | 154.6            | 1.80              | 0.02          | Not required     |
|          | Bluetooth |          | 0.064      | 15       | -0.0554               | 0.0624  | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz  |          | 1.033      | 15       | -0.058                | 0.068   | -0.207 |                  |                   |               |                  |



| Case #24 | Band         | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|--------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |              |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          |              |          |            |          |                       |        |        |                  |                   |               |                  |
|          | CDMA2000 BC1 | Back     | 0.642      | 15       | 0.001                 | -0.083 | -0.206 | 162.1            | 1.74              | 0.01          | Not required     |
|          | WLAN5GHz     |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth    |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | CDMA2000 BC1 |          | 0.642      | 15       | 0.001                 | -0.083 | -0.206 | 156.0            | 1.74              | 0.01          | Not required     |
|          | Bluetooth    |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz     |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |

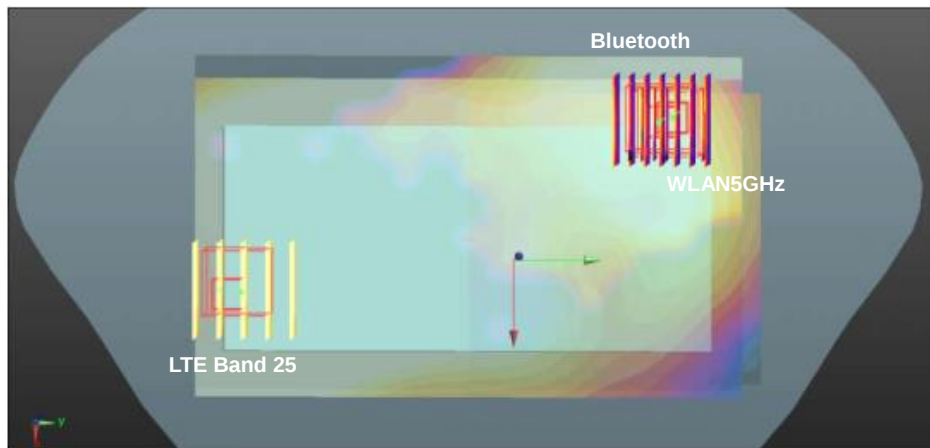
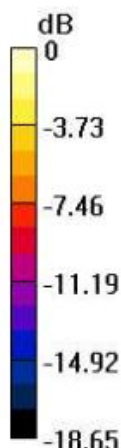


| Case #25 | Band        | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|----------|------------|----------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |             |          |            |          | X                     | Y       | Z      |                  |                   |               |                  |
|          | LTE Band 66 | Back     | 0.543      | 15       | 0.0025                | -0.0795 | -0.206 | 159.4            | 1.64              | 0.01          | Not required     |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068   | -0.207 |                  |                   |               |                  |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624  | -0.206 |                  |                   |               |                  |
|          | LTE Band 66 |          | 0.543      | 15       | 0.0025                | -0.0795 | -0.206 | 153.3            | 1.64              | 0.01          | Not required     |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624  | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068   | -0.207 |                  |                   |               |                  |



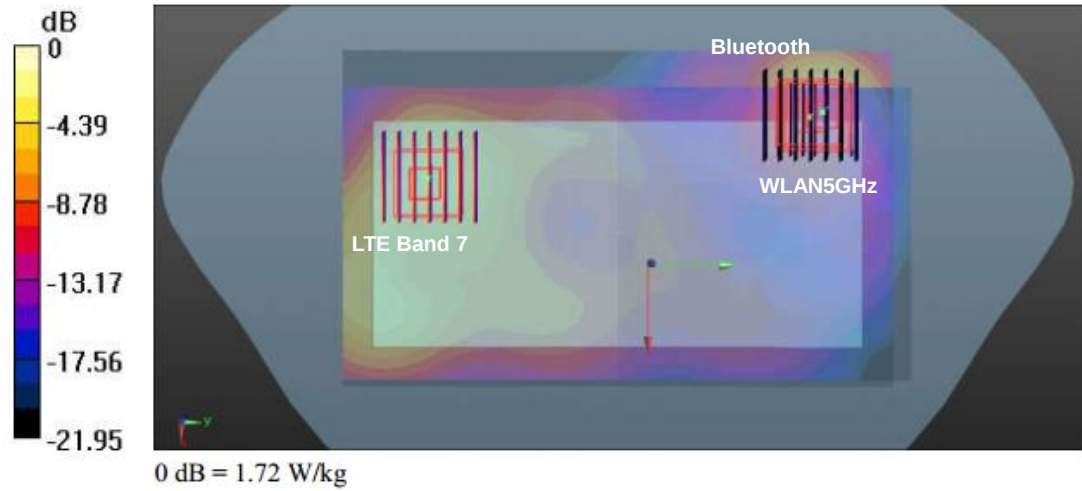
0 dB = 1.72 W/kg

| Case #26 | Band        | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|-------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          |             |          |            |          | X                     | Y      | Z      |                  |                   |               |                  |
|          | LTE Band 25 | Back     | 0.663      | 15       | 0.001                 | -0.083 | -0.206 | 162.1            | 1.76              | 0.01          | Not required     |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | LTE Band 25 |          | 0.663      | 15       | 0.001                 | -0.083 | -0.206 | 156.0            | 1.76              | 0.01          | Not required     |
|          | Bluetooth   |          | 0.064      | 15       | -0.0554               | 0.0624 | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz    |          | 1.033      | 15       | -0.058                | 0.068  | -0.207 |                  |                   |               |                  |

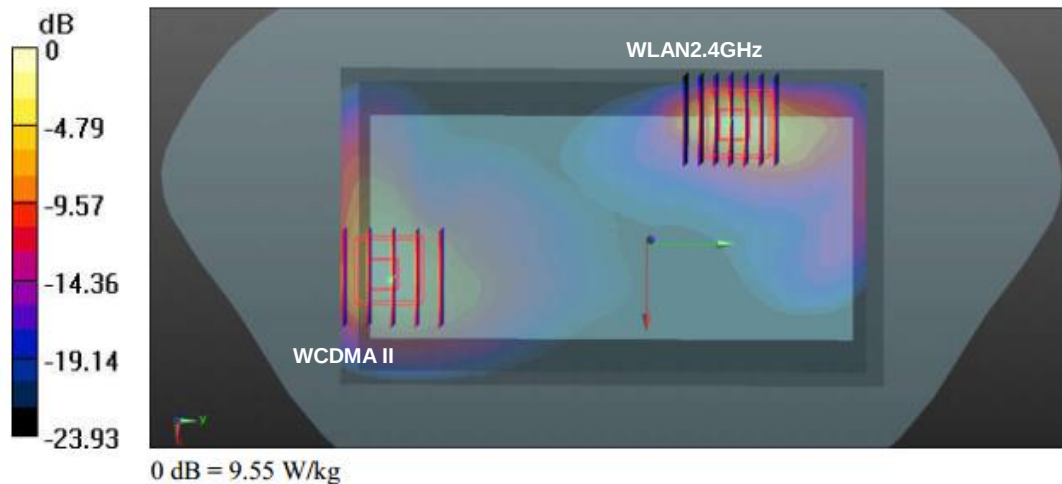


0 dB = 0.102 W/kg

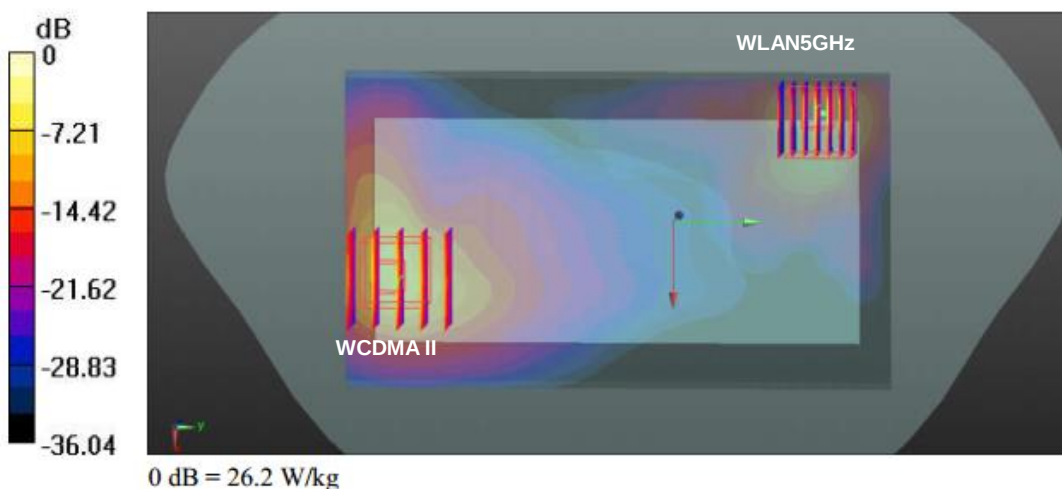
| Case #27 | Band       | Position | SAR (W/kg) | Gap  | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|------------|----------|------------|------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |            |          |            | (mm) | X                     | Y       | Z      |                  |                   |               |                  |
|          | LTE Band 7 | Back     | 0.675      | 15   | -0.035                | -0.0624 | -0.206 | 132.4            | 1.77              | 0.02          | Not required     |
|          | WLAN5GHz   |          | 1.033      | 15   | -0.058                | 0.068   | -0.207 |                  |                   |               |                  |
|          | Bluetooth  |          | 0.064      | 15   | -0.0554               | 0.0624  | -0.206 |                  |                   |               |                  |
|          | LTE Band 7 |          | 0.675      | 15   | -0.035                | -0.0624 | -0.206 | 126.5            | 1.77              | 0.02          | Not required     |
|          | Bluetooth  |          | 0.064      | 15   | -0.0554               | 0.0624  | -0.206 |                  |                   |               |                  |
|          | WLAN5GHz   |          | 1.033      | 15   | -0.058                | 0.068   | -0.207 |                  |                   |               |                  |



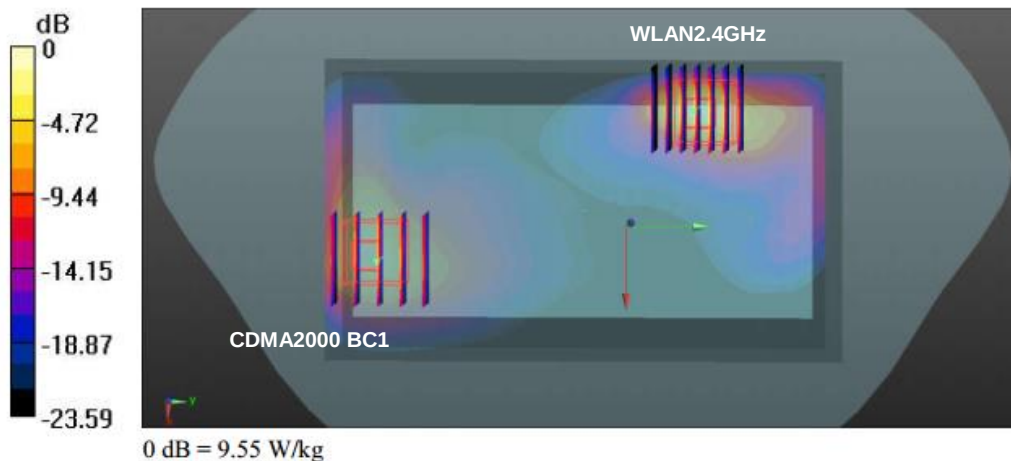
| Case #28 | Band       | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|------------|----------|------------|----------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |            |          |            |          | X                     | Y       | Z      |                  |                   |               |                  |
|          | WCDMA II   | Back     | 2.589      | 0        | 0.001                 | -0.0735 | -0.206 | 123.7            | 5.07              | 0.09          | Not required     |
|          | WLAN2.4GHz |          | 2.477      | 0        | -0.0518               | 0.0384  | -0.204 |                  |                   |               |                  |



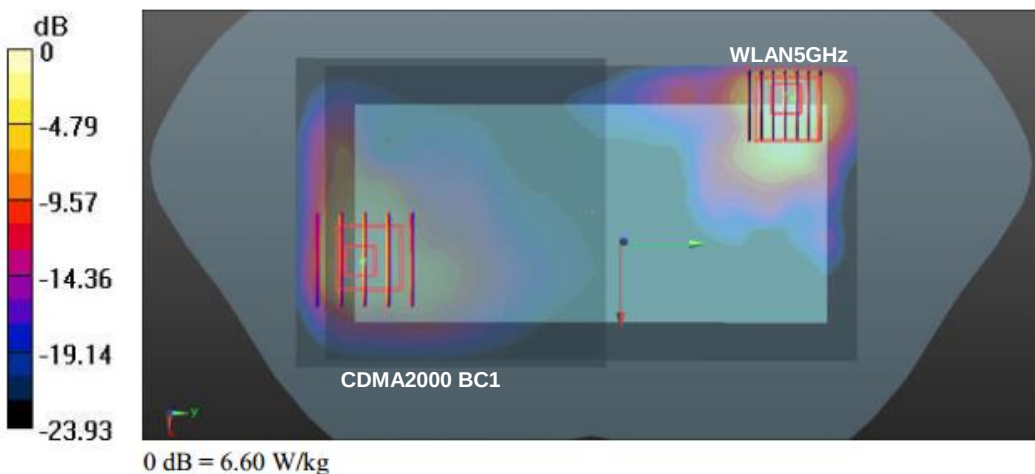
| Case #29 | Band     | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|----------|----------|------------|----------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |          |          |            |          | X                     | Y       | Z      |                  |                   |               |                  |
|          | WCDMA II | Back     | 2.589      | 0        | 0.001                 | -0.0735 | -0.206 | 150.2            | 5.07              | 0.08          | Not required     |
|          | WLAN5GHz |          | 2.476      | 0        | -0.057                | 0.065   | -0.207 |                  |                   |               |                  |



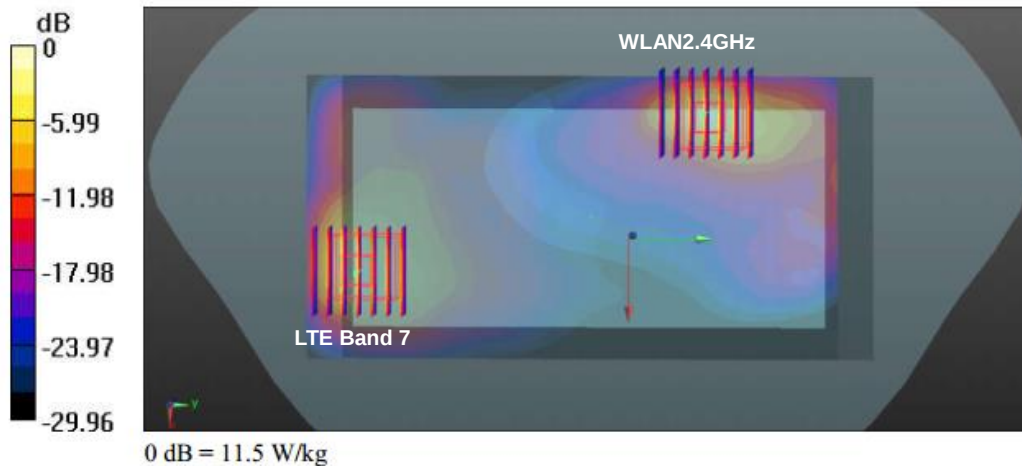
| Case #30 | Band         | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|--------------|----------|------------|----------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |              |          |            |          | X                     | Y       | Z      |                  |                   |               |                  |
|          | CDMA2000 BC1 | Back     | 2.25       | 0        | -0.0005               | -0.0775 | -0.206 | 126.8            | 4.73              | 0.08          | Not required     |
|          | WLAN2.4GHz   |          | 2.477      | 0        | -0.0518               | 0.0384  | -0.204 |                  |                   |               |                  |



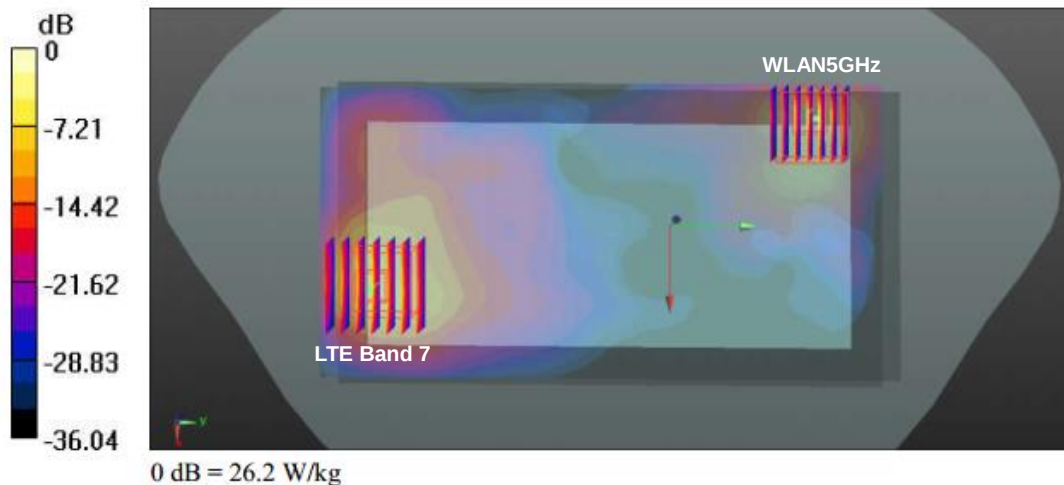
| Case #31 | Band         | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |         |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|--------------|----------|------------|----------|-----------------------|---------|--------|------------------|-------------------|---------------|------------------|
|          |              |          |            |          | X                     | Y       | Z      |                  |                   |               |                  |
|          | CDMA2000 BC1 | Back     | 2.25       | 0        | -0.0005               | -0.0775 | -0.206 | 153.3            | 4.73              | 0.07          | Not required     |
|          | WLAN5GHz     |          | 2.476      | 0        | -0.057                | 0.065   | -0.207 |                  |                   |               |                  |



| Case #32 | Band       | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |        |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|------------|----------|------------|----------|-----------------------|--------|--------|------------------|-------------------|---------------|------------------|
|          | LTE Band 7 | Back     | 2.274      | 0        | X                     | Y      | Z      |                  |                   |               |                  |
|          | WLAN2.4GHz |          | 2.477      | 0        | -0.0518               | 0.0384 | -0.204 | 129.4            | 4.75              | 0.08          | Not required     |



| Case #33 | Band       | Position | SAR (W/kg) | Gap (mm) | SAR peak location (m) |       |        | 3D distance (mm) | Summed SAR (W/kg) | SPLSR Results | Simultaneous SAR |
|----------|------------|----------|------------|----------|-----------------------|-------|--------|------------------|-------------------|---------------|------------------|
|          | LTE Band 7 | Back     | 2.274      | 0        | X                     | Y     | Z      |                  |                   |               |                  |
|          | WLAN5GHz   |          | 2.476      | 0        | -0.057                | 0.065 | -0.207 | 155.9            | 4.75              | 0.07          | Not required     |



## **17. Supplemental Tuner Tests Results**

### **General Note:**

1. The following test procedure was followed to demonstrate that the SAR results in this report represent the appropriate SAR test conditions. For bands with dynamic tuning implemented, SAR will be measured according to the required FCC SAR test procedures with the dynamic tuner active to allow the device to automatically tune to the antenna state for the respective RF exposure test configurations. Additional single point SAR time-sweep measurements will be evaluated for other tuner states to determine that the other tuner configurations would result in equivalent or lower SAR values. The additional tuner hardware has no influence to the antenna characteristics, other than impedance matching.
2. To evaluate all of the tuner states, the 112 tuner states for each WWAN antenna 1, each WWAN antenna 2 and each WWAN antenna 3 are divided evenly among band, mode and exposure combinations so that at least one single point SAR measurement is measured in each configuration. Single point time-sweep measurements will be performed at the peak SAR location determined by the zoom scan of the configuration with the highest reported SAR for each combination. The tuner state will be established remotely so that the device is not moved for the entire series of single point SAR for the tuner states in each combination. The SAR probe will remain stationary at the same position throughout the entire series of single point measurements for each combination. The bands which are dynamically tuned are split into three separate antennas, so each antenna system will have its own test plan to cover the corresponding 112 tuner states for each WWAN antenna 1, each WWAN antenna 2 and each WWAN antenna 3.
3. For WWAN Antenna 2, only LTE band 7/38/41 supports dynamic antenna tune.
4. The operational decryption contains more information about the design and implementation of the dynamic antenna tuning.
5. This device supports both LTE B4/17/38/2 and B66/12/41/25. Since the supported frequency span for LTE B4/17/38/2 falls completely within the supports frequency span for LTE B66/12/41/25, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B66/12/41/25.

### **17.1 Supplemental Head & Body SAR Results**

Please refer to Appendix D.

**Test Engineer :** Changlin Huang, Bin He, Mengming Dai



## **18. 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 and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.

## **19. 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 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.
- [6] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [7] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [8] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.
- [9] FCC KDB 248227 D01 v02r02, "SAR Guidance for IEEE 802.11 (WiFi) Transmitters", Oct 2015.
- [10] FCC KDB 941225 D01 v03r01, "3G SAR MEAUREMENT PROCEDURES", Oct 2015
- [11] FCC KDB 941225 D05 v02r05, "SAR Evaluation Considerations for LTE Devices", Dec 2015
- [12] FCC KDB 941225 D05A v01r02, "Rel. 10 LTE SAR Test Guidance and KDB Inquiries", Oct 2015
- [13] FCC KDB 941225 D06 v02r01, "SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities", Oct 2015.

-----THE END-----



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## ***Appendix A. Plots of System Performance Check***

The plots are shown as follows.

## System Check\_Head\_750MHz

### DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL\_750\_190728 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.88$  S/m;  $\epsilon_r = 40.797$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.5 °C ; Liquid Temperature : 22.6 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(10, 10, 10); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.57 W/kg

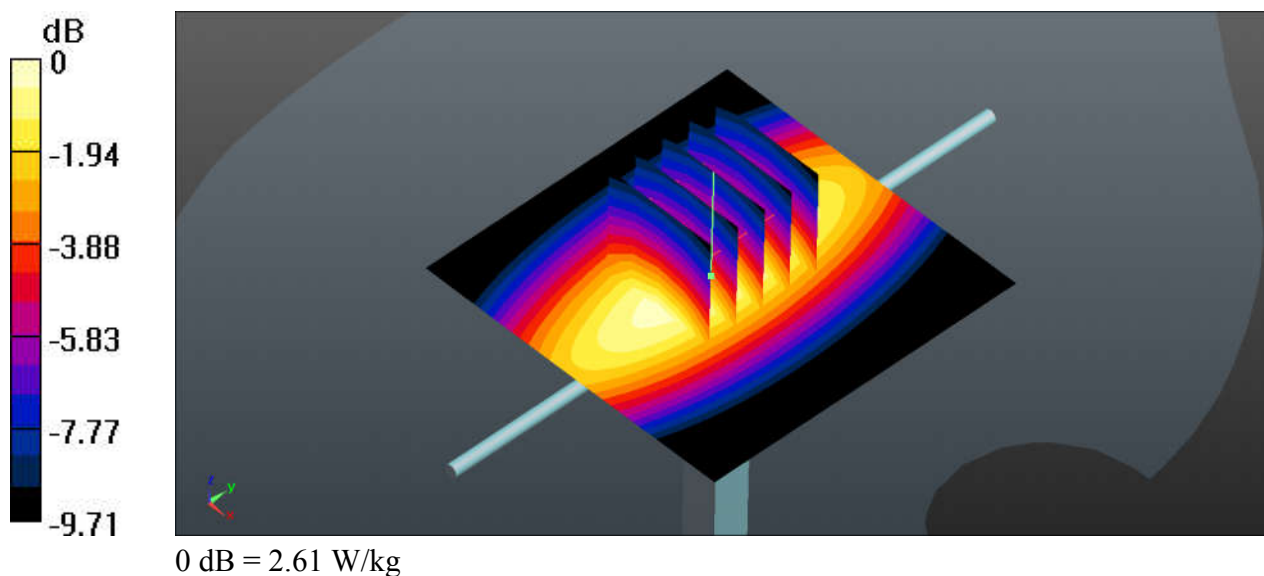
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 55.14 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 2.99 W/kg

**SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.43 W/kg**

Maximum value of SAR (measured) = 2.61 W/kg



## System Check\_Head\_750MHz

### DUT: D750V3-SN:1099

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1

Medium: HSL\_750\_190805 Medium parameters used:  $f = 750$  MHz;  $\sigma = 0.889$  S/m;  $\epsilon_r = 40.877$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C; Liquid Temperature : 22.4 °C

#### DASY5 Configuration:

- Probe: ES3DV3 - SN3191; ConvF(6.59, 6.59, 6.59); Calibrated: 2019.01.29;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1437; Calibrated: 2018.10.15
- Phantom: SAM2; Type: QD000P40CD; Serial: TP:1671
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.60 W/kg

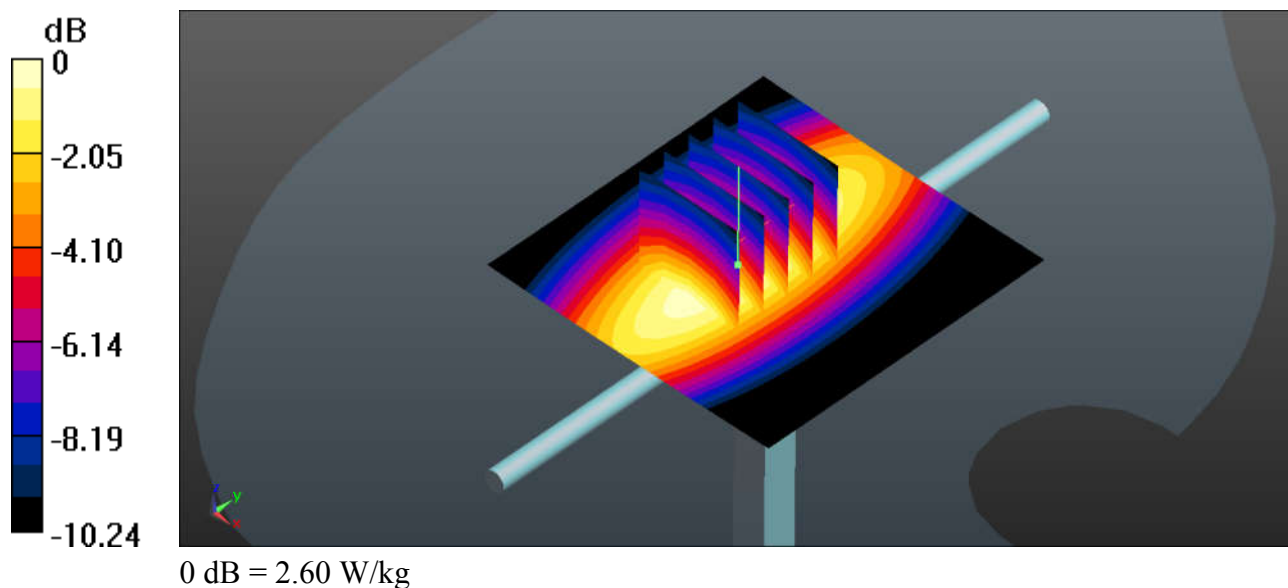
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.20 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.26 W/kg

**SAR(1 g) = 2.16 W/kg; SAR(10 g) = 1.43 W/kg**

Maximum value of SAR (measured) = 2.74 W/kg



## System Check\_Head\_835MHz

**DUT: D835V2-SN:4d162**

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_190719 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.927$  S/m;  $\epsilon_r = 42.674$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.3 °C; Liquid Temperature : 22.9 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(9.57, 9.57, 9.57); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 3.21 W/kg

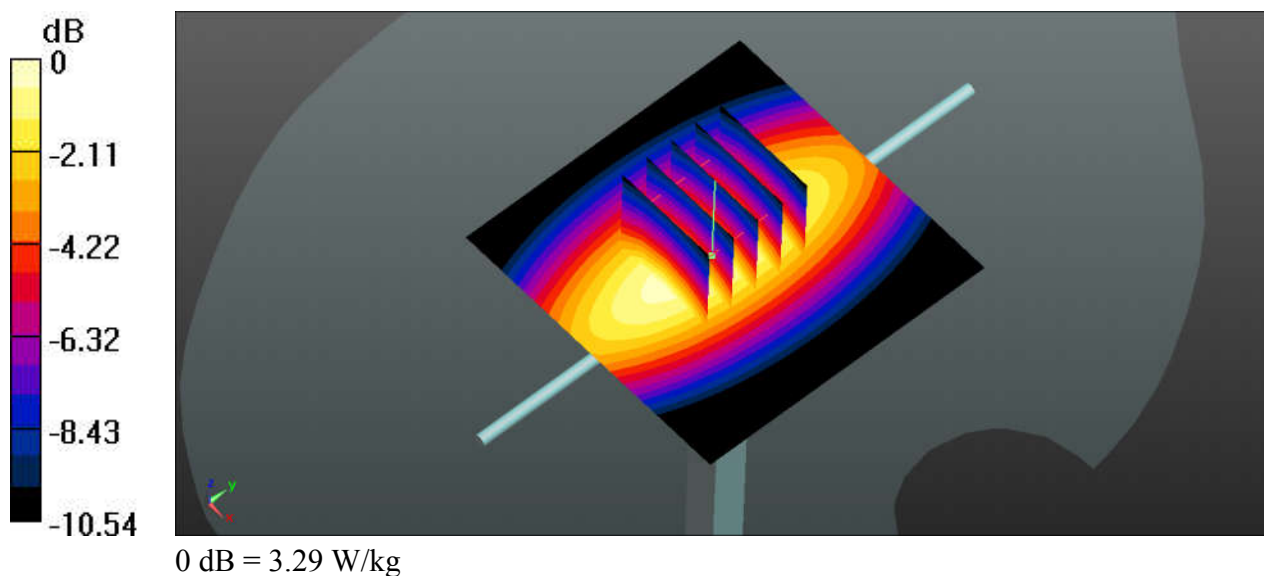
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 59.91 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.85 W/kg

**SAR(1 g) = 2.59 W/kg; SAR(10 g) = 1.7 W/kg**

Maximum value of SAR (measured) = 3.29 W/kg



## System Check\_Head\_835MHz

### DUT: D835V2-SN:4d162

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL\_835\_190729 Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.897$  S/m;  $\epsilon_r = 40.781$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.4 °C; Liquid Temperature : 22.7 °C

#### DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(9.57, 9.57, 9.57); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 3.12 W/kg

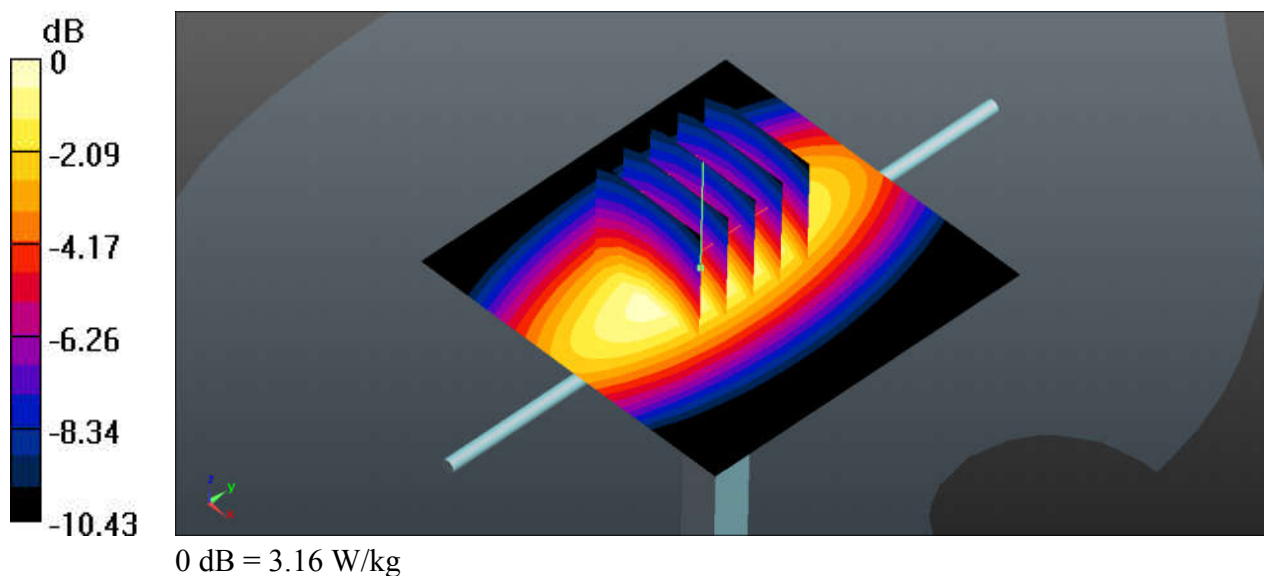
**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 60.13 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 3.67 W/kg

**SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.66 W/kg**

Maximum value of SAR (measured) = 3.16 W/kg



## System Check\_Head\_1750MHz

**DUT: D1750V2-SN:1137**

Communication System: UID 0, CW; Frequency: 1750 MHz; Duty Cycle: 1:1

Medium: HSL\_1750\_190726 Medium parameters used:  $f = 1750$  MHz;  $\sigma = 1.392$  S/m;  $\epsilon_r = 39.95$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature : 23.7 °C; Liquid Temperature : 22.9 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3819; ConvF(8.54, 8.54, 8.54); Calibrated: 2019.03.01;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn715; Calibrated: 2019.01.23
- Phantom: SAM (Front) with CRP v5.0; Type: QD000P40CD; Serial: TP:1795
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Pin=250mW/Area Scan (61x61x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.5 W/kg

**Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 95.50 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 16.4 W/kg

**SAR(1 g) = 9.14 W/kg; SAR(10 g) = 4.86 W/kg**

Maximum value of SAR (measured) = 12.7 W/kg

