| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 100.00 | 127.26 | 29.88 | 1.17 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 114.89 | 24.38 | | 100.0 | |
| | | Z | 100.00 | 122.11 | 27.79 | | 100.0 | |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | X | 21.21 | 99.84 | 27.91 | 5.30 | 70.0 | ± 9.6 % |
| | | Y | 19.09 | 97.43 | 26.61 | | 70.0 | |
| | | Z | 13.98 | 92.26 | 25.56 | | 70.0 | |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | X | 14.93 | 98.23 | 25.94 | 1.88 | 100.0 | ± 9.6 % |
| | | Y | 7.46 | 86.71 | 21.62 | | 100.0 | |
| | | Z | 7.45 | 87.10 | 22.42 | | 100.0 | |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5) | X | 7.98 | 90.77 | 23.49 | 1.17 | 100.0 | ± 9.6 % |
| | | Y | 3.97 | 79.58 | 18.90 | | 100.0 | |
| | | Z | 4.48 | 81.52 | 20.27 | | 100.0 | |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 26.12 | 103.52 | 29.04 | 5.30 | 70.0 | ± 9.6 % |
| | | Y | 24.16 | 101.42 | 27.84 | | 70.0 | |
| | | Z | 15.99 | 94.67 | 26.38 | | 70.0 | |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 14.25 | 97.55 | 25.70 | 1.88 | 100.0 | ± 9.6 % |
| | | Y | 7.04 | 85.92 | 21.32 | | 100.0 | |
| | | Z | 7.24 | 86.72 | 22.25 | | 100.0 | |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 8.53 | 92.07 | 23.99 | 1.17 | 100.0 | ± 9.6 % |
| | | Y | 4.13 | 80.37 | 19.27 | | 100.0 | |
| | | Z | 4.65 | 82.31 | 20.62 | | 100.0 | |
| 10039-CAB | CDMA2000 (1xRTT, RC1) | X | 2.96 | 79.09 | 19.43 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.75 | 71.10 | 15.36 | | 150.0 | |
| | | Z | 2.10 | 73.23 | 16.92 | | 150.0 | |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 53.77 | 109.05 | 28.70 | 7.78 | 50.0 | ± 9.6 % |
| | | Y | 79.10 | 112.95 | 28.86 | | 50.0 | |
| | | Z | 23.46 | 96.42 | 25.41 | | 50.0 | |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.00 | 123.18 | 1.26 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.02 | 127.84 | 0.07 | | 150.0 | |
| | | Z | 0.00 | 110.77 | 4.52 | | 150.0 | |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 11.41 | 83.11 | 24.20 | 13.80 | 25.0 | ± 9.6 % |
| | | Y | 12.66 | 85.48 | 24.49 | | 25.0 | |
| | | Z | 10.45 | 80.79 | 23.56 | | 25.0 | |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 13.41 | 87.55 | 24.40 | 10.79 | 40.0 | ± 9.6 % |
| | | Y | 15.25 | 89.77 | 24.55 | | 40.0 | |
| | | Z | 11.61 | 84.53 | 23.55 | | 40.0 | |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | X | 13.37 | 87.98 | 25.03 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 13.72 | 88.51 | 24.74 | | 50.0 | |
| | | Z | 11.72 | 85.02 | 24.05 | | 50.0 | |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 11.14 | 91.28 | 29.72 | 6.55 | 100.0 | ± 9.6 % |
| | | Y | 9.52 | 87.98 | 28.26 | | 100.0 | |
| | | Z | 10.41 | 88.91 | 28.62 | | 100.0 | |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.60 | 69.38 | 18.31 | 0.61 | 110.0 | ± 9.6 % |
| | | Y | 1.43 | 67.15 | 16.67 | | 110.0 | |
| | | Z | 1.53 | 67.97 | 17.25 | | 110.0 | |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 100.00 | 133.15 | 34.60 | 1.30 | 110.0 | ± 9.6 % |
| | | Y | 100.00 | 128.63 | 32.36 | | 110.0 | |
| | | Z | 100.00 | 130.16 | 33.31 | | 110.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 24.68 | 111.64 | 31.63 | 2.04 | 110.0 | ± 9.6 % |
| | | Y | 11.26 | 97.49 | 27.04 | | 110.0 | |
| | | Z | 10.95 | 96.57 | 26.98 | | 110.0 | |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 4.90 | 67.24 | 16.94 | 0.49 | 100.0 | ± 9.6 % |
| | | Y | 4.79 | 66.94 | 16.63 | | 100.0 | |
| | | Z | 4.90 | 67.05 | 16.74 | | 100.0 | |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 4.95 | 67.42 | 17.09 | 0.72 | 100.0 | ± 9.6 % |
| | | Y | 4.84 | 67.10 | 16.77 | | 100.0 | |
| | | Z | 4.95 | 67.23 | 16.89 | | 100.0 | |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | X | 5.28 | 67.75 | 17.35 | 0.86 | 100.0 | ± 9.6 % |
| | | Y | 5.16 | 67.43 | 17.04 | | 100.0 | |
| | | Z | 5.30 | 67.59 | 17.17 | | 100.0 | |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps) | X | 5.19 | 67.81 | 17.53 | 1.21 | 100.0 | ± 9.6 % |
| | | Y | 5.07 | 67.47 | 17.22 | | 100.0 | |
| | | Z | 5.21 | 67.65 | 17.35 | | 100.0 | |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps) | X | 5.25 | 67.95 | 17.76 | 1.46 | 100.0 | ± 9.6 % |
| | | Y | 5.12 | 67.61 | 17.44 | | 100.0 | |
| | | Z | 5.27 | 67.80 | 17.59 | | 100.0 | |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps) | X | 5.57 | 68.10 | 18.21 | 2.04 | 100.0 | ± 9.6 % |
| | | Y | 5.44 | 67.80 | 17.92 | | 100.0 | |
| | | Z | 5.60 | 67.97 | 18.05 | | 100.0 | |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | X | 5.73 | 68.50 | 18.60 | 2.55 | 100.0 | ± 9.6 % |
| | | Y | 5.58 | 68.13 | 18.28 | | 100.0 | |
| | | Z | 5.77 | 68.41 | 18.46 | | 100.0 | |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps) | X | 5.81 | 68.43 | 18.78 | 2.67 | 100.0 | ± 9.6 % |
| | | Y | 5.66 | 68.09 | 18.46 | | 100.0 | |
| | | Z | 5.84 | 68.33 | 18.64 | | 100.0 | |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps) | X | 5.34 | 67.73 | 18.04 | 1.99 | 100.0 | ± 9.6 % |
| | | Y | 5.22 | 67.44 | 17.75 | | 100.0 | |
| | | Z | 5.35 | 67.60 | 17.87 | | 100.0 | |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.42 | 68.35 | 18.39 | 2.30 | 100.0 | ± 9.6 % |
| | | Y | 5.29 | 68.00 | 18.07 | | 100.0 | |
| | | Z | 5.44 | 68.21 | 18.22 | | 100.0 | |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.57 | 68.74 | 18.83 | 2.83 | 100.0 | ± 9.6 % |
| | | Y | 5.42 | 68.36 | 18.50 | | 100.0 | |
| | | Z | 5.60 | 68.62 | 18.66 | | 100.0 | |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.61 | 68.84 | 19.10 | 3.30 | 100.0 | ± 9.6 % |
| | | Y | 5.46 | 68.44 | 18.75 | | 100.0 | |
| | | Z | 5.65 | 68.74 | 18.95 | | 100.0 | |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.79 | 69.40 | 19.63 | 3.82 | 90.0 | ± 9.6 % |
| | | Y | 5.61 | 68.91 | 19.24 | | 90.0 | |
| | | Z | 5.85 | 69.35 | 19.51 | | 90.0 | |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.80 | 69.20 | 19.75 | 4.15 | 90.0 | ± 9.6 % |
| | | Y | 5.64 | 68.73 | 19.37 | | 90.0 | |
| | | Z | 5.86 | 69.15 | 19.63 | | 90.0 | |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.84 | 69.30 | 19.86 | 4.30 | 90.0 | ± 9.6 % |
| | | Y | 5.68 | 68.82 | 19.47 | | 90.0 | |
| | | Z | 5.90 | 69.25 | 19.74 | | 90.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10081-CAB | CDMA2000 (1xRTT, RC3) | X | 1.29 | 72.14 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.81 | 65.51 | 12.24 | | 150.0 | |
| | | Z | 0.99 | 67.68 | 14.05 | | 150.0 | |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 2.36 | 64.73 | 9.48 | 4.77 | 80.0 | ± 9.6 % |
| | | Y | 1.97 | 63.15 | 8.18 | | 80.0 | |
| | | Z | 2.45 | 64.78 | 9.67 | | 80.0 | |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 100.00 | 119.65 | 31.37 | 6.56 | 60.0 | ± 9.6 % |
| | | Y | 100.00 | 117.49 | 29.99 | | 60.0 | |
| | | Z | 45.52 | 107.81 | 28.61 | | 60.0 | |
| 10097-CAB | UMTS-FDD (HSDPA) | X | 2.00 | 69.44 | 16.95 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.78 | 67.32 | 15.42 | | 150.0 | |
| | | Z | 1.87 | 67.93 | 15.97 | | 150.0 | |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2) | X | 1.97 | 69.46 | 16.95 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.74 | 67.28 | 15.38 | | 150.0 | |
| | | Z | 1.84 | 67.91 | 15.95 | | 150.0 | |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 21.45 | 104.88 | 36.18 | 9.56 | 60.0 | ± 9.6 % |
| | | Y | 18.89 | 102.07 | 34.98 | | 60.0 | |
| | | Z | 18.39 | 100.05 | 34.32 | | 60.0 | |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | X | 3.55 | 72.46 | 17.74 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.14 | 70.29 | 16.48 | | 150.0 | |
| | | Z | 3.35 | 71.19 | 16.95 | | 150.0 | |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | X | 3.45 | 68.62 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.26 | 67.61 | 15.85 | | 150.0 | |
| | | Z | 3.39 | 68.08 | 16.14 | | 150.0 | |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | X | 3.54 | 68.46 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.37 | 67.56 | 15.95 | | 150.0 | |
| | | Z | 3.49 | 67.97 | 16.20 | | 150.0 | |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | X | 8.98 | 78.82 | 21.57 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.50 | 78.15 | 21.17 | | 65.0 | |
| | | Z | 8.60 | 77.58 | 20.95 | | 65.0 | |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | X | 8.85 | 77.44 | 21.89 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.45 | 76.83 | 21.49 | | 65.0 | |
| | | Z | 8.72 | 76.72 | 21.48 | | 65.0 | |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | X | 8.33 | 76.23 | 21.66 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.79 | 75.22 | 21.09 | | 65.0 | |
| | | Z | 7.71 | 74.28 | 20.69 | | 65.0 | |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | X | 3.11 | 71.64 | 17.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.75 | 69.54 | 16.32 | | 150.0 | |
| | | Z | 2.95 | 70.37 | 16.78 | | 150.0 | |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | X | 3.12 | 68.50 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.92 | 67.41 | 15.75 | | 150.0 | |
| | | Z | 3.06 | 67.87 | 16.07 | | 150.0 | |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | X | 2.56 | 70.84 | 17.38 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.24 | 68.61 | 15.94 | | 150.0 | |
| | | Z | 2.42 | 69.44 | 16.48 | | 150.0 | |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | X | 2.84 | 69.29 | 16.96 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.62 | 68.02 | 15.99 | | 150.0 | |
| | | Z | 2.75 | 68.36 | 16.33 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | X | 3.23 | 68.35 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.05 | 67.38 | 15.81 | | 150.0 | |
| | | Z | 3.18 | 67.77 | 16.10 | | 150.0 | |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | X | 2.98 | 69.28 | 17.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.77 | 68.14 | 16.13 | | 150.0 | |
| | | Z | 2.90 | 68.40 | 16.43 | | 150.0 | |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | X | 5.25 | 67.55 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.16 | 67.27 | 16.41 | | 150.0 | |
| | | Z | 5.23 | 67.36 | 16.47 | | 150.0 | |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM) | X | 5.62 | 67.87 | 16.84 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.53 | 67.61 | 16.59 | | 150.0 | |
| | | Z | 5.61 | 67.68 | 16.64 | | 150.0 | |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.38 | 67.84 | 16.74 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.28 | 67.54 | 16.47 | | 150.0 | |
| | | Z | 5.37 | 67.64 | 16.53 | | 150.0 | |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK) | X | 5.26 | 67.57 | 16.70 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.15 | 67.22 | 16.40 | | 150.0 | |
| | | Z | 5.24 | 67.39 | 16.51 | | 150.0 | |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM) | X | 5.70 | 68.05 | 16.94 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.61 | 67.82 | 16.70 | | 150.0 | |
| | | Z | 5.67 | 67.81 | 16.71 | | 150.0 | |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM) | X | 5.36 | 67.79 | 16.73 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.26 | 67.48 | 16.45 | | 150.0 | |
| | | Z | 5.34 | 67.59 | 16.52 | | 150.0 | |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | X | 3.59 | 68.46 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.41 | 67.56 | 15.87 | | 150.0 | |
| | | Z | 3.54 | 67.97 | 16.13 | | 150.0 | |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | X | 3.70 | 68.46 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.53 | 67.64 | 16.03 | | 150.0 | |
| | | Z | 3.65 | 67.99 | 16.26 | | 150.0 | |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | X | 2.36 | 71.08 | 17.31 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.01 | 68.49 | 15.62 | | 150.0 | |
| | | Z | 2.20 | 69.37 | 16.30 | | 150.0 | |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | X | 2.76 | 70.34 | 17.00 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.47 | 68.62 | 15.73 | | 150.0 | |
| | | Z | 2.62 | 69.02 | 16.23 | | 150.0 | |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | X | 2.54 | 68.16 | 15.50 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.28 | 66.60 | 14.27 | | 150.0 | |
| | | Z | 2.46 | 67.23 | 14.93 | | 150.0 | |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | X | 1.75 | 69.86 | 15.18 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.29 | 65.55 | 12.27 | | 150.0 | |
| | | Z | 1.55 | 67.61 | 14.05 | | 150.0 | |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 4.07 | 76.05 | 17.30 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.52 | 69.20 | 13.62 | | 150.0 | |
| | | Z | 3.50 | 73.50 | 16.33 | | 150.0 | |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 5.72 | 80.95 | 19.32 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.13 | 72.10 | 15.05 | | 150.0 | |
| | | Z | 4.43 | 76.91 | 17.88 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | X | 3.13 | 68.56 | 16.60 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.93 | 67.47 | 15.80 | | 150.0 | |
| | | Z | 3.07 | 67.93 | 16.12 | | 150.0 | |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | X | 3.24 | 68.40 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.05 | 67.43 | 15.85 | | 150.0 | |
| | | Z | 3.18 | 67.82 | 16.13 | | 150.0 | |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | X | 9.59 | 81.21 | 22.61 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 9.21 | 80.79 | 22.27 | | 65.0 | |
| | | Z | 9.05 | 79.62 | 21.87 | | 65.0 | |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | X | 8.53 | 77.77 | 21.82 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.07 | 77.03 | 21.32 | | 65.0 | |
| | | Z | 8.36 | 76.93 | 21.37 | | 65.0 | |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | X | 8.87 | 78.41 | 22.41 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.48 | 77.88 | 22.02 | | 65.0 | |
| | | Z | 8.68 | 77.54 | 21.94 | | 65.0 | |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | X | 2.63 | 71.34 | 17.67 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.29 | 69.04 | 16.21 | | 150.0 | |
| | | Z | 2.48 | 69.88 | 16.75 | | 150.0 | |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | X | 2.84 | 69.30 | 16.97 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.62 | 68.03 | 16.00 | | 150.0 | |
| | | Z | 2.75 | 68.36 | 16.34 | | 150.0 | |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | X | 2.26 | 71.67 | 17.44 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.86 | 68.59 | 15.46 | | 150.0 | |
| | | Z | 2.07 | 69.64 | 16.29 | | 150.0 | |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | X | 2.42 | 69.16 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.11 | 67.12 | 14.31 | | 150.0 | |
| | | Z | 2.30 | 67.87 | 15.10 | | 150.0 | |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | X | 2.99 | 69.33 | 17.05 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.78 | 68.20 | 16.17 | | 150.0 | |
| | | Z | 2.90 | 68.44 | 16.46 | | 150.0 | |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | X | 2.55 | 69.60 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.22 | 67.56 | 14.60 | | 150.0 | |
| | | Z | 2.41 | 68.28 | 15.37 | | 150.0 | |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | X | 3.02 | 70.16 | 17.19 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.77 | 68.66 | 16.17 | | 150.0 | |
| | | Z | 2.91 | 69.14 | 16.50 | | 150.0 | |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | X | 3.13 | 68.32 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.95 | 67.34 | 15.78 | | 150.0 | |
| | | Z | 3.07 | 67.70 | 16.08 | | 150.0 | |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | X | 3.23 | 68.35 | 16.60 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.06 | 67.45 | 15.88 | | 150.0 | |
| | | Z | 3.18 | 67.74 | 16.14 | | 150.0 | |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | X | 4.02 | 71.10 | 20.08 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.79 | 70.19 | 19.37 | | 150.0 | |
| | | Z | 4.03 | 70.69 | 19.72 | | 150.0 | |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 5.24 | 74.71 | 20.79 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.82 | 73.39 | 19.92 | | 150.0 | |
| | | Z | 5.25 | 74.14 | 20.39 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.76 | 76.76 | 21.96 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 5.36 | 75.66 | 21.24 | | 150.0 | |
| | | Z | 5.73 | 75.99 | 21.47 | | 150.0 | |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | X | 3.69 | 72.72 | 20.82 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.33 | 70.78 | 19.63 | | 150.0 | |
| | | Z | 3.78 | 72.61 | 20.53 | | 150.0 | |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | X | 5.76 | 80.54 | 23.62 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.94 | 77.74 | 22.22 | | 150.0 | |
| | | Z | 5.83 | 79.90 | 23.09 | | 150.0 | |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | X | 4.61 | 75.69 | 20.76 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.94 | 72.92 | 19.25 | | 150.0 | |
| | | Z | 4.70 | 75.28 | 20.35 | | 150.0 | |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | X | 36.99 | 114.19 | 35.08 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 22.97 | 105.21 | 32.24 | | 65.0 | |
| | | Z | 26.68 | 106.36 | 32.56 | | 65.0 | |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | X | 41.01 | 110.69 | 32.32 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 35.83 | 108.35 | 31.36 | | 65.0 | |
| | | Z | 28.00 | 102.66 | 29.85 | | 65.0 | |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | X | 30.73 | 104.07 | 29.95 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 27.27 | 102.14 | 29.08 | | 65.0 | |
| | | Z | 22.20 | 97.35 | 27.81 | | 65.0 | |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | X | 3.64 | 72.35 | 20.56 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.28 | 70.42 | 19.36 | | 150.0 | |
| | | Z | 3.72 | 72.25 | 20.28 | | 150.0 | |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | X | 5.77 | 80.56 | 23.63 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.95 | 77.76 | 22.23 | | 150.0 | |
| | | Z | 5.84 | 79.92 | 23.10 | | 150.0 | |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | X | 3.67 | 72.53 | 20.66 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.31 | 70.60 | 19.46 | | 150.0 | |
| | | Z | 3.76 | 72.42 | 20.38 | | 150.0 | |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | X | 5.68 | 80.23 | 23.47 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.88 | 77.46 | 22.08 | | 150.0 | |
| | | Z | 5.74 | 79.60 | 22.95 | | 150.0 | |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | X | 5.14 | 77.96 | 22.04 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.38 | 75.13 | 20.57 | | 150.0 | |
| | | Z | 5.21 | 77.41 | 21.56 | | 150.0 | |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | X | 4.59 | 75.59 | 20.70 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.92 | 72.83 | 19.19 | | 150.0 | |
| | | Z | 4.68 | 75.18 | 20.29 | | 150.0 | |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | X | 3.66 | 72.51 | 20.66 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.30 | 70.58 | 19.46 | | 150.0 | |
| | | Z | 3.75 | 72.41 | 20.37 | | 150.0 | |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | X | 5.67 | 80.21 | 23.46 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.87 | 77.43 | 22.07 | | 150.0 | |
| | | Z | 5.73 | 79.57 | 22.94 | | 150.0 | |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | X | 4.58 | 75.56 | 20.68 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.92 | 72.80 | 19.18 | | 150.0 | |
| | | Z | 4.67 | 75.15 | 20.27 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | X | 3.68 | 72.56 | 20.68 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.32 | 70.63 | 19.48 | | 150.0 | |
| | | Z | 3.77 | 72.45 | 20.39 | | 150.0 | |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | X | 5.70 | 80.29 | 23.50 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.90 | 77.51 | 22.11 | | 150.0 | |
| | | Z | 5.76 | 79.65 | 22.97 | | 150.0 | |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | X | 4.61 | 75.64 | 20.72 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.94 | 72.88 | 19.21 | | 150.0 | |
| | | Z | 4.69 | 75.23 | 20.31 | | 150.0 | |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | X | 3.69 | 72.61 | 20.73 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.33 | 70.68 | 19.54 | | 150.0 | |
| | | Z | 3.77 | 72.50 | 20.44 | | 150.0 | |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | X | 5.93 | 81.11 | 23.91 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 5.09 | 78.33 | 22.53 | | 150.0 | |
| | | Z | 5.99 | 80.44 | 23.37 | | 150.0 | |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | X | 4.73 | 76.16 | 21.02 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.04 | 73.37 | 19.51 | | 150.0 | |
| | | Z | 4.82 | 75.73 | 20.60 | | 150.0 | |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK) | X | 4.67 | 66.99 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.56 | 66.66 | 16.13 | | 150.0 | |
| | | Z | 4.66 | 66.78 | 16.26 | | 150.0 | |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.87 | 67.36 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.75 | 67.00 | 16.25 | | 150.0 | |
| | | Z | 4.87 | 67.15 | 16.37 | | 150.0 | |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.91 | 67.37 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.79 | 67.03 | 16.27 | | 150.0 | |
| | | Z | 4.91 | 67.16 | 16.38 | | 150.0 | |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | X | 4.69 | 67.10 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.58 | 66.74 | 16.16 | | 150.0 | |
| | | Z | 4.69 | 66.88 | 16.30 | | 150.0 | |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM) | X | 4.89 | 67.38 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.77 | 67.03 | 16.26 | | 150.0 | |
| | | Z | 4.88 | 67.17 | 16.38 | | 150.0 | |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM) | X | 4.92 | 67.39 | 16.60 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.80 | 67.05 | 16.28 | | 150.0 | |
| | | Z | 4.91 | 67.18 | 16.39 | | 150.0 | |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.64 | 67.11 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.53 | 66.75 | 16.12 | | 150.0 | |
| | | Z | 4.64 | 66.90 | 16.26 | | 150.0 | |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM) | X | 4.88 | 67.37 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.76 | 67.01 | 16.26 | | 150.0 | |
| | | Z | 4.88 | 67.17 | 16.38 | | 150.0 | |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM) | X | 4.92 | 67.32 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.80 | 66.98 | 16.27 | | 150.0 | |
| | | Z | 4.92 | 67.11 | 16.38 | | 150.0 | |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK) | X | 5.23 | 67.59 | 16.70 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.12 | 67.23 | 16.39 | | 150.0 | |
| | | Z | 5.22 | 67.42 | 16.51 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM) | X | 5.61 | 67.92 | 16.89 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.46 | 67.48 | 16.54 | | 150.0 | |
| | | Z | 5.61 | 67.78 | 16.72 | | 150.0 | |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.28 | 67.68 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.17 | 67.32 | 16.37 | | 150.0 | |
| | | Z | 5.27 | 67.52 | 16.48 | | 150.0 | |
| 10225-CAB | UMTS-FDD (HSPA+) | X | 2.96 | 66.82 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.82 | 66.09 | 15.31 | | 150.0 | |
| | | Z | 2.93 | 66.33 | 15.63 | | 150.0 | |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | X | 43.59 | 111.94 | 32.75 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 38.77 | 109.92 | 31.88 | | 65.0 | |
| | | Z | 29.30 | 103.58 | 30.20 | | 65.0 | |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | X | 32.72 | 105.33 | 30.40 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 30.31 | 104.10 | 29.73 | | 65.0 | |
| | | Z | 23.58 | 98.50 | 28.23 | | 65.0 | |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | X | 45.04 | 118.57 | 36.38 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 33.63 | 112.96 | 34.54 | | 65.0 | |
| | | Z | 30.07 | 109.15 | 33.47 | | 65.0 | |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | X | 40.99 | 110.67 | 32.33 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 35.91 | 108.38 | 31.38 | | 65.0 | |
| | | Z | 28.02 | 102.65 | 29.86 | | 65.0 | |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | X | 31.17 | 104.37 | 30.06 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 28.46 | 102.90 | 29.31 | | 65.0 | |
| | | Z | 22.72 | 97.78 | 27.95 | | 65.0 | |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | X | 42.43 | 117.25 | 35.96 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 31.37 | 111.47 | 34.05 | | 65.0 | |
| | | Z | 28.77 | 108.18 | 33.13 | | 65.0 | |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | X | 40.99 | 110.68 | 32.33 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 35.90 | 108.38 | 31.38 | | 65.0 | |
| | | Z | 28.01 | 102.65 | 29.86 | | 65.0 | |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | X | 31.21 | 104.41 | 30.07 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 28.46 | 102.91 | 29.32 | | 65.0 | |
| | | Z | 22.74 | 97.80 | 27.96 | | 65.0 | |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | X | 39.80 | 115.77 | 35.45 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 29.32 | 109.94 | 33.51 | | 65.0 | |
| | | Z | 27.42 | 107.07 | 32.71 | | 65.0 | |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | X | 41.16 | 110.77 | 32.35 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 36.04 | 108.46 | 31.40 | | 65.0 | |
| | | Z | 28.08 | 102.71 | 29.87 | | 65.0 | |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | X | 31.50 | 104.54 | 30.10 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 28.73 | 103.05 | 29.35 | | 65.0 | |
| | | Z | 22.90 | 97.90 | 27.98 | | 65.0 | |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | X | 42.99 | 117.54 | 36.03 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 31.67 | 111.68 | 34.11 | | 65.0 | |
| | | Z | 29.03 | 108.38 | 33.18 | | 65.0 | |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | X | 41.04 | 110.71 | 32.33 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 35.91 | 108.40 | 31.38 | | 65.0 | |
| | | Z | 28.02 | 102.67 | 29.86 | | 65.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | X | 31.24 | 104.44 | 30.08 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 28.46 | 102.92 | 29.32 | | 65.0 | |
| | | Z | 22.74 | 97.82 | 27.96 | | 65.0 | |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | X | 42.83 | 117.47 | 36.01 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 31.56 | 111.62 | 34.09 | | 65.0 | |
| | | Z | 28.94 | 108.32 | 33.17 | | 65.0 | |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 13.21 | 88.13 | 28.12 | 6.98 | 65.0 | ± 9.6 % |
| | | Y | 12.19 | 86.75 | 27.34 | | 65.0 | |
| | | Z | 12.93 | 86.92 | 27.56 | | 65.0 | |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 11.82 | 85.64 | 27.08 | 6.98 | 65.0 | ± 9.6 % |
| | | Y | 11.88 | 86.18 | 27.05 | | 65.0 | |
| | | Z | 11.71 | 84.70 | 26.62 | | 65.0 | |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | X | 9.69 | 83.18 | 27.04 | 6.98 | 65.0 | ± 9.6 % |
| | | Y | 8.48 | 80.58 | 25.71 | | 65.0 | |
| | | Z | 9.71 | 82.55 | 26.66 | | 65.0 | |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | X | 10.16 | 81.71 | 21.73 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 9.31 | 80.28 | 20.70 | | 65.0 | |
| | | Z | 9.66 | 80.44 | 21.31 | | 65.0 | |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | X | 9.99 | 81.19 | 21.49 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 9.12 | 79.71 | 20.44 | | 65.0 | |
| | | Z | 9.56 | 80.04 | 21.12 | | 65.0 | |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | X | 10.26 | 84.67 | 22.74 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 9.22 | 82.91 | 21.64 | | 65.0 | |
| | | Z | 9.02 | 82.03 | 21.79 | | 65.0 | |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | X | 8.13 | 78.66 | 21.05 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.56 | 77.60 | 20.25 | | 65.0 | |
| | | Z | 7.81 | 77.51 | 20.59 | | 65.0 | |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | X | 8.10 | 78.15 | 20.84 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.50 | 77.03 | 20.01 | | 65.0 | |
| | | Z | 7.84 | 77.14 | 20.44 | | 65.0 | |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | X | 11.10 | 86.20 | 23.88 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 10.38 | 85.15 | 23.14 | | 65.0 | |
| | | Z | 9.69 | 83.27 | 22.77 | | 65.0 | |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | X | 8.90 | 80.26 | 22.85 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.50 | 79.72 | 22.41 | | 65.0 | |
| | | Z | 8.55 | 78.98 | 22.26 | | 65.0 | |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | X | 8.43 | 78.18 | 21.77 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.97 | 77.44 | 21.21 | | 65.0 | |
| | | Z | 8.21 | 77.20 | 21.30 | | 65.0 | |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | X | 10.55 | 84.69 | 23.95 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 10.10 | 84.18 | 23.52 | | 65.0 | |
| | | Z | 9.56 | 82.30 | 22.95 | | 65.0 | |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | X | 8.29 | 77.16 | 21.61 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.87 | 76.45 | 21.11 | | 65.0 | |
| | | Z | 8.15 | 76.38 | 21.20 | | 65.0 | |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | X | 8.65 | 77.83 | 22.17 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.27 | 77.28 | 21.75 | | 65.0 | |
| | | Z | 8.49 | 77.01 | 21.74 | | 65.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | X | 9.28 | 80.86 | 22.71 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.89 | 80.40 | 22.35 | | 65.0 | |
| | | Z | 8.80 | 79.34 | 21.99 | | 65.0 | |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 9.13 | 79.62 | 20.18 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.96 | 77.38 | 18.74 | | 65.0 | |
| | | Z | 8.84 | 78.74 | 19.97 | | 65.0 | |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 8.90 | 78.86 | 19.81 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.73 | 76.58 | 18.34 | | 65.0 | |
| | | Z | 8.71 | 78.17 | 19.67 | | 65.0 | |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | X | 8.90 | 81.94 | 21.19 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.60 | 79.37 | 19.69 | | 65.0 | |
| | | Z | 8.10 | 80.01 | 20.54 | | 65.0 | |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | X | 8.43 | 79.20 | 21.67 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.92 | 78.34 | 21.01 | | 65.0 | |
| | | Z | 8.11 | 78.01 | 21.17 | | 65.0 | |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | X | 8.43 | 78.91 | 21.57 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.92 | 78.05 | 20.91 | | 65.0 | |
| | | Z | 8.14 | 77.80 | 21.11 | | 65.0 | |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | X | 10.44 | 84.93 | 23.72 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 9.81 | 84.03 | 23.07 | | 65.0 | |
| | | Z | 9.35 | 82.40 | 22.71 | | 65.0 | |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | X | 8.89 | 80.23 | 22.82 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.49 | 79.67 | 22.37 | | 65.0 | |
| | | Z | 8.55 | 78.95 | 22.23 | | 65.0 | |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | X | 8.43 | 78.18 | 21.77 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.96 | 77.43 | 21.21 | | 65.0 | |
| | | Z | 8.21 | 77.20 | 21.30 | | 65.0 | |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | X | 10.49 | 84.56 | 23.88 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 10.02 | 84.01 | 23.44 | | 65.0 | |
| | | Z | 9.51 | 82.19 | 22.89 | | 65.0 | |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | X | 8.52 | 77.77 | 21.82 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.07 | 77.03 | 21.32 | | 65.0 | |
| | | Z | 8.36 | 76.93 | 21.38 | | 65.0 | |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | X | 8.87 | 78.41 | 22.40 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.48 | 77.88 | 22.01 | | 65.0 | |
| | | Z | 8.68 | 77.54 | 21.94 | | 65.0 | |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | X | 9.58 | 81.18 | 22.60 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 9.19 | 80.75 | 22.26 | | 65.0 | |
| | | Z | 9.04 | 79.59 | 21.85 | | 65.0 | |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | X | 8.91 | 77.09 | 21.88 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.54 | 76.56 | 21.51 | | 65.0 | |
| | | Z | 8.80 | 76.43 | 21.50 | | 65.0 | |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | X | 8.82 | 76.67 | 21.78 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.46 | 76.15 | 21.41 | | 65.0 | |
| | | Z | 8.73 | 76.06 | 21.42 | | 65.0 | |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | X | 8.97 | 78.33 | 21.62 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 8.64 | 77.97 | 21.34 | | 65.0 | |
| | | Z | 8.71 | 77.32 | 21.10 | | 65.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.72 | 67.23 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.57 | 66.31 | 15.13 | | 150.0 | |
| | | Z | 2.65 | 66.56 | 15.46 | | 150.0 | |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.89 | 70.77 | 17.26 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.58 | 67.67 | 15.25 | | 150.0 | |
| | | Z | 1.72 | 68.75 | 16.01 | | 150.0 | |
| 10277-CAA | PHS (QPSK) | X | 6.00 | 70.47 | 14.76 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 5.21 | 68.57 | 13.21 | | 50.0 | |
| | | Z | 6.28 | 70.88 | 15.27 | | 50.0 | |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 9.55 | 80.33 | 21.17 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 8.72 | 78.79 | 19.97 | | 50.0 | |
| | | Z | 9.29 | 79.51 | 21.06 | | 50.0 | |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 9.72 | 80.54 | 21.26 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 8.86 | 78.97 | 20.05 | | 50.0 | |
| | | Z | 9.46 | 79.72 | 21.15 | | 50.0 | |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate | X | 2.18 | 74.40 | 17.31 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.44 | 68.27 | 13.81 | | 150.0 | |
| | | Z | 1.72 | 70.30 | 15.40 | | 150.0 | |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate | X | 1.24 | 71.68 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.80 | 65.30 | 12.12 | | 150.0 | |
| | | Z | 0.97 | 67.39 | 13.90 | | 150.0 | |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate | X | 2.10 | 80.68 | 20.23 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.98 | 68.86 | 14.25 | | 150.0 | |
| | | Z | 1.23 | 71.77 | 16.34 | | 150.0 | |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate | X | 4.35 | 92.52 | 24.81 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.43 | 74.29 | 17.12 | | 150.0 | |
| | | Z | 1.75 | 77.17 | 19.08 | | 150.0 | |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 11.19 | 84.61 | 24.64 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 11.12 | 84.62 | 24.20 | | 50.0 | |
| | | Z | 10.33 | 82.52 | 23.91 | | 50.0 | |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | X | 3.13 | 71.75 | 17.66 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.77 | 69.64 | 16.38 | | 150.0 | |
| | | Z | 2.96 | 70.46 | 16.84 | | 150.0 | |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | X | 2.07 | 71.56 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.59 | 67.63 | 14.15 | | 150.0 | |
| | | Z | 1.84 | 69.13 | 15.41 | | 150.0 | |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | X | 4.44 | 77.05 | 18.50 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.17 | 71.89 | 15.69 | | 150.0 | |
| | | Z | 3.89 | 74.52 | 17.46 | | 150.0 | |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | X | 2.98 | 70.18 | 14.87 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.33 | 66.80 | 12.64 | | 150.0 | |
| | | Z | 2.88 | 69.22 | 14.45 | | 150.0 | |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC) | X | 5.88 | 68.71 | 19.12 | 4.17 | 80.0 | ± 9.6 % |
| | | Y | 5.67 | 68.35 | 18.79 | | 80.0 | |
| | | Z | 5.96 | 68.70 | 19.05 | | 80.0 | |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 6.49 | 69.93 | 20.23 | 4.96 | 80.0 | ± 9.6 % |
| | | Y | 6.06 | 68.48 | 19.24 | | 80.0 | |
| | | Z | 6.58 | 69.96 | 20.17 | | 80.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC) | X | 6.38 | 70.18 | 20.37 | 4.96 | 80.0 | ± 9.6 % |
| | | Y | 5.90 | 68.52 | 19.27 | | 80.0 | |
| | | Z | 6.49 | 70.27 | 20.35 | | 80.0 | |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC) | X | 5.94 | 69.20 | 19.41 | 4.17 | 80.0 | ± 9.6 % |
| | | Y | 5.55 | 67.84 | 18.48 | | 80.0 | |
| | | Z | 6.02 | 69.19 | 19.33 | | 80.0 | |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols) | X | 8.63 | 79.84 | 25.16 | 6.02 | 50.0 | ± 9.6 % |
| | | Y | 8.50 | 80.74 | 25.49 | | 50.0 | |
| | | Z | 9.07 | 80.51 | 25.38 | | 50.0 | |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols) | X | 7.19 | 74.26 | 22.98 | 6.02 | 50.0 | ± 9.6 % |
| | | Y | 6.24 | 70.98 | 21.03 | | 50.0 | |
| | | Z | 7.44 | 74.65 | 23.11 | | 50.0 | |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols) | X | 7.43 | 75.32 | 23.26 | 6.02 | 50.0 | ± 9.6 % |
| | | Y | 7.08 | 75.34 | 23.24 | | 50.0 | |
| | | Z | 7.71 | 75.76 | 23.39 | | 50.0 | |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC) | X | 7.56 | 75.95 | 23.55 | 6.02 | 50.0 | ± 9.6 % |
| | | Y | 7.22 | 76.07 | 23.58 | | 50.0 | |
| | | Z | 7.85 | 76.40 | 23.68 | | 50.0 | |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 7.34 | 74.67 | 23.20 | 6.02 | 50.0 | ± 9.6 % |
| | | Y | 6.34 | 71.28 | 21.21 | | 50.0 | |
| | | Z | 7.59 | 75.05 | 23.31 | | 50.0 | |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols) | X | 7.26 | 74.63 | 23.05 | 6.02 | 50.0 | ± 9.6 % |
| | | Y | 6.24 | 71.19 | 21.04 | | 50.0 | |
| | | Z | 7.51 | 75.03 | 23.17 | | 50.0 | |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | X | 3.50 | 70.87 | 17.20 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.12 | 68.92 | 16.05 | | 150.0 | |
| | | Z | 3.32 | 69.72 | 16.47 | | 150.0 | |
| 10313-AAA | iDEN 1:3 | X | 8.27 | 79.76 | 19.38 | 6.99 | 70.0 | ± 9.6 % |
| | | Y | 7.09 | 77.48 | 18.12 | | 70.0 | |
| | | Z | 7.27 | 77.42 | 18.52 | | 70.0 | |
| 10314-AAA | iDEN 1:6 | X | 10.52 | 85.41 | 23.73 | 10.00 | 30.0 | ± 9.6 % |
| | | Y | 9.80 | 84.47 | 23.05 | | 30.0 | |
| | | Z | 8.56 | 81.26 | 22.24 | | 30.0 | |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle) | X | 1.21 | 66.04 | 16.76 | 0.17 | 150.0 | ± 9.6 % |
| | | Y | 1.11 | 64.36 | 15.28 | | 150.0 | |
| | | Z | 1.16 | 64.99 | 15.81 | | 150.0 | |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle) | X | 4.78 | 67.20 | 16.69 | 0.17 | 150.0 | ± 9.6 % |
| | | Y | 4.67 | 66.87 | 16.36 | | 150.0 | |
| | | Z | 4.78 | 67.00 | 16.48 | | 150.0 | |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle) | X | 4.78 | 67.20 | 16.69 | 0.17 | 150.0 | ± 9.6 % |
| | | Y | 4.67 | 66.87 | 16.36 | | 150.0 | |
| | | Z | 4.78 | 67.00 | 16.48 | | 150.0 | |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle) | X | 4.88 | 67.44 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.75 | 67.07 | 16.25 | | 150.0 | |
| | | Z | 4.88 | 67.23 | 16.38 | | 150.0 | |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle) | X | 5.52 | 67.51 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.43 | 67.26 | 16.42 | | 150.0 | |
| | | Z | 5.50 | 67.29 | 16.46 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle) | X | 5.81 | 67.99 | 16.74 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.71 | 67.67 | 16.46 | | 150.0 | |
| | | Z | 5.80 | 67.83 | 16.56 | | 150.0 | |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0) | X | 2.18 | 74.40 | 17.31 | 0.00 | 115.0 | ± 9.6 % |
| | | Y | 1.44 | 68.27 | 13.81 | | 115.0 | |
| | | Z | 1.72 | 70.30 | 15.40 | | 115.0 | |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A) | X | 2.18 | 74.40 | 17.31 | 0.00 | 115.0 | ± 9.6 % |
| | | Y | 1.44 | 68.27 | 13.81 | | 115.0 | |
| | | Z | 1.72 | 70.30 | 15.40 | | 115.0 | |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate | X | 100.00 | 125.34 | 32.57 | 0.00 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 122.30 | 30.90 | | 100.0 | |
| | | Z | 100.00 | 123.59 | 31.86 | | 100.0 | |
| 10410-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 121.08 | 31.14 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 119.39 | 30.03 | | 80.0 | |
| | | Z | 100.00 | 119.84 | 30.69 | | 80.0 | |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 1.04 | 64.21 | 15.75 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.96 | 62.81 | 14.37 | | 150.0 | |
| | | Z | 1.00 | 63.31 | 14.86 | | 150.0 | |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle) | X | 4.68 | 67.03 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.57 | 66.70 | 16.19 | | 150.0 | |
| | | Z | 4.67 | 66.81 | 16.30 | | 150.0 | |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.68 | 67.03 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.57 | 66.70 | 16.19 | | 150.0 | |
| | | Z | 4.67 | 66.81 | 16.30 | | 150.0 | |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule) | X | 4.66 | 67.18 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.55 | 66.84 | 16.19 | | 150.0 | |
| | | Z | 4.65 | 66.94 | 16.30 | | 150.0 | |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule) | X | 4.69 | 67.13 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.58 | 66.80 | 16.20 | | 150.0 | |
| | | Z | 4.68 | 66.91 | 16.31 | | 150.0 | |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 4.81 | 67.13 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.70 | 66.81 | 16.22 | | 150.0 | |
| | | Z | 4.80 | 66.92 | 16.33 | | 150.0 | |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 5.01 | 67.51 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.89 | 67.16 | 16.35 | | 150.0 | |
| | | Z | 5.01 | 67.31 | 16.47 | | 150.0 | |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | X | 4.92 | 67.45 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.80 | 67.10 | 16.32 | | 150.0 | |
| | | Z | 4.92 | 67.24 | 16.43 | | 150.0 | |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK) | X | 5.50 | 67.77 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.41 | 67.50 | 16.53 | | 150.0 | |
| | | Z | 5.49 | 67.58 | 16.59 | | 150.0 | |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM) | X | 5.51 | 67.80 | 16.80 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.41 | 67.51 | 16.53 | | 150.0 | |
| | | Z | 5.50 | 67.62 | 16.60 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | X | 5.53 | 67.79 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.42 | 67.48 | 16.51 | | 150.0 | |
| | | Z | 5.52 | 67.63 | 16.61 | | 150.0 | |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) | X | 4.38 | 70.70 | 18.40 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.25 | 70.46 | 18.05 | | 150.0 | |
| | | Z | 4.31 | 70.02 | 17.98 | | 150.0 | |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) | X | 4.42 | 67.67 | 16.62 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.27 | 67.23 | 16.20 | | 150.0 | |
| | | Z | 4.41 | 67.37 | 16.37 | | 150.0 | |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) | X | 4.70 | 67.52 | 16.63 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.57 | 67.13 | 16.26 | | 150.0 | |
| | | Z | 4.70 | 67.28 | 16.40 | | 150.0 | |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) | X | 4.94 | 67.50 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.82 | 67.14 | 16.34 | | 150.0 | |
| | | Z | 4.94 | 67.29 | 16.46 | | 150.0 | |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH) | X | 4.49 | 71.52 | 18.43 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.34 | 71.22 | 18.01 | | 150.0 | |
| | | Z | 4.39 | 70.68 | 17.96 | | 150.0 | |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 120.92 | 31.06 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 119.22 | 29.95 | | 80.0 | |
| | | Z | 100.00 | 119.70 | 30.62 | | 80.0 | |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | X | 3.75 | 67.86 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.56 | 67.20 | 15.57 | | 150.0 | |
| | | Z | 3.73 | 67.41 | 15.90 | | 150.0 | |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%) | X | 4.24 | 67.45 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.10 | 67.00 | 16.05 | | 150.0 | |
| | | Z | 4.22 | 67.14 | 16.23 | | 150.0 | |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%) | X | 4.49 | 67.35 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.37 | 66.95 | 16.16 | | 150.0 | |
| | | Z | 4.48 | 67.09 | 16.30 | | 150.0 | |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | X | 4.67 | 67.26 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.56 | 66.89 | 16.18 | | 150.0 | |
| | | Z | 4.66 | 67.04 | 16.31 | | 150.0 | |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) | X | 3.69 | 68.21 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.47 | 67.39 | 15.23 | | 150.0 | |
| | | Z | 3.66 | 67.69 | 15.67 | | 150.0 | |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle) | X | 6.36 | 68.35 | 16.93 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.27 | 68.07 | 16.69 | | 150.0 | |
| | | Z | 6.35 | 68.21 | 16.77 | | 150.0 | |
| 10457-AAA | UMTS-FDD (DC-HSDPA) | X | 3.86 | 65.66 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.78 | 65.32 | 15.90 | | 150.0 | |
| | | Z | 3.84 | 65.45 | 16.04 | | 150.0 | |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers) | X | 4.10 | 70.68 | 17.90 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.95 | 70.36 | 17.40 | | 150.0 | |
| | | Z | 3.98 | 69.73 | 17.40 | | 150.0 | |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | X | 5.16 | 67.87 | 18.15 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.08 | 67.96 | 18.01 | | 150.0 | |
| | | Z | 5.12 | 67.39 | 17.86 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10460-AAA | UMTS-FDD (WCDMA, AMR) | X | 1.21 | 74.36 | 19.56 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.84 | 67.73 | 15.53 | | 150.0 | |
| | | Z | 0.96 | 69.69 | 16.87 | | 150.0 | |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 124.72 | 32.88 | 3.29 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 122.71 | 31.63 | | 80.0 | |
| | | Z | 100.00 | 122.27 | 31.89 | | 80.0 | |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 110.81 | 26.22 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 107.68 | 24.48 | | 80.0 | |
| | | Z | 100.00 | 109.58 | 25.81 | | 80.0 | |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 108.02 | 24.88 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 17.57 | 87.04 | 18.79 | | 80.0 | |
| | | Z | 57.71 | 101.03 | 23.21 | | 80.0 | |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 122.99 | 31.92 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 120.66 | 30.52 | | 80.0 | |
| | | Z | 100.00 | 120.59 | 30.96 | | 80.0 | |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 110.36 | 26.00 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 69.93 | 103.37 | 23.39 | | 80.0 | |
| | | Z | 100.00 | 109.17 | 25.60 | | 80.0 | |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 107.59 | 24.67 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 10.32 | 81.39 | 17.12 | | 80.0 | |
| | | Z | 32.56 | 94.43 | 21.51 | | 80.0 | |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 123.18 | 32.01 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 120.88 | 30.62 | | 80.0 | |
| | | Z | 100.00 | 120.77 | 31.04 | | 80.0 | |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 110.50 | 26.06 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 95.55 | 106.84 | 24.20 | | 80.0 | |
| | | Z | 100.00 | 109.30 | 25.66 | | 80.0 | |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 107.60 | 24.67 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 10.51 | 81.58 | 17.17 | | 80.0 | |
| | | Z | 33.51 | 94.76 | 21.58 | | 80.0 | |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 123.21 | 32.02 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 120.90 | 30.62 | | 80.0 | |
| | | Z | 100.00 | 120.79 | 31.05 | | 80.0 | |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 110.46 | 26.04 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 94.56 | 106.68 | 24.14 | | 80.0 | |
| | | Z | 100.00 | 109.26 | 25.63 | | 80.0 | |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 107.56 | 24.64 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 10.43 | 81.48 | 17.13 | | 80.0 | |
| | | Z | 33.64 | 94.78 | 21.58 | | 80.0 | |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 123.19 | 32.00 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 120.87 | 30.61 | | 80.0 | |
| | | Z | 100.00 | 120.77 | 31.03 | | 80.0 | |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 110.47 | 26.04 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 92.06 | 106.40 | 24.08 | | 80.0 | |
| | | Z | 100.00 | 109.26 | 25.64 | | 80.0 | |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 107.57 | 24.65 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 10.30 | 81.37 | 17.09 | | 80.0 | |
| | | Z | 33.12 | 94.61 | 21.54 | | 80.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 110.32 | 25.97 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 73.47 | 103.85 | 23.47 | | 80.0 | |
| | | Z | 100.00 | 109.13 | 25.57 | | 80.0 | |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 107.52 | 24.63 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 10.13 | 81.17 | 17.03 | | 80.0 | |
| | | Z | 32.56 | 94.40 | 21.47 | | 80.0 | |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 23.24 | 102.02 | 28.60 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 17.72 | 96.96 | 26.53 | | 80.0 | |
| | | Z | 12.62 | 91.31 | 25.32 | | 80.0 | |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 23.79 | 96.38 | 25.31 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 16.50 | 90.35 | 22.90 | | 80.0 | |
| | | Z | 13.56 | 87.65 | 22.71 | | 80.0 | |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 19.64 | 92.74 | 23.93 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 13.10 | 86.39 | 21.35 | | 80.0 | |
| | | Z | 12.05 | 85.29 | 21.66 | | 80.0 | |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 8.49 | 84.69 | 22.05 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.66 | 78.52 | 19.36 | | 80.0 | |
| | | Z | 6.07 | 79.11 | 20.05 | | 80.0 | |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 11.70 | 86.22 | 22.45 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 8.73 | 81.47 | 20.24 | | 80.0 | |
| | | Z | 8.71 | 81.39 | 20.85 | | 80.0 | |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 10.50 | 84.41 | 21.86 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 7.92 | 79.90 | 19.71 | | 80.0 | |
| | | Z | 8.18 | 80.26 | 20.46 | | 80.0 | |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 8.12 | 84.44 | 22.68 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.95 | 79.56 | 20.54 | | 80.0 | |
| | | Z | 6.24 | 79.61 | 20.83 | | 80.0 | |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.60 | 75.72 | 19.25 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.71 | 73.16 | 17.81 | | 80.0 | |
| | | Z | 5.00 | 73.46 | 18.29 | | 80.0 | |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.48 | 75.06 | 18.99 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.65 | 72.64 | 17.60 | | 80.0 | |
| | | Z | 4.96 | 73.01 | 18.11 | | 80.0 | |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 7.06 | 80.88 | 21.92 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.70 | 77.55 | 20.40 | | 80.0 | |
| | | Z | 6.08 | 77.77 | 20.57 | | 80.0 | |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.31 | 73.88 | 19.45 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.75 | 72.25 | 18.50 | | 80.0 | |
| | | Z | 5.02 | 72.44 | 18.71 | | 80.0 | |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.32 | 73.40 | 19.28 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.80 | 71.92 | 18.39 | | 80.0 | |
| | | Z | 5.07 | 72.08 | 18.60 | | 80.0 | |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 6.29 | 77.08 | 20.62 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.44 | 74.84 | 19.51 | | 80.0 | |
| | | Z | 5.78 | 75.12 | 19.66 | | 80.0 | |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.38 | 72.26 | 19.03 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.95 | 71.03 | 18.29 | | 80.0 | |
| | | Z | 5.22 | 71.29 | 18.47 | | 80.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.41 | 71.97 | 18.93 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.99 | 70.82 | 18.22 | | 80.0 | |
| | | Z | 5.27 | 71.06 | 18.40 | | 80.0 | |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 7.26 | 79.46 | 21.31 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 6.08 | 76.70 | 20.04 | | 80.0 | |
| | | Z | 6.47 | 77.03 | 20.19 | | 80.0 | |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.52 | 72.92 | 19.28 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.04 | 71.57 | 18.51 | | 80.0 | |
| | | Z | 5.33 | 71.88 | 18.69 | | 80.0 | |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.51 | 72.36 | 19.10 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.07 | 71.15 | 18.38 | | 80.0 | |
| | | Z | 5.35 | 71.43 | 18.55 | | 80.0 | |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 6.84 | 81.16 | 20.14 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.18 | 74.07 | 16.91 | | 80.0 | |
| | | Z | 4.97 | 76.21 | 18.38 | | 80.0 | |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.23 | 71.63 | 15.72 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 2.88 | 66.72 | 12.99 | | 80.0 | |
| | | Z | 3.81 | 69.89 | 15.10 | | 80.0 | |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.07 | 70.79 | 15.25 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 2.78 | 66.03 | 12.55 | | 80.0 | |
| | | Z | 3.73 | 69.33 | 14.75 | | 80.0 | |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 7.25 | 82.07 | 22.09 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.64 | 78.16 | 20.30 | | 80.0 | |
| | | Z | 5.95 | 78.24 | 20.53 | | 80.0 | |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.43 | 74.78 | 19.24 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.72 | 72.72 | 18.04 | | 80.0 | |
| | | Z | 4.99 | 72.91 | 18.39 | | 80.0 | |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.43 | 74.40 | 19.05 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.75 | 72.45 | 17.89 | | 80.0 | |
| | | Z | 5.01 | 72.63 | 18.25 | | 80.0 | |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 6.96 | 80.64 | 21.82 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.62 | 77.31 | 20.29 | | 80.0 | |
| | | Z | 6.00 | 77.58 | 20.48 | | 80.0 | |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.28 | 73.79 | 19.40 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.72 | 72.15 | 18.44 | | 80.0 | |
| | | Z | 5.00 | 72.37 | 18.67 | | 80.0 | |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.30 | 73.31 | 19.23 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.78 | 71.81 | 18.34 | | 80.0 | |
| | | Z | 5.05 | 72.00 | 18.55 | | 80.0 | |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 7.19 | 79.29 | 21.23 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 6.02 | 76.53 | 19.97 | | 80.0 | |
| | | Z | 6.42 | 76.89 | 20.13 | | 80.0 | |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.49 | 72.85 | 19.25 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.02 | 71.50 | 18.47 | | 80.0 | |
| | | Z | 5.31 | 71.82 | 18.66 | | 80.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.49 | 72.29 | 19.06 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.05 | 71.07 | 18.34 | | 80.0 | |
| | | Z | 5.33 | 71.37 | 18.52 | | 80.0 | |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 6.71 | 76.12 | 20.06 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.94 | 74.25 | 19.13 | | 80.0 | |
| | | Z | 6.28 | 74.57 | 19.27 | | 80.0 | |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.84 | 71.95 | 18.94 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.42 | 70.86 | 18.30 | | 80.0 | |
| | | Z | 5.71 | 71.20 | 18.47 | | 80.0 | |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.82 | 71.51 | 18.81 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.44 | 70.51 | 18.21 | | 80.0 | |
| | | Z | 5.71 | 70.83 | 18.37 | | 80.0 | |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 7.61 | 78.80 | 20.90 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 6.48 | 76.29 | 19.75 | | 80.0 | |
| | | Z | 6.88 | 76.71 | 19.92 | | 80.0 | |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.82 | 72.58 | 19.18 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.36 | 71.33 | 18.47 | | 80.0 | |
| | | Z | 5.67 | 71.74 | 18.66 | | 80.0 | |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.73 | 71.89 | 18.96 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 5.32 | 70.77 | 18.31 | | 80.0 | |
| | | Z | 5.61 | 71.15 | 18.49 | | 80.0 | |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 1.00 | 64.53 | 15.90 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.92 | 62.98 | 14.41 | | 150.0 | |
| | | Z | 0.96 | 63.54 | 14.94 | | 150.0 | |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 1.68 | 91.06 | 26.34 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.55 | 69.99 | 16.34 | | 150.0 | |
| | | Z | 0.73 | 74.56 | 19.01 | | 150.0 | |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.92 | 68.12 | 17.45 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.77 | 64.83 | 14.89 | | 150.0 | |
| | | Z | 0.84 | 65.95 | 15.79 | | 150.0 | |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.67 | 67.12 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.56 | 66.77 | 16.17 | | 150.0 | |
| | | Z | 4.66 | 66.89 | 16.28 | | 150.0 | |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 4.89 | 67.40 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.77 | 67.04 | 16.30 | | 150.0 | |
| | | Z | 4.89 | 67.19 | 16.43 | | 150.0 | |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.74 | 67.39 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.61 | 67.01 | 16.22 | | 150.0 | |
| | | Z | 4.74 | 67.17 | 16.35 | | 150.0 | |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.67 | 67.41 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.55 | 67.00 | 16.20 | | 150.0 | |
| | | Z | 4.67 | 67.18 | 16.34 | | 150.0 | |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.72 | 67.39 | 16.60 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.60 | 67.04 | 16.27 | | 150.0 | |
| | | Z | 4.71 | 67.14 | 16.36 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.59 | 67.29 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.47 | 66.91 | 16.11 | | 150.0 | |
| | | Z | 4.58 | 67.04 | 16.22 | | 150.0 | |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.67 | 67.35 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.55 | 66.98 | 16.24 | | 150.0 | |
| | | Z | 4.67 | 67.11 | 16.36 | | 150.0 | |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) | X | 4.63 | 66.37 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.52 | 66.01 | 15.83 | | 150.0 | |
| | | Z | 4.62 | 66.13 | 15.94 | | 150.0 | |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) | X | 4.83 | 66.78 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.70 | 66.40 | 15.97 | | 150.0 | |
| | | Z | 4.82 | 66.54 | 16.09 | | 150.0 | |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) | X | 4.75 | 66.76 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.62 | 66.36 | 15.92 | | 150.0 | |
| | | Z | 4.74 | 66.51 | 16.04 | | 150.0 | |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) | X | 4.77 | 66.78 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.64 | 66.38 | 15.95 | | 150.0 | |
| | | Z | 4.76 | 66.54 | 16.08 | | 150.0 | |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.77 | 66.78 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.64 | 66.38 | 15.95 | | 150.0 | |
| | | Z | 4.76 | 66.54 | 16.08 | | 150.0 | |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) | X | 4.78 | 66.93 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.64 | 66.50 | 15.97 | | 150.0 | |
| | | Z | 4.77 | 66.69 | 16.10 | | 150.0 | |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | X | 4.63 | 66.80 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.49 | 66.35 | 15.90 | | 150.0 | |
| | | Z | 4.62 | 66.56 | 16.05 | | 150.0 | |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | X | 4.78 | 66.80 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.65 | 66.41 | 15.94 | | 150.0 | |
| | | Z | 4.77 | 66.55 | 16.05 | | 150.0 | |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle) | X | 5.28 | 66.88 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.17 | 66.53 | 16.03 | | 150.0 | |
| | | Z | 5.27 | 66.70 | 16.13 | | 150.0 | |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | X | 5.35 | 67.03 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.24 | 66.69 | 16.10 | | 150.0 | |
| | | Z | 5.34 | 66.84 | 16.18 | | 150.0 | |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | X | 5.22 | 67.03 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.10 | 66.65 | 16.06 | | 150.0 | |
| | | Z | 5.21 | 66.83 | 16.16 | | 150.0 | |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle) | X | 5.29 | 67.00 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.17 | 66.63 | 16.05 | | 150.0 | |
| | | Z | 5.27 | 66.80 | 16.15 | | 150.0 | |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle) | X | 5.40 | 67.06 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.27 | 66.69 | 16.12 | | 150.0 | |
| | | Z | 5.39 | 66.88 | 16.23 | | 150.0 | |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 5.30 | 67.01 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.19 | 66.66 | 16.12 | | 150.0 | |
| | | Z | 5.29 | 66.82 | 16.22 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | X | 5.28 | 66.90 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.16 | 66.53 | 16.05 | | 150.0 | |
| | | Z | 5.27 | 66.74 | 16.17 | | 150.0 | |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle) | X | 5.43 | 66.95 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.32 | 66.61 | 16.11 | | 150.0 | |
| | | Z | 5.42 | 66.77 | 16.20 | | 150.0 | |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | X | 5.51 | 66.95 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.40 | 66.65 | 16.14 | | 150.0 | |
| | | Z | 5.51 | 66.78 | 16.22 | | 150.0 | |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle) | X | 5.56 | 66.97 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.46 | 66.64 | 16.02 | | 150.0 | |
| | | Z | 5.54 | 66.80 | 16.11 | | 150.0 | |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle) | X | 5.78 | 67.41 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.68 | 67.09 | 16.19 | | 150.0 | |
| | | Z | 5.76 | 67.21 | 16.25 | | 150.0 | |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | X | 5.66 | 67.27 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.55 | 66.90 | 16.11 | | 150.0 | |
| | | Z | 5.65 | 67.10 | 16.22 | | 150.0 | |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle) | X | 5.75 | 67.34 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.64 | 66.99 | 16.14 | | 150.0 | |
| | | Z | 5.73 | 67.16 | 16.24 | | 150.0 | |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | X | 6.10 | 68.57 | 17.02 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.97 | 68.15 | 16.70 | | 150.0 | |
| | | Z | 6.06 | 68.30 | 16.78 | | 150.0 | |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle) | X | 5.68 | 67.21 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.57 | 66.88 | 16.11 | | 150.0 | |
| | | Z | 5.66 | 67.04 | 16.20 | | 150.0 | |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle) | X | 5.70 | 67.30 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.58 | 66.93 | 16.09 | | 150.0 | |
| | | Z | 5.68 | 67.15 | 16.21 | | 150.0 | |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle) | X | 5.59 | 67.05 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.48 | 66.70 | 15.99 | | 150.0 | |
| | | Z | 5.58 | 66.90 | 16.10 | | 150.0 | |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 5.69 | 67.10 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.57 | 66.76 | 16.05 | | 150.0 | |
| | | Z | 5.67 | 66.95 | 16.15 | | 150.0 | |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.97 | 67.34 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.87 | 67.02 | 16.12 | | 150.0 | |
| | | Z | 5.94 | 67.19 | 16.21 | | 150.0 | |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.12 | 67.69 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.01 | 67.35 | 16.26 | | 150.0 | |
| | | Z | 6.10 | 67.54 | 16.36 | | 150.0 | |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.13 | 67.71 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.03 | 67.38 | 16.27 | | 150.0 | |
| | | Z | 6.11 | 67.54 | 16.35 | | 150.0 | |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.12 | 67.66 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.00 | 67.31 | 16.25 | | 150.0 | |
| | | Z | 6.10 | 67.52 | 16.36 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle) | X | 6.18 | 67.86 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.06 | 67.49 | 16.36 | | 150.0 | |
| | | Z | 6.16 | 67.71 | 16.47 | | 150.0 | |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle) | X | 6.16 | 67.67 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.05 | 67.32 | 16.31 | | 150.0 | |
| | | Z | 6.15 | 67.54 | 16.42 | | 150.0 | |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle) | X | 6.08 | 67.64 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.97 | 67.29 | 16.33 | | 150.0 | |
| | | Z | 6.06 | 67.49 | 16.44 | | 150.0 | |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle) | X | 6.25 | 68.16 | 16.88 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.13 | 67.77 | 16.57 | | 150.0 | |
| | | Z | 6.23 | 68.01 | 16.70 | | 150.0 | |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle) | X | 6.60 | 68.73 | 17.10 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.50 | 68.45 | 16.86 | | 150.0 | |
| | | Z | 6.53 | 68.43 | 16.86 | | 150.0 | |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle) | X | 5.01 | 67.24 | 16.68 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.90 | 66.90 | 16.36 | | 150.0 | |
| | | Z | 5.01 | 67.05 | 16.49 | | 150.0 | |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.27 | 67.70 | 16.99 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 5.15 | 67.37 | 16.68 | | 150.0 | |
| | | Z | 5.27 | 67.52 | 16.80 | | 150.0 | |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 5.11 | 67.60 | 16.84 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.98 | 67.23 | 16.50 | | 150.0 | |
| | | Z | 5.11 | 67.41 | 16.64 | | 150.0 | |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.13 | 67.96 | 17.16 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 5.01 | 67.61 | 16.84 | | 150.0 | |
| | | Z | 5.13 | 67.75 | 16.95 | | 150.0 | |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 5.02 | 67.36 | 16.62 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.90 | 67.01 | 16.28 | | 150.0 | |
| | | Z | 5.02 | 67.16 | 16.41 | | 150.0 | |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 5.07 | 67.97 | 17.18 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.96 | 67.67 | 16.89 | | 150.0 | |
| | | Z | 5.06 | 67.76 | 16.96 | | 150.0 | |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.11 | 67.83 | 17.12 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 5.00 | 67.52 | 16.83 | | 150.0 | |
| | | Z | 5.11 | 67.61 | 16.91 | | 150.0 | |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 1.43 | 67.78 | 17.55 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.29 | 65.83 | 16.01 | | 130.0 | |
| | | Z | 1.37 | 66.57 | 16.56 | | 130.0 | |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 1.47 | 68.62 | 18.01 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.32 | 66.50 | 16.39 | | 130.0 | |
| | | Z | 1.40 | 67.26 | 16.95 | | 130.0 | |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 100.00 | 147.77 | 39.50 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.11 | 95.86 | 25.26 | | 130.0 | |
| | | Z | 11.46 | 108.94 | 29.46 | | 130.0 | |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 2.11 | 79.07 | 22.64 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.59 | 73.49 | 19.59 | | 130.0 | |
| | | Z | 1.75 | 74.78 | 20.34 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) | X | 4.84 | 67.12 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.72 | 66.80 | 16.47 | | 130.0 | |
| | | Z | 4.83 | 66.93 | 16.59 | | 130.0 | |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle) | X | 4.86 | 67.28 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.75 | 66.95 | 16.53 | | 130.0 | |
| | | Z | 4.86 | 67.08 | 16.65 | | 130.0 | |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 5.09 | 67.60 | 17.02 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.97 | 67.26 | 16.71 | | 130.0 | |
| | | Z | 5.10 | 67.41 | 16.83 | | 130.0 | |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.99 | 67.77 | 17.12 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.86 | 67.43 | 16.80 | | 130.0 | |
| | | Z | 4.99 | 67.57 | 16.91 | | 130.0 | |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.77 | 67.19 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.64 | 66.77 | 16.15 | | 130.0 | |
| | | Z | 4.78 | 67.01 | 16.33 | | 130.0 | |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.81 | 67.17 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.68 | 66.78 | 16.16 | | 130.0 | |
| | | Z | 4.82 | 66.97 | 16.32 | | 130.0 | |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.90 | 67.87 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.77 | 67.49 | 16.75 | | 130.0 | |
| | | Z | 4.90 | 67.66 | 16.87 | | 130.0 | |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.73 | 66.96 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.59 | 66.53 | 15.94 | | 130.0 | |
| | | Z | 4.73 | 66.78 | 16.14 | | 130.0 | |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | X | 4.84 | 67.12 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.72 | 66.80 | 16.47 | | 130.0 | |
| | | Z | 4.83 | 66.93 | 16.59 | | 130.0 | |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.86 | 67.28 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.75 | 66.95 | 16.53 | | 130.0 | |
| | | Z | 4.86 | 67.08 | 16.65 | | 130.0 | |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | X | 5.09 | 67.60 | 17.02 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.97 | 67.26 | 16.71 | | 130.0 | |
| | | Z | 5.10 | 67.41 | 16.83 | | 130.0 | |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.99 | 67.77 | 17.12 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.86 | 67.43 | 16.80 | | 130.0 | |
| | | Z | 4.99 | 67.57 | 16.91 | | 130.0 | |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.77 | 67.19 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.64 | 66.77 | 16.15 | | 130.0 | |
| | | Z | 4.78 | 67.01 | 16.33 | | 130.0 | |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.81 | 67.17 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.68 | 66.78 | 16.16 | | 130.0 | |
| | | Z | 4.82 | 66.97 | 16.32 | | 130.0 | |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | X | 4.90 | 67.87 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.77 | 67.49 | 16.75 | | 130.0 | |
| | | Z | 4.90 | 67.66 | 16.87 | | 130.0 | |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.73 | 66.96 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.59 | 66.53 | 15.94 | | 130.0 | |
| | | Z | 4.73 | 66.78 | 16.14 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.98 | 67.15 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.87 | 66.85 | 16.57 | | 130.0 | |
| | | Z | 4.98 | 66.97 | 16.68 | | 130.0 | |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.15 | 67.50 | 16.99 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.04 | 67.19 | 16.69 | | 130.0 | |
| | | Z | 5.16 | 67.32 | 16.80 | | 130.0 | |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 5.09 | 67.46 | 16.91 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.96 | 67.12 | 16.59 | | 130.0 | |
| | | Z | 5.09 | 67.29 | 16.72 | | 130.0 | |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.14 | 67.60 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.02 | 67.28 | 16.73 | | 130.0 | |
| | | Z | 5.14 | 67.42 | 16.84 | | 130.0 | |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.11 | 67.58 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.99 | 67.24 | 16.64 | | 130.0 | |
| | | Z | 5.12 | 67.40 | 16.76 | | 130.0 | |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 5.05 | 67.59 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.93 | 67.24 | 16.64 | | 130.0 | |
| | | Z | 5.06 | 67.40 | 16.76 | | 130.0 | |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 5.00 | 67.53 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.88 | 67.16 | 16.53 | | 130.0 | |
| | | Z | 5.01 | 67.35 | 16.68 | | 130.0 | |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.98 | 67.77 | 17.12 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.86 | 67.40 | 16.79 | | 130.0 | |
| | | Z | 4.99 | 67.58 | 16.92 | | 130.0 | |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.65 | 67.74 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.54 | 67.42 | 16.77 | | 130.0 | |
| | | Z | 5.65 | 67.58 | 16.87 | | 130.0 | |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.86 | 68.37 | 17.35 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.74 | 68.03 | 17.05 | | 130.0 | |
| | | Z | 5.87 | 68.25 | 17.19 | | 130.0 | |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.71 | 67.99 | 17.17 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.59 | 67.67 | 16.88 | | 130.0 | |
| | | Z | 5.71 | 67.84 | 16.99 | | 130.0 | |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.80 | 67.99 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.68 | 67.66 | 16.80 | | 130.0 | |
| | | Z | 5.80 | 67.87 | 16.93 | | 130.0 | |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.88 | 68.27 | 17.35 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.76 | 67.95 | 17.07 | | 130.0 | |
| | | Z | 5.91 | 68.22 | 17.22 | | 130.0 | |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.65 | 67.69 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.55 | 67.38 | 16.78 | | 130.0 | |
| | | Z | 5.65 | 67.55 | 16.88 | | 130.0 | |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.77 | 68.03 | 17.23 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.67 | 67.75 | 16.97 | | 130.0 | |
| | | Z | 5.76 | 67.86 | 17.04 | | 130.0 | |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.54 | 67.48 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.42 | 67.14 | 16.52 | | 130.0 | |
| | | Z | 5.54 | 67.37 | 16.67 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.81 | 66.46 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.70 | 66.13 | 16.17 | | 130.0 | |
| | | Z | 4.81 | 66.25 | 16.27 | | 130.0 | |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 5.03 | 66.90 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.90 | 66.55 | 16.34 | | 130.0 | |
| | | Z | 5.02 | 66.68 | 16.44 | | 130.0 | |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.92 | 66.79 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.79 | 66.41 | 16.18 | | 130.0 | |
| | | Z | 4.92 | 66.57 | 16.31 | | 130.0 | |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.97 | 66.94 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.84 | 66.57 | 16.34 | | 130.0 | |
| | | Z | 4.97 | 66.72 | 16.46 | | 130.0 | |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.89 | 66.78 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.76 | 66.39 | 16.20 | | 130.0 | |
| | | Z | 4.89 | 66.57 | 16.33 | | 130.0 | |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.92 | 66.95 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.78 | 66.55 | 16.24 | | 130.0 | |
| | | Z | 4.91 | 66.73 | 16.37 | | 130.0 | |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.93 | 66.87 | 16.50 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.79 | 66.46 | 16.14 | | 130.0 | |
| | | Z | 4.93 | 66.66 | 16.28 | | 130.0 | |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.85 | 67.03 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.72 | 66.63 | 16.36 | | 130.0 | |
| | | Z | 4.85 | 66.82 | 16.49 | | 130.0 | |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.90 | 66.61 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.76 | 66.22 | 15.98 | | 130.0 | |
| | | Z | 4.90 | 66.40 | 16.12 | | 130.0 | |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.47 | 66.98 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.36 | 66.66 | 16.38 | | 130.0 | |
| | | Z | 5.46 | 66.82 | 16.47 | | 130.0 | |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.52 | 67.09 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.42 | 66.80 | 16.41 | | 130.0 | |
| | | Z | 5.52 | 66.93 | 16.49 | | 130.0 | |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.42 | 67.18 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.31 | 66.84 | 16.45 | | 130.0 | |
| | | Z | 5.41 | 67.00 | 16.54 | | 130.0 | |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.45 | 67.00 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.34 | 66.68 | 16.31 | | 130.0 | |
| | | Z | 5.44 | 66.82 | 16.40 | | 130.0 | |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.56 | 67.11 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.44 | 66.75 | 16.39 | | 130.0 | |
| | | Z | 5.56 | 66.95 | 16.51 | | 130.0 | |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.53 | 67.13 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.42 | 66.81 | 16.54 | | 130.0 | |
| | | Z | 5.53 | 66.98 | 16.63 | | 130.0 | |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.53 | 67.27 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.43 | 66.97 | 16.61 | | 130.0 | |
| | | Z | 5.52 | 67.09 | 16.67 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle) | X | 5.42 | 66.86 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.30 | 66.51 | 16.26 | | 130.0 | |
| | | Z | 5.42 | 66.73 | 16.39 | | 130.0 | |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle) | X | 5.61 | 67.03 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.50 | 66.72 | 16.43 | | 130.0 | |
| | | Z | 5.60 | 66.86 | 16.51 | | 130.0 | |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle) | X | 6.05 | 68.19 | 17.33 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.94 | 67.90 | 17.07 | | 130.0 | |
| | | Z | 6.01 | 67.90 | 17.08 | | 130.0 | |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle) | X | 5.72 | 66.99 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.63 | 66.69 | 16.31 | | 130.0 | |
| | | Z | 5.71 | 66.84 | 16.40 | | 130.0 | |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle) | X | 5.99 | 67.59 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.90 | 67.32 | 16.58 | | 130.0 | |
| | | Z | 5.97 | 67.39 | 16.62 | | 130.0 | |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle) | X | 5.80 | 67.20 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.69 | 66.85 | 16.29 | | 130.0 | |
| | | Z | 5.79 | 67.05 | 16.40 | | 130.0 | |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle) | X | 5.88 | 67.25 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.77 | 66.92 | 16.31 | | 130.0 | |
| | | Z | 5.87 | 67.12 | 16.43 | | 130.0 | |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle) | X | 6.51 | 69.31 | 17.62 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.37 | 68.86 | 17.28 | | 130.0 | |
| | | Z | 6.46 | 69.04 | 17.39 | | 130.0 | |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle) | X | 6.31 | 68.81 | 17.54 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.17 | 68.39 | 17.24 | | 130.0 | |
| | | Z | 6.30 | 68.62 | 17.35 | | 130.0 | |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle) | X | 5.95 | 67.61 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.85 | 67.34 | 16.73 | | 130.0 | |
| | | Z | 5.94 | 67.45 | 16.78 | | 130.0 | |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle) | X | 5.89 | 67.42 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.75 | 67.01 | 16.39 | | 130.0 | |
| | | Z | 5.89 | 67.32 | 16.56 | | 130.0 | |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle) | X | 5.85 | 67.37 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.73 | 67.02 | 16.46 | | 130.0 | |
| | | Z | 5.86 | 67.27 | 16.59 | | 130.0 | |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle) | X | 5.75 | 66.78 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.62 | 66.39 | 15.89 | | 130.0 | |
| | | Z | 5.75 | 66.67 | 16.05 | | 130.0 | |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.13 | 67.38 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.05 | 67.09 | 16.42 | | 130.0 | |
| | | Z | 6.12 | 67.24 | 16.50 | | 130.0 | |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.31 | 67.79 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.21 | 67.50 | 16.60 | | 130.0 | |
| | | Z | 6.29 | 67.65 | 16.68 | | 130.0 | |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.31 | 67.76 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.21 | 67.47 | 16.56 | | 130.0 | |
| | | Z | 6.29 | 67.60 | 16.64 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle) | X | 6.30 | 67.76 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.20 | 67.43 | 16.59 | | 130.0 | |
| | | Z | 6.29 | 67.63 | 16.70 | | 130.0 | |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle) | X | 6.34 | 67.87 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.22 | 67.50 | 16.57 | | 130.0 | |
| | | Z | 6.33 | 67.75 | 16.70 | | 130.0 | |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle) | X | 6.33 | 67.58 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.23 | 67.29 | 16.48 | | 130.0 | |
| | | Z | 6.31 | 67.45 | 16.57 | | 130.0 | |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle) | X | 6.39 | 67.88 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.28 | 67.58 | 16.79 | | 130.0 | |
| | | Z | 6.38 | 67.76 | 16.88 | | 130.0 | |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle) | X | 6.22 | 67.60 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.12 | 67.28 | 16.54 | | 130.0 | |
| | | Z | 6.21 | 67.48 | 16.65 | | 130.0 | |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle) | X | 6.47 | 68.34 | 17.21 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.34 | 67.93 | 16.89 | | 130.0 | |
| | | Z | 6.46 | 68.22 | 17.05 | | 130.0 | |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle) | X | 6.86 | 69.01 | 17.48 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.84 | 68.95 | 17.35 | | 130.0 | |
| | | Z | 6.77 | 68.66 | 17.21 | | 130.0 | |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7) | X | 39.97 | 118.78 | 39.16 | 9.30 | 60.0 | ± 9.6 % |
| | | Y | 36.64 | 117.33 | 38.51 | | 60.0 | |
| | | Z | 28.19 | 109.42 | 36.13 | | 60.0 | |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 43.22 | 121.45 | 40.07 | 9.30 | 60.0 | ± 9.6 % |
| | | Y | 37.61 | 118.78 | 39.06 | | 60.0 | |
| | | Z | 29.77 | 111.44 | 36.87 | | 60.0 | |
| 10648-AAA | CDMA2000 (1x Advanced) | X | 0.92 | 67.44 | 13.60 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.67 | 63.31 | 10.51 | | 150.0 | |
| | | Z | 0.80 | 64.88 | 12.09 | | 150.0 | |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | X | 4.65 | 69.66 | 17.99 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.35 | 68.72 | 17.32 | | 80.0 | |
| | | Z | 4.56 | 68.93 | 17.55 | | 80.0 | |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | X | 5.05 | 68.61 | 17.89 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.81 | 67.90 | 17.37 | | 80.0 | |
| | | Z | 5.01 | 68.17 | 17.57 | | 80.0 | |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | X | 4.97 | 68.24 | 17.87 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.75 | 67.55 | 17.37 | | 80.0 | |
| | | Z | 4.94 | 67.85 | 17.56 | | 80.0 | |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | X | 5.03 | 68.27 | 17.91 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.81 | 67.56 | 17.41 | | 80.0 | |
| | | Z | 4.99 | 67.90 | 17.61 | | 80.0 | |
| 10658-AAA | Pulse Waveform (200Hz, 10%) | X | 13.25 | 86.83 | 23.62 | 10.00 | 50.0 | ± 9.6 % |
| | | Y | 14.38 | 88.09 | 23.44 | | 50.0 | |
| | | Z | 11.47 | 83.98 | 22.82 | | 50.0 | |
| 10659-AAA | Pulse Waveform (200Hz, 20%) | X | 55.89 | 109.63 | 28.77 | 6.99 | 60.0 | ± 9.6 % |
| | | Y | 73.21 | 111.71 | 28.47 | | 60.0 | |
| | | Z | 23.49 | 96.54 | 25.38 | | 60.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 116.44 | 28.38 | 3.98 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 113.18 | 26.58 | | 80.0 | |
| | | Z | 100.00 | 116.19 | 28.39 | | 80.0 | |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 118.35 | 27.71 | 2.22 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 112.59 | 24.89 | | 100.0 | |
| | | Z | 100.00 | 116.83 | 27.13 | | 100.0 | |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 126.67 | 29.16 | 0.97 | 120.0 | ± 9.6 % |
| | | Y | 100.00 | 111.31 | 22.51 | | 120.0 | |
| | | Z | 100.00 | 120.40 | 26.63 | | 120.0 | |

[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

**Calibration Laboratory of**
Schmid & Partner
Engineering AG
**Zeughausstrasse 43, 8004 Zurich, Switzerland**

**S** Schweizerischer Kalibrierdienst
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**Accreditation No.: SCS 0108**

**Client** **PC Test**

**Certificate No: EX3-3914_Feb18**

# CALIBRATION CERTIFICATE

| | |
|---|---|
| Object | EX3DV4 - SN:3914 |
| Calibration procedure(s) | QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6<br>Calibration procedure for dosimetric E-field probes |
| Calibration date: | February 14, 2018 |

BN 02-23-2018

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
|---|---|---|---|
| Power meter NRP | SN: 104778 | 04-Apr-17 (No. 217-02521/02522) | Apr-18 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-17 (No. 217-02521) | Apr-18 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-17 (No. 217-02525) | Apr-18 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 07-Apr-17 (No. 217-02528) | Apr-18 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-17 (No. ES3-3013_Dec17) | Dec-18 |
| DAE4 | SN: 660 | 21-Dec-17 (No. DAE4-660_Dec17) | Dec-18 |
| | | | |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| RF generator HP 8648C | SN: US3642U01700 | 04-Aug-99 (in house check Jun-16) | In house check: Jun-18 |
| Network Analyzer HP 8753E | SN: US37390585 | 18-Oct-01 (in house check Oct-17) | In house check: Oct-18 |

| | Name | Function | Signature |
|---|---|---|---|
| Calibrated by: | Jeton Kastrati | Laboratory Technician | |
| Approved by: | Katja Pokovic | Technical Manager | |

Issued: February 14, 2018

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

## Glossary:

| | |
|---|---|
| TSL | tissue simulating liquid |
| NORMx,y,z | sensitivity in free space |
| ConvF | sensitivity in TSL / NORMx,y,z |
| DCP | diode compression point |
| CF | crest factor (1/duty_cycle) of the RF signal |
| A, B, C, D | modulation dependent linearization parameters |
| Polarization φ | φ rotation around probe axis |
| Polarization ϑ | ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis |
| Connector Angle | information used in DASY system to align probe sensor X to the robot coordinate system |

## Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, ", "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

## Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the $E^2$-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

# Probe EX3DV4

# SN:3914

Manufactured: December 18, 2012
Calibrated: February 14, 2018

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

## Basic Calibration Parameters

| | Sensor X | Sensor Y | Sensor Z | Unc (k=2) |
|---|---|---|---|---|
| Norm (μV/(V/m)$^2$)[A] | 0.47 | 0.41 | 0.44 | ± 10.1 % |
| DCP (mV)[B] | 98.1 | 103.5 | 99.1 | |

## Modulation Calibration Parameters

| UID | Communication System Name | | A dB | B dB√μV | C | D dB | VR mV | Unc[E] (k=2) |
|---|---|---|---|---|---|---|---|---|
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 157.3 | ±3.5 % |
| | | Y | 0.0 | 0.0 | 1.0 | | 143.4 | |
| | | Z | 0.0 | 0.0 | 1.0 | | 153.1 | |

Note: For details on UID parameters see Appendix.

## Sensor Model Parameters

| | C1 fF | C2 fF | α $V^{-1}$ | T1 $ms.V^{-2}$ | T2 $ms.V^{-1}$ | T3 ms | T4 $V^{-2}$ | T5 $V^{-1}$ | T6 |
|---|---|---|---|---|---|---|---|---|---|
| X | 44.52 | 338.7 | 36.78 | 11.30 | 0.699 | 5.054 | 0.000 | 0.544 | 1.006 |
| Y | 43.63 | 317.9 | 34.18 | 13.04 | 0.623 | 5.031 | 2.000 | 0.164 | 1.007 |
| Z | 41.48 | 314.2 | 36.51 | 10.96 | 0.847 | 5.054 | 0.251 | 0.494 | 1.008 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the $E^2$-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

## Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) [C] | Relative Permittivity [F] | Conductivity (S/m) [F] | ConvF X | ConvF Y | ConvF Z | Alpha [G] | Depth [G] (mm) | Unc (k=2) |
|---|---|---|---|---|---|---|---|---|
| 6 | 55.5 | 0.75 | 21.06 | 21.06 | 21.06 | 0.00 | 1.00 | ± 13.3 % |
| 13 | 55.5 | 0.75 | 17.97 | 17.97 | 17.97 | 0.00 | 1.00 | ± 13.3 % |
| 750 | 41.9 | 0.89 | 10.18 | 10.18 | 10.18 | 0.58 | 0.80 | ± 12.0 % |
| 835 | 41.5 | 0.90 | 9.70 | 9.70 | 9.70 | 0.52 | 0.80 | ± 12.0 % |
| 1750 | 40.1 | 1.37 | 8.34 | 8.34 | 8.34 | 0.40 | 0.80 | ± 12.0 % |
| 1900 | 40.0 | 1.40 | 7.98 | 7.98 | 7.98 | 0.41 | 0.84 | ± 12.0 % |
| 2300 | 39.5 | 1.67 | 7.58 | 7.58 | 7.58 | 0.37 | 0.87 | ± 12.0 % |
| 2450 | 39.2 | 1.80 | 7.26 | 7.26 | 7.26 | 0.43 | 0.84 | ± 12.0 % |
| 2600 | 39.0 | 1.96 | 7.04 | 7.04 | 7.04 | 0.29 | 0.86 | ± 12.0 % |
| 3500 | 37.9 | 2.91 | 6.99 | 6.99 | 6.99 | 0.25 | 1.20 | ± 13.1 % |
| 3700 | 37.7 | 3.12 | 6.72 | 6.72 | 6.72 | 0.23 | 1.20 | ± 13.1 % |
| 5250 | 35.9 | 4.71 | 5.41 | 5.41 | 5.41 | 0.30 | 1.80 | ± 13.1 % |
| 5600 | 35.5 | 5.07 | 4.79 | 4.79 | 4.79 | 0.40 | 1.80 | ± 13.1 % |
| 5750 | 35.4 | 5.22 | 4.78 | 4.78 | 4.78 | 0.40 | 1.80 | ± 13.1 % |

[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4-9 MHz, and ConvF assessed at 13 MHz is 9-19 MHz. Above 5 GHz frequency validity can be extended to ± 110 MHz.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

## Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) [C] | Relative Permittivity [F] | Conductivity (S/m) [F] | ConvF X | ConvF Y | ConvF Z | Alpha [G] | Depth [G] (mm) | Unc (k=2) |
|---|---|---|---|---|---|---|---|---|
| 750 | 55.5 | 0.96 | 9.75 | 9.75 | 9.75 | 0.47 | 0.80 | ± 12.0 % |
| 835 | 55.2 | 0.97 | 9.57 | 9.57 | 9.57 | 0.44 | 0.89 | ± 12.0 % |
| 1750 | 53.4 | 1.49 | 7.91 | 7.91 | 7.91 | 0.37 | 0.80 | ± 12.0 % |
| 1900 | 53.3 | 1.52 | 7.62 | 7.62 | 7.62 | 0.29 | 1.01 | ± 12.0 % |
| 2300 | 52.9 | 1.81 | 7.46 | 7.46 | 7.46 | 0.40 | 0.88 | ± 12.0 % |
| 2450 | 52.7 | 1.95 | 7.39 | 7.39 | 7.39 | 0.39 | 0.86 | ± 12.0 % |
| 2600 | 52.5 | 2.16 | 7.05 | 7.05 | 7.05 | 0.28 | 1.05 | ± 12.0 % |
| 3500 | 51.3 | 3.31 | 6.81 | 6.81 | 6.81 | 0.30 | 1.25 | ± 13.1 % |
| 3700 | 51.0 | 3.55 | 6.64 | 6.64 | 6.64 | 0.30 | 1.25 | ± 13.1 % |
| 5250 | 48.9 | 5.36 | 4.81 | 4.81 | 4.81 | 0.35 | 1.90 | ± 13.1 % |
| 5600 | 48.5 | 5.77 | 4.09 | 4.09 | 4.09 | 0.40 | 1.90 | ± 13.1 % |
| 5750 | 48.3 | 5.94 | 4.22 | 4.22 | 4.22 | 0.40 | 1.90 | ± 13.1 % |

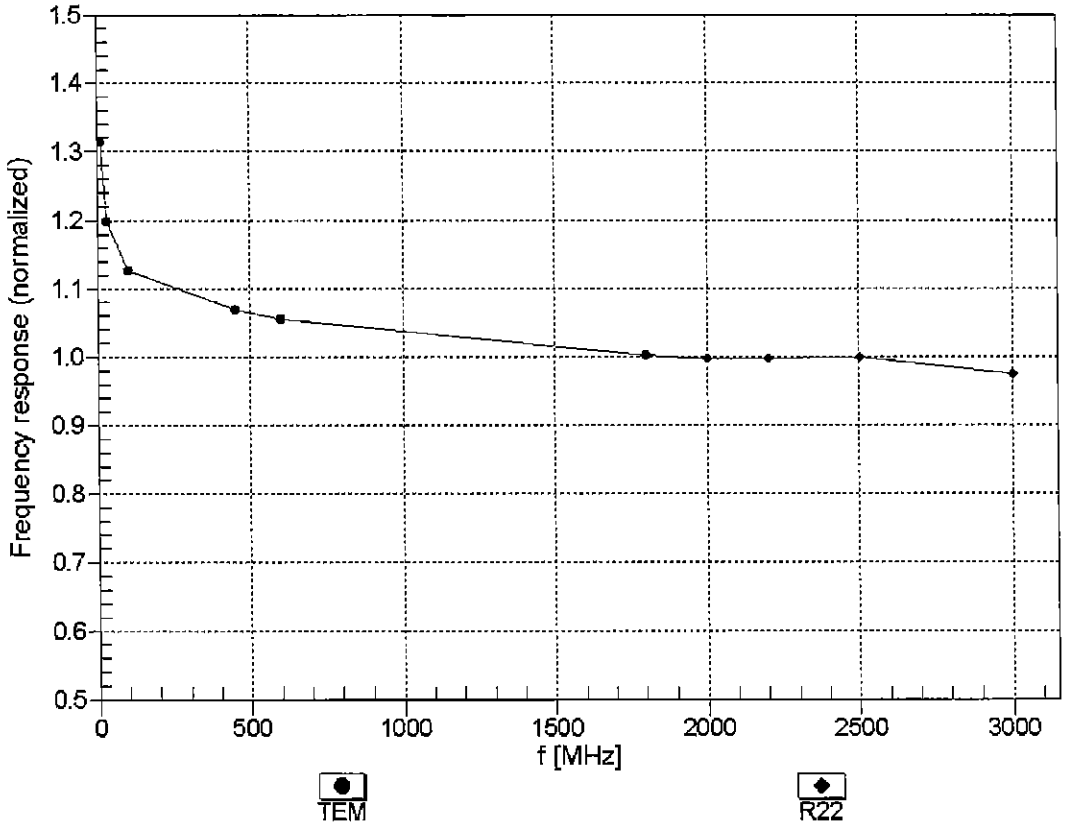
[C] Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

# Frequency Response of E-Field

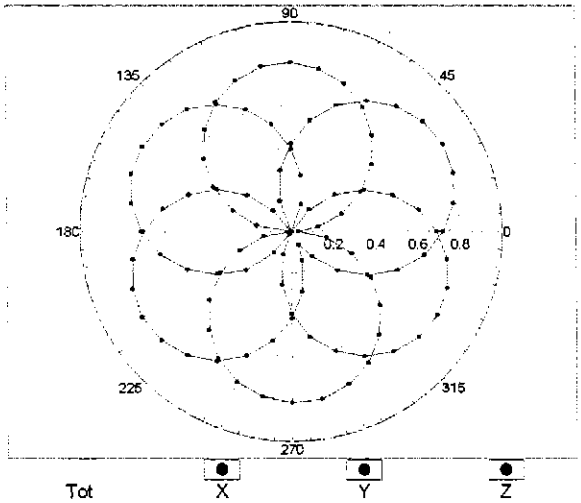
**(TEM-Cell:ifi110 EXX, Waveguide: R22)**



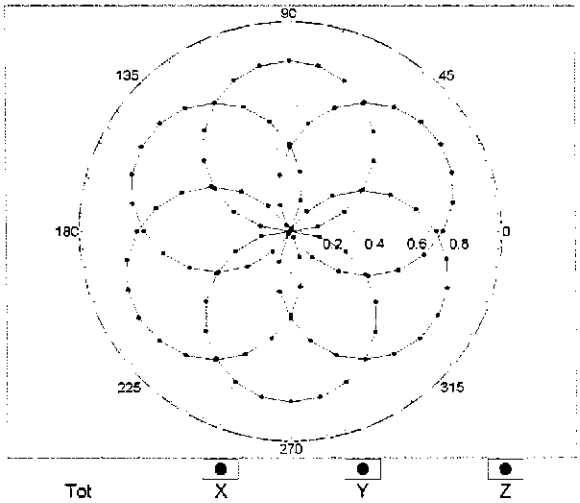

**Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)**

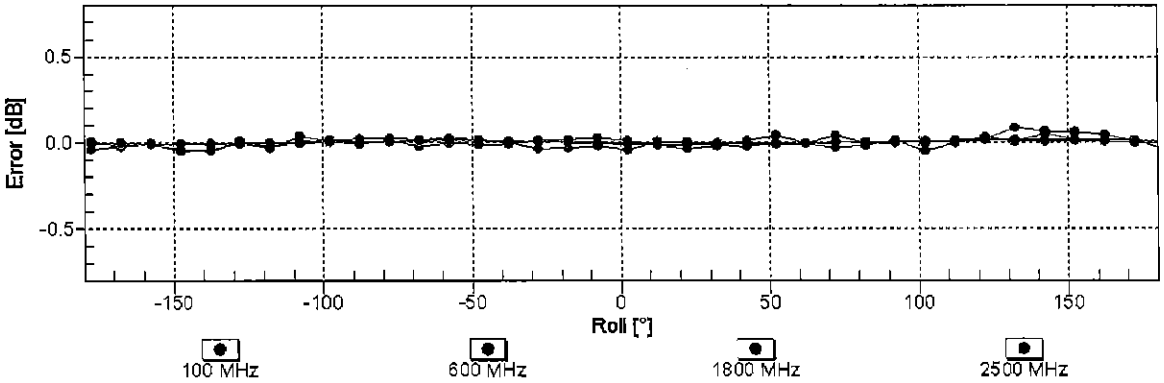
# Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM




f=1800 MHz,R22

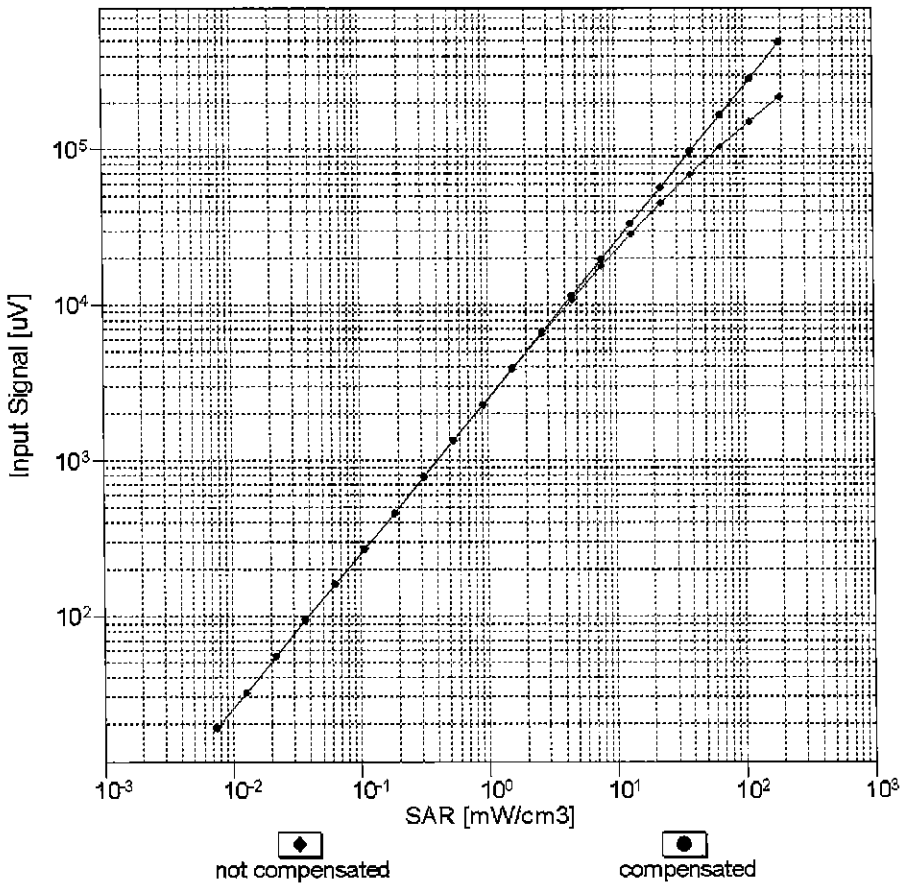


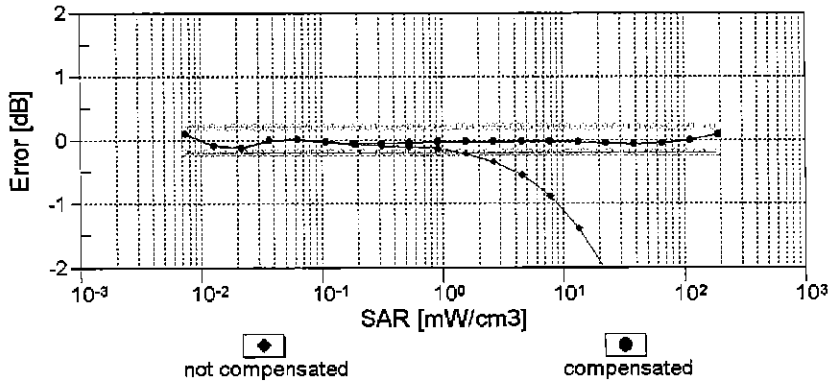




**Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)**

# Dynamic Range f($SAR_{head}$)

**(TEM cell , $f_{eval}$= 1900 MHz)**

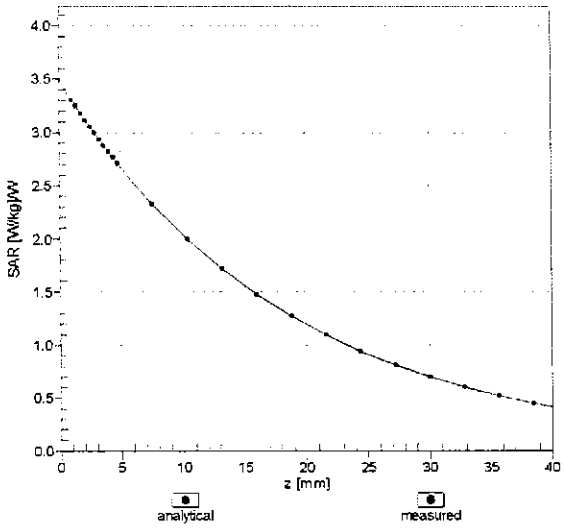


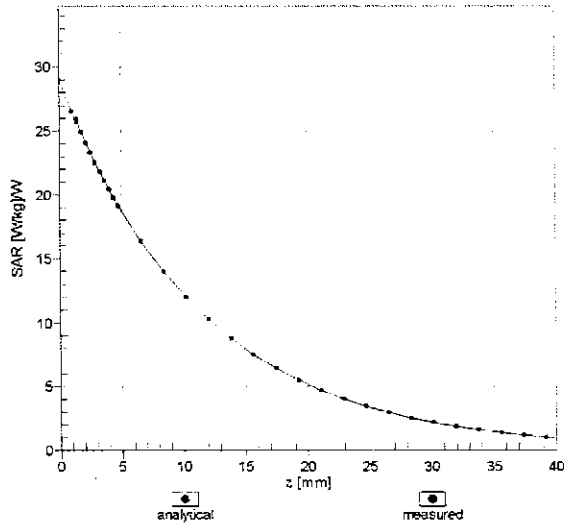

**Uncertainty of Linearity Assessment: ± 0.6% (k=2)**

# Conversion Factor Assessment

f = 835 MHz,WGLS R9 (H_convF)

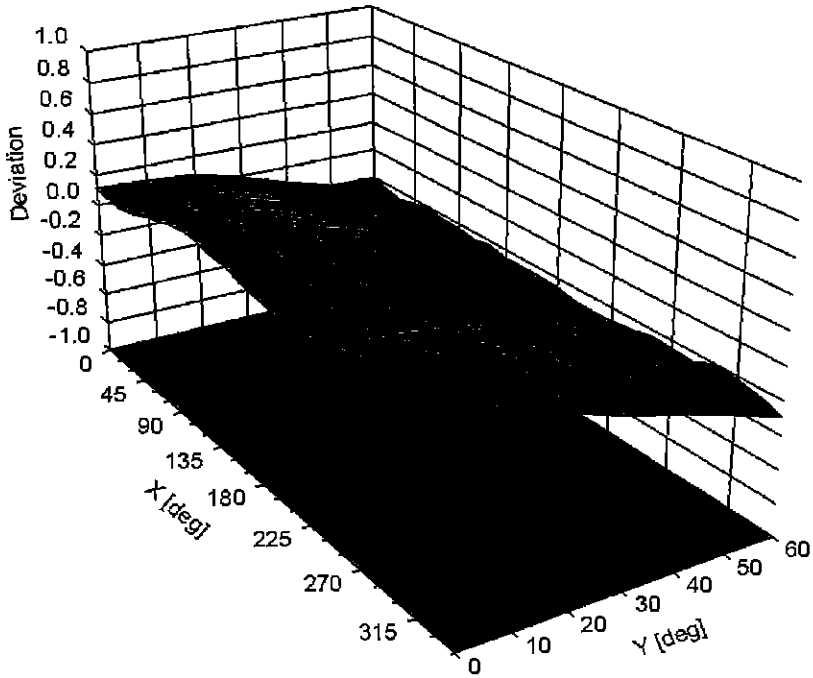


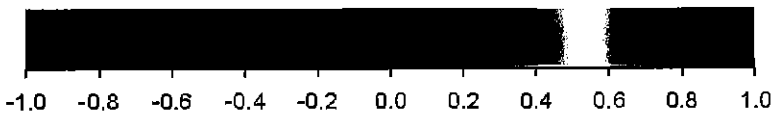

f = 1900 MHz,WGLS R22 (H_convF)




# Deviation from Isotropy in Liquid

**Error (ϕ, ϑ), f = 900 MHz**




**Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)**

# DASY/EASY - Parameters of Probe: EX3DV4 - SN:3914

## Other Probe Parameters

| | |
|---|---|
| Sensor Arrangement | Triangular |
| Connector Angle (°) | 132.3 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

## Appendix: Modulation Calibration Parameters

| UID | Communication System Name | | A dB | B dB√μV | C | D dB | VR mV | Max Unc[E] (k=2) |
|---|---|---|---|---|---|---|---|---|
| 0 | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 157.3 | ± 3.5 % |
| | | Y | 0.00 | 0.00 | 1.00 | | 143.4 | |
| | | Z | 0.00 | 0.00 | 1.00 | | 153.1 | |
| 10010-CAA | SAR Validation (Square, 100ms, 10ms) | X | 2.02 | 63.97 | 9.10 | 10.00 | 20.0 | ± 9.6 % |
| | | Y | 2.59 | 66.85 | 10.84 | | 20.0 | |
| | | Z | 2.31 | 65.14 | 9.98 | | 20.0 | |
| 10011-CAB | UMTS-FDD (WCDMA) | X | 0.89 | 66.39 | 14.20 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.06 | 68.74 | 16.01 | | 150.0 | |
| | | Z | 0.90 | 66.80 | 14.44 | | 150.0 | |
| 10012-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 1.06 | 63.38 | 14.79 | 0.41 | 150.0 | ± 9.6 % |
| | | Y | 1.17 | 64.37 | 15.54 | | 150.0 | |
| | | Z | 1.07 | 63.61 | 14.94 | | 150.0 | |
| 10013-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.75 | 66.53 | 16.97 | 1.46 | 150.0 | ± 9.6 % |
| | | Y | 4.80 | 66.78 | 17.02 | | 150.0 | |
| | | Z | 4.73 | 66.65 | 17.01 | | 150.0 | |
| 10021-DAC | GSM-FDD (TDMA, GMSK) | X | 100.00 | 110.09 | 25.45 | 9.39 | 50.0 | ± 9.6 % |
| | | Y | 100.00 | 112.00 | 26.43 | | 50.0 | |
| | | Z | 100.00 | 111.93 | 26.50 | | 50.0 | |
| 10023-DAC | GPRS-FDD (TDMA, GMSK, TN 0) | X | 100.00 | 109.83 | 25.39 | 9.57 | 50.0 | ± 9.6 % |
| | | Y | 100.00 | 111.69 | 26.33 | | 50.0 | |
| | | Z | 100.00 | 111.63 | 26.42 | | 50.0 | |
| 10024-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 100.00 | 107.43 | 23.14 | 6.56 | 60.0 | ± 9.6 % |
| | | Y | 100.00 | 110.61 | 24.77 | | 60.0 | |
| | | Z | 100.00 | 109.57 | 24.26 | | 60.0 | |
| 10025-DAC | EDGE-FDD (TDMA, 8PSK, TN 0) | X | 4.03 | 68.96 | 25.05 | 12.57 | 50.0 | ± 9.6 % |
| | | Y | 5.30 | 77.15 | 29.41 | | 50.0 | |
| | | Z | 4.06 | 68.52 | 24.65 | | 50.0 | |
| 10026-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 8.87 | 91.28 | 32.17 | 9.56 | 60.0 | ± 9.6 % |
| | | Y | 10.08 | 94.25 | 33.27 | | 60.0 | |
| | | Z | 8.65 | 90.32 | 31.77 | | 60.0 | |
| 10027-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | X | 100.00 | 105.82 | 21.66 | 4.80 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 111.09 | 24.24 | | 80.0 | |
| | | Z | 100.00 | 108.42 | 22.93 | | 80.0 | |
| 10028-DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 100.00 | 104.11 | 20.26 | 3.55 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 112.84 | 24.34 | | 100.0 | |
| | | Z | 100.00 | 107.37 | 21.76 | | 100.0 | |
| 10029-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | X | 5.57 | 80.93 | 27.02 | 7.80 | 80.0 | ± 9.6 % |
| | | Y | 6.11 | 82.68 | 27.69 | | 80.0 | |
| | | Z | 5.53 | 80.55 | 26.85 | | 80.0 | |
| 10030-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 100.00 | 104.99 | 21.59 | 5.30 | 70.0 | ± 9.6 % |
| | | Y | 100.00 | 109.04 | 23.62 | | 70.0 | |
| | | Z | 100.00 | 107.17 | 22.68 | | 70.0 | |
| 10031-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 0.46 | 62.47 | 6.17 | 1.88 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 111.97 | 22.67 | | 100.0 | |
| | | Z | 100.00 | 95.35 | 15.52 | | 100.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 0.19 | 60.00 | 3.78 | 1.17 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 120.03 | 24.95 | | 100.0 | |
| | | Z | 0.19 | 60.00 | 4.15 | | 100.0 | |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | X | 13.55 | 95.45 | 24.90 | 5.30 | 70.0 | ± 9.6 % |
| | | Y | 18.76 | 100.49 | 26.60 | | 70.0 | |
| | | Z | 13.36 | 94.67 | 24.55 | | 70.0 | |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | X | 2.70 | 75.51 | 16.71 | 1.88 | 100.0 | ± 9.6 % |
| | | Y | 4.49 | 82.47 | 19.70 | | 100.0 | |
| | | Z | 2.90 | 76.09 | 16.70 | | 100.0 | |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5) | X | 1.71 | 70.85 | 14.56 | 1.17 | 100.0 | ± 9.6 % |
| | | Y | 2.70 | 76.95 | 17.56 | | 100.0 | |
| | | Z | 1.78 | 71.24 | 14.48 | | 100.0 | |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 22.62 | 103.29 | 27.18 | 5.30 | 70.0 | ± 9.6 % |
| | | Y | 32.35 | 108.98 | 28.96 | | 70.0 | |
| | | Z | 21.86 | 102.15 | 26.73 | | 70.0 | |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 2.48 | 74.51 | 16.30 | 1.88 | 100.0 | ± 9.6 % |
| | | Y | 3.96 | 80.90 | 19.14 | | 100.0 | |
| | | Z | 2.61 | 74.90 | 16.23 | | 100.0 | |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 1.74 | 71.34 | 14.88 | 1.17 | 100.0 | ± 9.6 % |
| | | Y | 2.75 | 77.52 | 17.90 | | 100.0 | |
| | | Z | 1.82 | 71.77 | 14.82 | | 100.0 | |
| 10039-CAB | CDMA2000 (1xRTT, RC1) | X | 1.34 | 68.49 | 13.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.27 | 75.66 | 16.89 | | 150.0 | |
| | | Z | 1.29 | 68.35 | 12.80 | | 150.0 | |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 34.99 | 94.66 | 19.93 | 7.78 | 50.0 | ± 9.6 % |
| | | Y | 100.00 | 108.11 | 23.89 | | 50.0 | |
| | | Z | 100.00 | 107.01 | 23.40 | | 50.0 | |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.17 | 126.30 | 3.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.00 | 107.81 | 5.46 | | 150.0 | |
| | | Z | 0.15 | 126.17 | 2.27 | | 150.0 | |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 10.11 | 79.88 | 18.52 | 13.80 | 25.0 | ± 9.6 % |
| | | Y | 23.48 | 91.75 | 22.45 | | 25.0 | |
| | | Z | 12.25 | 82.71 | 19.92 | | 25.0 | |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 11.72 | 83.69 | 18.67 | 10.79 | 40.0 | ± 9.6 % |
| | | Y | 40.84 | 100.05 | 23.71 | | 40.0 | |
| | | Z | 15.78 | 87.97 | 20.48 | | 40.0 | |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | X | 18.86 | 95.31 | 25.05 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 26.98 | 101.35 | 27.04 | | 50.0 | |
| | | Z | 17.19 | 93.67 | 24.60 | | 50.0 | |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 4.30 | 76.01 | 24.21 | 6.55 | 100.0 | ± 9.6 % |
| | | Y | 4.66 | 77.31 | 24.71 | | 100.0 | |
| | | Z | 4.30 | 75.85 | 24.15 | | 100.0 | |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.10 | 64.51 | 15.41 | 0.61 | 110.0 | ± 9.6 % |
| | | Y | 1.22 | 65.59 | 16.19 | | 110.0 | |
| | | Z | 1.11 | 64.78 | 15.58 | | 110.0 | |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 40.70 | 121.16 | 30.62 | 1.30 | 110.0 | ± 9.6 % |
| | | Y | 100.00 | 138.01 | 35.59 | | 110.0 | |
| | | Z | 76.47 | 130.66 | 32.92 | | 110.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 2.97 | 81.68 | 22.34 | 2.04 | 110.0 | ± 9.6 % |
| | | Y | 3.52 | 84.01 | 23.42 | | 110.0 | |
| | | Z | 3.16 | 82.63 | 22.73 | | 110.0 | |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 4.54 | 66.50 | 16.38 | 0.49 | 100.0 | ± 9.6 % |
| | | Y | 4.60 | 66.81 | 16.49 | | 100.0 | |
| | | Z | 4.51 | 66.59 | 16.41 | | 100.0 | |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 4.56 | 66.59 | 16.48 | 0.72 | 100.0 | ± 9.6 % |
| | | Y | 4.62 | 66.89 | 16.58 | | 100.0 | |
| | | Z | 4.53 | 66.70 | 16.52 | | 100.0 | |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | X | 4.84 | 66.85 | 16.71 | 0.86 | 100.0 | ± 9.6 % |
| | | Y | 4.89 | 67.12 | 16.79 | | 100.0 | |
| | | Z | 4.80 | 66.93 | 16.74 | | 100.0 | |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps) | X | 4.71 | 66.74 | 16.80 | 1.21 | 100.0 | ± 9.6 % |
| | | Y | 4.76 | 67.01 | 16.87 | | 100.0 | |
| | | Z | 4.67 | 66.83 | 16.83 | | 100.0 | |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps) | X | 4.72 | 66.77 | 16.97 | 1.46 | 100.0 | ± 9.6 % |
| | | Y | 4.77 | 67.02 | 17.03 | | 100.0 | |
| | | Z | 4.69 | 66.86 | 17.00 | | 100.0 | |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps) | X | 5.02 | 66.97 | 17.43 | 2.04 | 100.0 | ± 9.6 % |
| | | Y | 5.06 | 67.18 | 17.45 | | 100.0 | |
| | | Z | 4.99 | 67.10 | 17.47 | | 100.0 | |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | X | 5.06 | 66.99 | 17.64 | 2.55 | 100.0 | ± 9.6 % |
| | | Y | 5.10 | 67.19 | 17.65 | | 100.0 | |
| | | Z | 5.03 | 67.09 | 17.67 | | 100.0 | |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps) | X | 5.14 | 67.01 | 17.83 | 2.67 | 100.0 | ± 9.6 % |
| | | Y | 5.18 | 67.19 | 17.83 | | 100.0 | |
| | | Z | 5.11 | 67.11 | 17.86 | | 100.0 | |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps) | X | 4.84 | 66.62 | 17.27 | 1.99 | 100.0 | ± 9.6 % |
| | | Y | 4.89 | 66.85 | 17.31 | | 100.0 | |
| | | Z | 4.83 | 66.75 | 17.32 | | 100.0 | |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.82 | 66.93 | 17.48 | 2.30 | 100.0 | ± 9.6 % |
| | | Y | 4.86 | 67.16 | 17.51 | | 100.0 | |
| | | Z | 4.80 | 67.06 | 17.53 | | 100.0 | |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.88 | 67.11 | 17.81 | 2.83 | 100.0 | ± 9.6 % |
| | | Y | 4.92 | 67.32 | 17.83 | | 100.0 | |
| | | Z | 4.87 | 67.25 | 17.87 | | 100.0 | |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.87 | 67.01 | 17.95 | 3.30 | 100.0 | ± 9.6 % |
| | | Y | 4.91 | 67.22 | 17.97 | | 100.0 | |
| | | Z | 4.87 | 67.19 | 18.02 | | 100.0 | |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.90 | 67.11 | 18.25 | 3.82 | 90.0 | ± 9.6 % |
| | | Y | 4.95 | 67.32 | 18.26 | | 90.0 | |
| | | Z | 4.91 | 67.27 | 18.31 | | 90.0 | |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.92 | 66.92 | 18.38 | 4.15 | 90.0 | ± 9.6 % |
| | | Y | 4.97 | 67.13 | 18.38 | | 90.0 | |
| | | Z | 4.94 | 67.11 | 18.46 | | 90.0 | |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.95 | 66.99 | 18.48 | 4.30 | 90.0 | ± 9.6 % |
| | | Y | 5.00 | 67.21 | 18.49 | | 90.0 | |
| | | Z | 4.97 | 67.20 | 18.56 | | 90.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10081-CAB | CDMA2000 (1xRTT, RC3) | X | 0.61 | 63.26 | 9.90 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.87 | 67.43 | 13.01 | | 150.0 | |
| | | Z | 0.58 | 63.10 | 9.56 | | 150.0 | |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 2.50 | 65.17 | 5.97 | 4.77 | 80.0 | ± 9.6 % |
| | | Y | 0.75 | 60.00 | 4.55 | | 80.0 | |
| | | Z | 0.72 | 60.00 | 4.31 | | 80.0 | |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 100.00 | 107.54 | 23.21 | 6.56 | 60.0 | ± 9.6 % |
| | | Y | 100.00 | 110.64 | 24.80 | | 60.0 | |
| | | Z | 100.00 | 109.67 | 24.33 | | 60.0 | |
| 10097-CAB | UMTS-FDD (HSDPA) | X | 1.69 | 67.19 | 15.08 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.88 | 68.79 | 16.18 | | 150.0 | |
| | | Z | 1.71 | 67.59 | 15.23 | | 150.0 | |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2) | X | 1.65 | 67.13 | 15.04 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.84 | 68.75 | 16.15 | | 150.0 | |
| | | Z | 1.67 | 67.53 | 15.19 | | 150.0 | |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 8.93 | 91.41 | 32.21 | 9.56 | 60.0 | ± 9.6 % |
| | | Y | 10.16 | 94.39 | 33.31 | | 60.0 | |
| | | Z | 8.70 | 90.44 | 31.80 | | 60.0 | |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | X | 2.94 | 69.72 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.18 | 71.08 | 17.07 | | 150.0 | |
| | | Z | 2.94 | 69.89 | 16.39 | | 150.0 | |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | X | 3.09 | 67.13 | 15.64 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.21 | 67.85 | 16.08 | | 150.0 | |
| | | Z | 3.07 | 67.21 | 15.70 | | 150.0 | |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | X | 3.20 | 67.14 | 15.76 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.32 | 67.82 | 16.17 | | 150.0 | |
| | | Z | 3.18 | 67.23 | 15.82 | | 150.0 | |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | X | 5.93 | 75.11 | 20.17 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.63 | 76.82 | 20.78 | | 65.0 | |
| | | Z | 5.91 | 75.14 | 20.21 | | 65.0 | |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | X | 5.89 | 73.03 | 20.08 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.25 | 73.91 | 20.36 | | 65.0 | |
| | | Z | 5.90 | 73.09 | 20.11 | | 65.0 | |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | X | 5.51 | 71.58 | 19.75 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.10 | 73.31 | 20.41 | | 65.0 | |
| | | Z | 5.86 | 72.81 | 20.30 | | 65.0 | |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | X | 2.55 | 69.01 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.75 | 70.30 | 16.89 | | 150.0 | |
| | | Z | 2.54 | 69.20 | 16.22 | | 150.0 | |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | X | 2.74 | 66.99 | 15.50 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.87 | 67.79 | 16.01 | | 150.0 | |
| | | Z | 2.72 | 67.11 | 15.56 | | 150.0 | |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | X | 2.04 | 68.09 | 15.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.23 | 69.47 | 16.51 | | 150.0 | |
| | | Z | 2.03 | 68.32 | 15.72 | | 150.0 | |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | X | 2.46 | 67.87 | 15.72 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.64 | 69.03 | 16.47 | | 150.0 | |
| | | Z | 2.45 | 68.15 | 15.81 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | X | 2.87 | 67.02 | 15.59 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.00 | 67.79 | 16.07 | | 150.0 | |
| | | Z | 2.85 | 67.16 | 15.65 | | 150.0 | |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | X | 2.61 | 68.07 | 15.89 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.79 | 69.17 | 16.59 | | 150.0 | |
| | | Z | 2.61 | 68.36 | 15.98 | | 150.0 | |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | X | 5.01 | 67.03 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.06 | 67.33 | 16.45 | | 150.0 | |
| | | Z | 4.97 | 67.05 | 16.35 | | 150.0 | |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM) | X | 5.27 | 67.10 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.32 | 67.38 | 16.48 | | 150.0 | |
| | | Z | 5.22 | 67.11 | 16.39 | | 150.0 | |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.09 | 67.20 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.14 | 67.50 | 16.46 | | 150.0 | |
| | | Z | 5.06 | 67.23 | 16.37 | | 150.0 | |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK) | X | 4.97 | 66.87 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.03 | 67.20 | 16.40 | | 150.0 | |
| | | Z | 4.94 | 66.93 | 16.31 | | 150.0 | |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM) | X | 5.35 | 67.31 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.39 | 67.55 | 16.57 | | 150.0 | |
| | | Z | 5.30 | 67.32 | 16.50 | | 150.0 | |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM) | X | 5.08 | 67.16 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.12 | 67.45 | 16.45 | | 150.0 | |
| | | Z | 5.04 | 67.20 | 16.36 | | 150.0 | |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | X | 3.23 | 67.13 | 15.67 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.35 | 67.82 | 16.08 | | 150.0 | |
| | | Z | 3.21 | 67.22 | 15.73 | | 150.0 | |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | X | 3.36 | 67.28 | 15.87 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.48 | 67.94 | 16.26 | | 150.0 | |
| | | Z | 3.34 | 67.38 | 15.93 | | 150.0 | |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | X | 1.80 | 67.92 | 15.04 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.02 | 69.71 | 16.23 | | 150.0 | |
| | | Z | 1.78 | 68.19 | 15.11 | | 150.0 | |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | X | 2.28 | 68.33 | 15.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.56 | 70.16 | 16.27 | | 150.0 | |
| | | Z | 2.27 | 68.61 | 15.13 | | 150.0 | |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | X | 2.03 | 65.81 | 13.36 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.22 | 67.14 | 14.29 | | 150.0 | |
| | | Z | 1.98 | 65.83 | 13.22 | | 150.0 | |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | X | 0.92 | 62.55 | 9.46 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.17 | 65.32 | 11.54 | | 150.0 | |
| | | Z | 0.84 | 61.98 | 8.80 | | 150.0 | |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 1.39 | 62.93 | 9.23 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.99 | 66.57 | 11.19 | | 150.0 | |
| | | Z | 1.31 | 62.53 | 8.72 | | 150.0 | |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 1.52 | 63.83 | 9.83 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.52 | 69.22 | 12.51 | | 150.0 | |
| | | Z | 1.42 | 63.36 | 9.28 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | X | 2.75 | 67.05 | 15.55 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.88 | 67.86 | 16.07 | | 150.0 | |
| | | Z | 2.73 | 67.18 | 15.62 | | 150.0 | |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | X | 2.88 | 67.08 | 15.63 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.01 | 67.85 | 16.12 | | 150.0 | |
| | | Z | 2.86 | 67.22 | 15.70 | | 150.0 | |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | X | 6.32 | 77.90 | 21.36 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.91 | 79.14 | 21.77 | | 65.0 | |
| | | Z | 6.41 | 78.22 | 21.50 | | 65.0 | |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | X | 5.42 | 72.95 | 19.71 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.78 | 73.88 | 20.03 | | 65.0 | |
| | | Z | 5.43 | 73.04 | 19.72 | | 65.0 | |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | X | 5.81 | 74.06 | 20.59 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.20 | 74.97 | 20.87 | | 65.0 | |
| | | Z | 5.84 | 74.21 | 20.62 | | 65.0 | |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | X | 2.09 | 68.53 | 15.87 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.29 | 69.96 | 16.81 | | 150.0 | |
| | | Z | 2.08 | 68.78 | 15.99 | | 150.0 | |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | X | 2.46 | 67.89 | 15.74 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.64 | 69.05 | 16.49 | | 150.0 | |
| | | Z | 2.46 | 68.18 | 15.84 | | 150.0 | |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | X | 1.63 | 67.76 | 14.61 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.89 | 69.98 | 16.07 | | 150.0 | |
| | | Z | 1.61 | 67.98 | 14.61 | | 150.0 | |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | X | 1.84 | 66.10 | 13.16 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.08 | 67.93 | 14.40 | | 150.0 | |
| | | Z | 1.79 | 66.07 | 12.96 | | 150.0 | |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | X | 2.62 | 68.14 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.80 | 69.25 | 16.65 | | 150.0 | |
| | | Z | 2.62 | 68.44 | 16.04 | | 150.0 | |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | X | 1.94 | 66.53 | 13.44 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.21 | 68.50 | 14.73 | | 150.0 | |
| | | Z | 1.88 | 66.49 | 13.23 | | 150.0 | |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | X | 2.59 | 68.31 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.73 | 69.19 | 16.57 | | 150.0 | |
| | | Z | 2.58 | 68.51 | 16.08 | | 150.0 | |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | X | 2.77 | 67.03 | 15.54 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.91 | 67.84 | 16.05 | | 150.0 | |
| | | Z | 2.75 | 67.18 | 15.60 | | 150.0 | |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | X | 2.88 | 67.21 | 15.67 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.02 | 68.01 | 16.17 | | 150.0 | |
| | | Z | 2.86 | 67.38 | 15.74 | | 150.0 | |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | X | 3.37 | 69.04 | 18.77 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.72 | 71.09 | 19.82 | | 150.0 | |
| | | Z | 3.38 | 69.53 | 19.11 | | 150.0 | |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.04 | 71.49 | 19.00 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 5.05 | 75.77 | 20.88 | | 150.0 | |
| | | Z | 4.12 | 72.30 | 19.44 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 4.56 | 74.09 | 20.53 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 5.99 | 79.40 | 22.74 | | 150.0 | |
| | | Z | 4.72 | 75.27 | 21.13 | | 150.0 | |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | X | 2.74 | 67.94 | 18.26 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.25 | 71.55 | 20.05 | | 150.0 | |
| | | Z | 2.77 | 68.38 | 18.59 | | 150.0 | |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | X | 3.65 | 73.29 | 20.42 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 6.00 | 83.03 | 24.31 | | 150.0 | |
| | | Z | 3.81 | 74.44 | 21.04 | | 150.0 | |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | X | 2.98 | 69.09 | 17.51 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.17 | 75.40 | 20.24 | | 150.0 | |
| | | Z | 3.05 | 69.77 | 17.92 | | 150.0 | |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | X | 6.26 | 85.95 | 26.48 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 13.49 | 101.43 | 31.66 | | 65.0 | |
| | | Z | 6.07 | 85.72 | 26.58 | | 65.0 | |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | X | 11.36 | 93.09 | 26.93 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 61.90 | 122.46 | 34.86 | | 65.0 | |
| | | Z | 13.00 | 96.00 | 28.02 | | 65.0 | |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | X | 8.36 | 86.77 | 24.30 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 35.10 | 110.72 | 31.17 | | 65.0 | |
| | | Z | 8.86 | 88.32 | 24.99 | | 65.0 | |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | X | 2.71 | 67.63 | 18.00 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.19 | 71.11 | 19.75 | | 150.0 | |
| | | Z | 2.74 | 68.04 | 18.32 | | 150.0 | |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | X | 3.66 | 73.32 | 20.43 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 6.01 | 83.07 | 24.33 | | 150.0 | |
| | | Z | 3.81 | 74.46 | 21.05 | | 150.0 | |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | X | 2.73 | 67.78 | 18.10 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.23 | 71.31 | 19.86 | | 150.0 | |
| | | Z | 2.76 | 68.20 | 18.41 | | 150.0 | |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | X | 3.63 | 73.10 | 20.31 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 5.90 | 82.67 | 24.15 | | 150.0 | |
| | | Z | 3.78 | 74.24 | 20.93 | | 150.0 | |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | X | 3.28 | 71.01 | 18.80 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.94 | 78.87 | 22.07 | | 150.0 | |
| | | Z | 3.38 | 71.91 | 19.31 | | 150.0 | |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | X | 2.98 | 69.03 | 17.47 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.15 | 75.28 | 20.17 | | 150.0 | |
| | | Z | 3.04 | 69.71 | 17.88 | | 150.0 | |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | X | 2.73 | 67.76 | 18.09 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.22 | 71.29 | 19.85 | | 150.0 | |
| | | Z | 2.75 | 68.18 | 18.41 | | 150.0 | |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | X | 3.62 | 73.08 | 20.30 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 5.88 | 82.63 | 24.13 | | 150.0 | |
| | | Z | 3.77 | 74.21 | 20.92 | | 150.0 | |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | X | 2.97 | 69.01 | 17.46 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.14 | 75.24 | 20.16 | | 150.0 | |
| | | Z | 3.04 | 69.68 | 17.87 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | X | 2.74 | 67.80 | 18.11 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.24 | 71.35 | 19.88 | | 150.0 | |
| | | Z | 2.77 | 68.22 | 18.43 | | 150.0 | |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | X | 3.64 | 73.15 | 20.34 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 5.93 | 82.75 | 24.19 | | 150.0 | |
| | | Z | 3.79 | 74.29 | 20.96 | | 150.0 | |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | X | 2.99 | 69.07 | 17.49 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.16 | 75.34 | 20.20 | | 150.0 | |
| | | Z | 3.05 | 69.75 | 17.90 | | 150.0 | |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | X | 2.75 | 67.86 | 18.18 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 3.25 | 71.43 | 19.96 | | 150.0 | |
| | | Z | 2.78 | 68.29 | 18.51 | | 150.0 | |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | X | 3.76 | 73.83 | 20.74 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 6.30 | 84.02 | 24.77 | | 150.0 | |
| | | Z | 3.92 | 75.04 | 21.38 | | 150.0 | |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | X | 3.05 | 69.47 | 17.77 | 3.01 | 150.0 | ± 9.6 % |
| | | Y | 4.32 | 76.05 | 20.59 | | 150.0 | |
| | | Z | 3.12 | 70.18 | 18.19 | | 150.0 | |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK) | X | 4.39 | 66.44 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.46 | 66.83 | 16.18 | | 150.0 | |
| | | Z | 4.36 | 66.53 | 16.02 | | 150.0 | |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.55 | 66.74 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.63 | 67.12 | 16.30 | | 150.0 | |
| | | Z | 4.51 | 66.81 | 16.16 | | 150.0 | |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.59 | 66.77 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.67 | 67.15 | 16.32 | | 150.0 | |
| | | Z | 4.55 | 66.84 | 16.18 | | 150.0 | |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | X | 4.39 | 66.48 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.46 | 66.87 | 16.19 | | 150.0 | |
| | | Z | 4.35 | 66.57 | 16.03 | | 150.0 | |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM) | X | 4.56 | 66.75 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.64 | 67.14 | 16.31 | | 150.0 | |
| | | Z | 4.53 | 66.83 | 16.17 | | 150.0 | |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM) | X | 4.59 | 66.78 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.67 | 67.16 | 16.33 | | 150.0 | |
| | | Z | 4.55 | 66.85 | 16.19 | | 150.0 | |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.34 | 66.50 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.41 | 66.90 | 16.15 | | 150.0 | |
| | | Z | 4.30 | 66.59 | 15.99 | | 150.0 | |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM) | X | 4.56 | 66.72 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.63 | 67.10 | 16.30 | | 150.0 | |
| | | Z | 4.52 | 66.79 | 16.15 | | 150.0 | |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM) | X | 4.60 | 66.71 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.67 | 67.09 | 16.31 | | 150.0 | |
| | | Z | 4.56 | 66.79 | 16.17 | | 150.0 | |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK) | X | 4.94 | 66.87 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.00 | 67.20 | 16.40 | | 150.0 | |
| | | Z | 4.91 | 66.93 | 16.30 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM) | X | 5.26 | 67.15 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.29 | 67.39 | 16.51 | | 150.0 | |
| | | Z | 5.21 | 67.16 | 16.44 | | 150.0 | |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 4.98 | 66.98 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.05 | 67.32 | 16.38 | | 150.0 | |
| | | Z | 4.95 | 67.03 | 16.28 | | 150.0 | |
| 10225-CAB | UMTS-FDD (HSPA+) | X | 2.65 | 65.82 | 14.94 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.77 | 66.54 | 15.42 | | 150.0 | |
| | | Z | 2.63 | 65.96 | 14.93 | | 150.0 | |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | X | 12.29 | 94.61 | 27.52 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 76.74 | 126.49 | 35.96 | | 65.0 | |
| | | Z | 14.23 | 97.75 | 28.67 | | 65.0 | |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | X | 11.60 | 92.16 | 26.09 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 58.51 | 119.10 | 33.33 | | 65.0 | |
| | | Z | 13.58 | 95.42 | 27.28 | | 65.0 | |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | X | 8.07 | 91.29 | 28.44 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 14.98 | 103.75 | 32.45 | | 65.0 | |
| | | Z | 8.37 | 92.43 | 29.01 | | 65.0 | |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | X | 11.46 | 93.21 | 26.98 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 62.74 | 122.68 | 34.92 | | 65.0 | |
| | | Z | 13.11 | 96.13 | 28.07 | | 65.0 | |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | X | 10.78 | 90.84 | 25.59 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 48.68 | 115.84 | 32.42 | | 65.0 | |
| | | Z | 12.46 | 93.85 | 26.71 | | 65.0 | |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | X | 7.66 | 90.18 | 27.97 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 13.86 | 102.08 | 31.86 | | 65.0 | |
| | | Z | 7.92 | 91.24 | 28.52 | | 65.0 | |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | X | 11.44 | 93.19 | 26.97 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 62.67 | 122.68 | 34.92 | | 65.0 | |
| | | Z | 13.08 | 96.11 | 28.07 | | 65.0 | |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | X | 10.75 | 90.81 | 25.58 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 48.50 | 115.79 | 32.41 | | 65.0 | |
| | | Z | 12.42 | 93.82 | 26.70 | | 65.0 | |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | X | 7.34 | 89.19 | 27.51 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 12.98 | 100.59 | 31.27 | | 65.0 | |
| | | Z | 7.57 | 90.21 | 28.04 | | 65.0 | |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | X | 11.45 | 93.23 | 26.99 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 63.03 | 122.79 | 34.95 | | 65.0 | |
| | | Z | 13.11 | 96.15 | 28.08 | | 65.0 | |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | X | 10.87 | 90.96 | 25.62 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 49.65 | 116.13 | 32.49 | | 65.0 | |
| | | Z | 12.57 | 93.99 | 26.75 | | 65.0 | |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | X | 7.67 | 90.24 | 28.00 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 13.91 | 102.19 | 31.90 | | 65.0 | |
| | | Z | 7.93 | 91.30 | 28.54 | | 65.0 | |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | X | 11.41 | 93.16 | 26.96 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 62.56 | 122.66 | 34.91 | | 65.0 | |
| | | Z | 13.06 | 96.08 | 28.06 | | 65.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | X | 10.72 | 90.78 | 25.57 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 48.29 | 115.74 | 32.40 | | 65.0 | |
| | | Z | 12.38 | 93.78 | 26.69 | | 65.0 | |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | X | 7.65 | 90.20 | 27.98 | 6.02 | 65.0 | ± 9.6 % |
| | | Y | 13.86 | 102.14 | 31.88 | | 65.0 | |
| | | Z | 7.91 | 91.26 | 28.53 | | 65.0 | |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 7.49 | 79.94 | 24.73 | 6.98 | 65.0 | ± 9.6 % |
| | | Y | 9.15 | 84.52 | 26.53 | | 65.0 | |
| | | Z | 7.78 | 81.10 | 25.24 | | 65.0 | |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 6.76 | 77.82 | 23.76 | 6.98 | 65.0 | ± 9.6 % |
| | | Y | 8.56 | 83.16 | 25.93 | | 65.0 | |
| | | Z | 7.57 | 80.56 | 24.94 | | 65.0 | |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | X | 5.55 | 74.73 | 23.33 | 6.98 | 65.0 | ± 9.6 % |
| | | Y | 6.44 | 78.27 | 24.91 | | 65.0 | |
| | | Z | 5.56 | 75.03 | 23.50 | | 65.0 | |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | X | 4.91 | 73.06 | 16.84 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.23 | 76.34 | 18.14 | | 65.0 | |
| | | Z | 4.96 | 73.17 | 16.71 | | 65.0 | |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | X | 4.78 | 72.39 | 16.50 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.96 | 75.43 | 17.72 | | 65.0 | |
| | | Z | 4.79 | 72.41 | 16.32 | | 65.0 | |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | X | 4.86 | 76.58 | 18.54 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.74 | 78.81 | 19.49 | | 65.0 | |
| | | Z | 4.75 | 76.10 | 18.16 | | 65.0 | |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | X | 4.54 | 72.63 | 17.68 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.00 | 73.89 | 18.23 | | 65.0 | |
| | | Z | 4.50 | 72.44 | 17.41 | | 65.0 | |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | X | 4.51 | 72.01 | 17.39 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 4.93 | 73.18 | 17.90 | | 65.0 | |
| | | Z | 4.45 | 71.77 | 17.09 | | 65.0 | |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | X | 6.38 | 81.20 | 21.41 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.34 | 83.11 | 22.13 | | 65.0 | |
| | | Z | 6.46 | 81.34 | 21.34 | | 65.0 | |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | X | 5.54 | 75.67 | 20.83 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.99 | 76.71 | 21.17 | | 65.0 | |
| | | Z | 5.60 | 75.87 | 20.83 | | 65.0 | |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | X | 5.22 | 73.28 | 19.41 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.60 | 74.26 | 19.76 | | 65.0 | |
| | | Z | 5.22 | 73.35 | 19.34 | | 65.0 | |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | X | 6.60 | 81.03 | 22.49 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.35 | 82.49 | 22.99 | | 65.0 | |
| | | Z | 6.74 | 81.46 | 22.63 | | 65.0 | |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | X | 5.32 | 72.45 | 19.46 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.67 | 73.38 | 19.78 | | 65.0 | |
| | | Z | 5.34 | 72.58 | 19.46 | | 65.0 | |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | X | 5.67 | 73.46 | 20.23 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.04 | 74.36 | 20.52 | | 65.0 | |
| | | Z | 5.70 | 73.62 | 20.25 | | 65.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | X | 6.00 | 77.17 | 21.28 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.54 | 78.36 | 21.67 | | 65.0 | |
| | | Z | 6.09 | 77.51 | 21.41 | | 65.0 | |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 3.55 | 68.31 | 13.56 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 4.31 | 70.70 | 14.63 | | 65.0 | |
| | | Z | 3.47 | 67.95 | 13.18 | | 65.0 | |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 3.46 | 67.65 | 13.15 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 4.12 | 69.78 | 14.12 | | 65.0 | |
| | | Z | 3.37 | 67.24 | 12.73 | | 65.0 | |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | X | 3.31 | 70.56 | 15.03 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 3.93 | 72.68 | 16.08 | | 65.0 | |
| | | Z | 3.14 | 69.68 | 14.40 | | 65.0 | |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | X | 4.95 | 73.85 | 18.86 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.40 | 75.01 | 19.32 | | 65.0 | |
| | | Z | 4.95 | 73.84 | 18.70 | | 65.0 | |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | X | 4.97 | 73.54 | 18.73 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.40 | 74.66 | 19.18 | | 65.0 | |
| | | Z | 4.96 | 73.50 | 18.55 | | 65.0 | |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | X | 6.09 | 80.15 | 21.50 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.88 | 81.79 | 22.11 | | 65.0 | |
| | | Z | 6.20 | 80.42 | 21.51 | | 65.0 | |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | X | 5.53 | 75.60 | 20.77 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.97 | 76.64 | 21.12 | | 65.0 | |
| | | Z | 5.58 | 75.79 | 20.77 | | 65.0 | |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | X | 5.21 | 73.26 | 19.40 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.59 | 74.24 | 19.76 | | 65.0 | |
| | | Z | 5.21 | 73.32 | 19.33 | | 65.0 | |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | X | 6.52 | 80.79 | 22.38 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 7.26 | 82.25 | 22.87 | | 65.0 | |
| | | Z | 6.65 | 81.20 | 22.51 | | 65.0 | |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | X | 5.42 | 72.95 | 19.72 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 5.78 | 73.89 | 20.03 | | 65.0 | |
| | | Z | 5.43 | 73.04 | 19.72 | | 65.0 | |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | X | 5.81 | 74.04 | 20.57 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.19 | 74.96 | 20.86 | | 65.0 | |
| | | Z | 5.84 | 74.19 | 20.60 | | 65.0 | |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | X | 6.31 | 77.85 | 21.33 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.90 | 79.09 | 21.75 | | 65.0 | |
| | | Z | 6.39 | 78.16 | 21.48 | | 65.0 | |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | X | 6.05 | 72.91 | 20.14 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.40 | 73.76 | 20.40 | | 65.0 | |
| | | Z | 6.06 | 73.00 | 20.17 | | 65.0 | |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | X | 6.03 | 72.50 | 20.01 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.37 | 73.34 | 20.27 | | 65.0 | |
| | | Z | 6.05 | 72.60 | 20.04 | | 65.0 | |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | X | 6.14 | 75.03 | 20.36 | 3.98 | 65.0 | ± 9.6 % |
| | | Y | 6.59 | 76.06 | 20.69 | | 65.0 | |
| | | Z | 6.19 | 75.26 | 20.47 | | 65.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.45 | 66.18 | 14.83 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.58 | 67.05 | 15.42 | | 150.0 | |
| | | Z | 2.44 | 66.39 | 14.86 | | 150.0 | |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.45 | 67.15 | 14.79 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.65 | 68.98 | 16.07 | | 150.0 | |
| | | Z | 1.46 | 67.49 | 14.94 | | 150.0 | |
| 10277-CAA | PHS (QPSK) | X | 2.05 | 60.99 | 6.61 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 2.14 | 61.42 | 6.98 | | 50.0 | |
| | | Z | 2.15 | 61.21 | 6.84 | | 50.0 | |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 3.88 | 69.24 | 13.58 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 4.38 | 71.00 | 14.54 | | 50.0 | |
| | | Z | 3.84 | 68.69 | 13.30 | | 50.0 | |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 4.00 | 69.55 | 13.78 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 4.51 | 71.31 | 14.73 | | 50.0 | |
| | | Z | 3.94 | 68.96 | 13.47 | | 50.0 | |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate | X | 1.07 | 65.69 | 11.52 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.53 | 70.26 | 14.37 | | 150.0 | |
| | | Z | 1.01 | 65.37 | 11.10 | | 150.0 | |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate | X | 0.60 | 63.10 | 9.79 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.85 | 67.12 | 12.84 | | 150.0 | |
| | | Z | 0.57 | 62.93 | 9.45 | | 150.0 | |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate | X | 0.74 | 66.24 | 11.75 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.46 | 75.17 | 16.76 | | 150.0 | |
| | | Z | 0.73 | 66.36 | 11.54 | | 150.0 | |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate | X | 1.24 | 72.67 | 15.10 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.17 | 93.05 | 23.35 | | 150.0 | |
| | | Z | 1.42 | 74.33 | 15.45 | | 150.0 | |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 9.92 | 85.20 | 23.12 | 9.03 | 50.0 | ± 9.6 % |
| | | Y | 9.50 | 84.91 | 23.23 | | 50.0 | |
| | | Z | 10.83 | 86.02 | 23.20 | | 50.0 | |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | X | 2.57 | 69.12 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 2.77 | 70.42 | 16.97 | | 150.0 | |
| | | Z | 2.55 | 69.32 | 16.30 | | 150.0 | |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | X | 1.27 | 65.66 | 12.33 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.58 | 68.64 | 14.32 | | 150.0 | |
| | | Z | 1.21 | 65.43 | 11.98 | | 150.0 | |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | X | 2.00 | 66.49 | 12.18 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.31 | 72.57 | 14.96 | | 150.0 | |
| | | Z | 1.99 | 66.70 | 12.06 | | 150.0 | |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | X | 1.58 | 63.09 | 9.74 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.99 | 65.54 | 11.08 | | 150.0 | |
| | | Z | 1.51 | 62.92 | 9.42 | | 150.0 | |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC) | X | 4.69 | 65.76 | 17.48 | 4.17 | 50.0 | ± 9.6 % |
| | | Y | 4.64 | 65.55 | 17.37 | | 50.0 | |
| | | Z | 4.67 | 65.93 | 17.49 | | 50.0 | |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.09 | 65.93 | 17.93 | 4.96 | 50.0 | ± 9.6 % |
| | | Y | 5.12 | 66.18 | 18.09 | | 50.0 | |
| | | Z | 5.09 | 66.17 | 17.98 | | 50.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC) | X | 4.84 | 65.58 | 17.76 | 4.96 | 50.0 | ± 9.6 % |
| | | Y | 4.88 | 65.83 | 17.92 | | 50.0 | |
| | | Z | 4.85 | 65.84 | 17.81 | | 50.0 | |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC) | X | 4.65 | 65.44 | 17.26 | 4.17 | 50.0 | ± 9.6 % |
| | | Y | 4.69 | 65.73 | 17.44 | | 50.0 | |
| | | Z | 4.65 | 65.69 | 17.31 | | 50.0 | |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols) | X | 4.44 | 68.14 | 19.56 | 6.02 | 35.0 | ± 9.6 % |
| | | Y | 4.41 | 68.01 | 19.60 | | 35.0 | |
| | | Z | 4.62 | 69.17 | 19.86 | | 35.0 | |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols) | X | 4.68 | 66.85 | 19.08 | 6.02 | 35.0 | ± 9.6 % |
| | | Y | 4.67 | 66.81 | 19.12 | | 35.0 | |
| | | Z | 4.77 | 67.53 | 19.30 | | 35.0 | |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols) | X | 4.59 | 67.04 | 19.05 | 6.02 | 35.0 | ± 9.6 % |
| | | Y | 4.58 | 66.99 | 19.09 | | 35.0 | |
| | | Z | 4.69 | 67.75 | 19.27 | | 35.0 | |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC) | X | 4.57 | 67.28 | 19.21 | 6.02 | 35.0 | ± 9.6 % |
| | | Y | 4.56 | 67.23 | 19.25 | | 35.0 | |
| | | Z | 4.69 | 68.04 | 19.45 | | 35.0 | |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.73 | 67.04 | 19.22 | 6.02 | 35.0 | ± 9.6 % |
| | | Y | 4.72 | 66.99 | 19.24 | | 35.0 | |
| | | Z | 4.82 | 67.69 | 19.42 | | 35.0 | |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols) | X | 4.63 | 66.94 | 19.07 | 6.02 | 35.0 | ± 9.6 % |
| | | Y | 4.63 | 66.90 | 19.11 | | 35.0 | |
| | | Z | 4.74 | 67.65 | 19.30 | | 35.0 | |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | X | 2.92 | 68.38 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.14 | 69.67 | 16.60 | | 150.0 | |
| | | Z | 2.91 | 68.56 | 15.97 | | 150.0 | |
| 10313-AAA | iDEN 1:3 | X | 2.95 | 70.69 | 14.66 | 6.99 | 70.0 | ± 9.6 % |
| | | Y | 3.98 | 74.43 | 16.48 | | 70.0 | |
| | | Z | 3.15 | 71.48 | 15.14 | | 70.0 | |
| 10314-AAA | iDEN 1:6 | X | 5.04 | 79.92 | 21.00 | 10.00 | 30.0 | ± 9.6 % |
| | | Y | 6.78 | 84.92 | 23.16 | | 30.0 | |
| | | Z | 5.73 | 81.64 | 21.73 | | 30.0 | |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle) | X | 0.97 | 63.25 | 14.68 | 0.17 | 150.0 | ± 9.6 % |
| | | Y | 1.08 | 64.33 | 15.52 | | 150.0 | |
| | | Z | 0.98 | 63.49 | 14.85 | | 150.0 | |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle) | X | 4.44 | 66.48 | 16.13 | 0.17 | 150.0 | ± 9.6 % |
| | | Y | 4.51 | 66.82 | 16.27 | | 150.0 | |
| | | Z | 4.41 | 66.56 | 16.16 | | 150.0 | |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle) | X | 4.44 | 66.48 | 16.13 | 0.17 | 150.0 | ± 9.6 % |
| | | Y | 4.51 | 66.82 | 16.27 | | 150.0 | |
| | | Z | 4.41 | 66.56 | 16.16 | | 150.0 | |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle) | X | 4.53 | 66.78 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.61 | 67.15 | 16.28 | | 150.0 | |
| | | Z | 4.49 | 66.84 | 16.14 | | 150.0 | |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle) | X | 5.27 | 67.03 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.28 | 67.17 | 16.36 | | 150.0 | |
| | | Z | 5.22 | 67.01 | 16.33 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle) | X | 5.50 | 67.24 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.56 | 67.57 | 16.43 | | 150.0 | |
| | | Z | 5.47 | 67.27 | 16.33 | | 150.0 | |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0) | X | 1.07 | 65.69 | 11.52 | 0.00 | 115.0 | ± 9.6 % |
| | | Y | 1.53 | 70.26 | 14.37 | | 115.0 | |
| | | Z | 1.01 | 65.37 | 11.10 | | 115.0 | |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A) | X | 1.07 | 65.69 | 11.52 | 0.00 | 115.0 | ± 9.6 % |
| | | Y | 1.53 | 70.26 | 14.37 | | 115.0 | |
| | | Z | 1.01 | 65.37 | 11.10 | | 115.0 | |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate | X | 23.46 | 102.23 | 25.39 | 0.00 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 115.29 | 27.21 | | 100.0 | |
| | | Z | 100.00 | 120.73 | 29.57 | | 100.0 | |
| 10410-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 55.06 | 113.36 | 27.76 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 120.25 | 29.20 | | 80.0 | |
| | | Z | 100.00 | 122.59 | 30.17 | | 80.0 | |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 0.91 | 62.47 | 14.11 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 1.00 | 63.52 | 14.99 | | 150.0 | |
| | | Z | 0.91 | 62.68 | 14.27 | | 150.0 | |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle) | X | 4.39 | 66.47 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.46 | 66.85 | 16.24 | | 150.0 | |
| | | Z | 4.36 | 66.56 | 16.10 | | 150.0 | |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.39 | 66.47 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.46 | 66.85 | 16.24 | | 150.0 | |
| | | Z | 4.36 | 66.56 | 16.10 | | 150.0 | |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule) | X | 4.38 | 66.64 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.46 | 67.04 | 16.28 | | 150.0 | |
| | | Z | 4.35 | 66.74 | 16.14 | | 150.0 | |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule) | X | 4.40 | 66.59 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.48 | 66.98 | 16.27 | | 150.0 | |
| | | Z | 4.37 | 66.68 | 16.13 | | 150.0 | |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 4.51 | 66.58 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.59 | 66.96 | 16.28 | | 150.0 | |
| | | Z | 4.48 | 66.67 | 16.14 | | 150.0 | |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 4.67 | 66.88 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.74 | 67.25 | 16.38 | | 150.0 | |
| | | Z | 4.62 | 66.95 | 16.24 | | 150.0 | |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | X | 4.59 | 66.83 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.67 | 67.21 | 16.36 | | 150.0 | |
| | | Z | 4.55 | 66.90 | 16.22 | | 150.0 | |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK) | X | 5.20 | 67.12 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.25 | 67.39 | 16.48 | | 150.0 | |
| | | Z | 5.17 | 67.16 | 16.41 | | 150.0 | |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM) | X | 5.23 | 67.21 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.26 | 67.44 | 16.50 | | 150.0 | |
| | | Z | 5.19 | 67.25 | 16.45 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | X | 5.23 | 67.14 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.27 | 67.40 | 16.48 | | 150.0 | |
| | | Z | 5.18 | 67.14 | 16.40 | | 150.0 | |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) | X | 4.20 | 71.33 | 18.23 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.38 | 72.12 | 18.67 | | 150.0 | |
| | | Z | 4.24 | 71.88 | 18.40 | | 150.0 | |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) | X | 4.04 | 67.01 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.14 | 67.47 | 16.25 | | 150.0 | |
| | | Z | 4.00 | 67.12 | 16.01 | | 150.0 | |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) | X | 4.35 | 66.89 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.44 | 67.29 | 16.32 | | 150.0 | |
| | | Z | 4.31 | 66.97 | 16.15 | | 150.0 | |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) | X | 4.61 | 66.86 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.68 | 67.24 | 16.38 | | 150.0 | |
| | | Z | 4.57 | 66.94 | 16.24 | | 150.0 | |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH) | X | 4.31 | 72.22 | 18.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.57 | 73.29 | 18.72 | | 150.0 | |
| | | Z | 4.37 | 72.83 | 18.28 | | 150.0 | |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 46.38 | 110.94 | 27.14 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 119.98 | 29.08 | | 80.0 | |
| | | Z | 100.00 | 122.32 | 30.05 | | 80.0 | |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | X | 3.31 | 66.87 | 15.09 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.44 | 67.57 | 15.54 | | 150.0 | |
| | | Z | 3.26 | 66.97 | 15.03 | | 150.0 | |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%) | X | 3.89 | 66.79 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.98 | 67.27 | 16.12 | | 150.0 | |
| | | Z | 3.85 | 66.90 | 15.88 | | 150.0 | |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%) | X | 4.17 | 66.71 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.26 | 67.14 | 16.23 | | 150.0 | |
| | | Z | 4.14 | 66.80 | 16.04 | | 150.0 | |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | X | 4.38 | 66.63 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.46 | 67.03 | 16.25 | | 150.0 | |
| | | Z | 4.35 | 66.71 | 16.09 | | 150.0 | |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) | X | 3.16 | 66.87 | 14.55 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.31 | 67.71 | 15.09 | | 150.0 | |
| | | Z | 3.09 | 66.88 | 14.41 | | 150.0 | |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle) | X | 6.10 | 67.71 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.13 | 67.95 | 16.63 | | 150.0 | |
| | | Z | 6.10 | 67.81 | 16.63 | | 150.0 | |
| 10457-AAA | UMTS-FDD (DC-HSDPA) | X | 3.68 | 65.12 | 15.78 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 3.75 | 65.52 | 15.96 | | 150.0 | |
| | | Z | 3.67 | 65.23 | 15.81 | | 150.0 | |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers) | X | 3.88 | 71.11 | 17.24 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.15 | 72.36 | 17.96 | | 150.0 | |
| | | Z | 3.88 | 71.47 | 17.22 | | 150.0 | |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | X | 5.03 | 68.93 | 18.26 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.12 | 69.27 | 18.40 | | 150.0 | |
| | | Z | 5.02 | 69.28 | 18.31 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10460-AAA | UMTS-FDD (WCDMA, AMR) | X | 0.76 | 67.21 | 14.98 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.95 | 70.10 | 17.17 | | 150.0 | |
| | | Z | 0.78 | 67.84 | 15.35 | | 150.0 | |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 124.22 | 31.05 | 3.29 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 126.59 | 32.12 | | 80.0 | |
| | | Z | 100.00 | 126.67 | 32.13 | | 80.0 | |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.13 | 62.20 | 9.29 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.76 | 66.14 | 10.65 | | 80.0 | |
| | | Z | 1.32 | 63.88 | 10.13 | | 80.0 | |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.91 | 60.00 | 7.67 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 0.95 | 60.52 | 7.63 | | 80.0 | |
| | | Z | 0.89 | 60.00 | 7.73 | | 80.0 | |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 47.59 | 111.65 | 27.34 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 123.29 | 30.45 | | 80.0 | |
| | | Z | 100.00 | 123.26 | 30.40 | | 80.0 | |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.05 | 61.52 | 8.89 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.46 | 64.47 | 9.90 | | 80.0 | |
| | | Z | 1.18 | 62.83 | 9.59 | | 80.0 | |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.91 | 60.00 | 7.62 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 0.90 | 60.08 | 7.36 | | 80.0 | |
| | | Z | 0.89 | 60.00 | 7.68 | | 80.0 | |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 72.09 | 117.06 | 28.59 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 123.66 | 30.60 | | 80.0 | |
| | | Z | 100.00 | 123.63 | 30.56 | | 80.0 | |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.07 | 61.70 | 9.00 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.53 | 64.89 | 10.09 | | 80.0 | |
| | | Z | 1.22 | 63.12 | 9.74 | | 80.0 | |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.91 | 60.00 | 7.62 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 0.90 | 60.09 | 7.36 | | 80.0 | |
| | | Z | 0.89 | 60.00 | 7.68 | | 80.0 | |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 74.02 | 117.39 | 28.66 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 123.68 | 30.61 | | 80.0 | |
| | | Z | 100.00 | 123.65 | 30.56 | | 80.0 | |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.07 | 61.65 | 8.96 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.51 | 64.78 | 10.03 | | 80.0 | |
| | | Z | 1.21 | 63.05 | 9.70 | | 80.0 | |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.91 | 60.00 | 7.61 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 0.89 | 60.04 | 7.32 | | 80.0 | |
| | | Z | 0.89 | 60.00 | 7.66 | | 80.0 | |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 72.58 | 117.11 | 28.59 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 123.64 | 30.59 | | 80.0 | |
| | | Z | 100.00 | 123.61 | 30.54 | | 80.0 | |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.06 | 61.62 | 8.95 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.50 | 64.73 | 10.01 | | 80.0 | |
| | | Z | 1.20 | 63.02 | 9.68 | | 80.0 | |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.91 | 60.00 | 7.61 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 0.89 | 60.02 | 7.32 | | 80.0 | |
| | | Z | 0.89 | 60.00 | 7.66 | | 80.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.04 | 61.46 | 8.85 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.44 | 64.36 | 9.83 | | 80.0 | |
| | | Z | 1.17 | 62.77 | 9.54 | | 80.0 | |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.91 | 60.00 | 7.60 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 0.89 | 60.00 | 7.29 | | 80.0 | |
| | | Z | 0.89 | 60.00 | 7.65 | | 80.0 | |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 8.21 | 87.49 | 22.94 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 20.18 | 101.14 | 27.13 | | 80.0 | |
| | | Z | 18.46 | 99.74 | 26.54 | | 80.0 | |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.14 | 76.02 | 17.14 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 17.56 | 91.22 | 21.83 | | 80.0 | |
| | | Z | 8.18 | 81.93 | 19.01 | | 80.0 | |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.78 | 71.70 | 15.15 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 9.36 | 82.53 | 18.82 | | 80.0 | |
| | | Z | 4.98 | 75.18 | 16.32 | | 80.0 | |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.35 | 69.25 | 15.02 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.01 | 72.46 | 16.59 | | 80.0 | |
| | | Z | 2.33 | 69.25 | 14.80 | | 80.0 | |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.09 | 69.06 | 14.42 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.90 | 74.92 | 16.84 | | 80.0 | |
| | | Z | 3.31 | 69.99 | 14.61 | | 80.0 | |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.93 | 68.12 | 14.03 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.36 | 73.23 | 16.22 | | 80.0 | |
| | | Z | 3.05 | 68.75 | 14.10 | | 80.0 | |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.95 | 72.33 | 17.49 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.47 | 74.53 | 18.53 | | 80.0 | |
| | | Z | 3.08 | 73.09 | 17.68 | | 80.0 | |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.76 | 67.89 | 15.02 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.16 | 69.70 | 15.94 | | 80.0 | |
| | | Z | 2.75 | 68.00 | 14.88 | | 80.0 | |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.75 | 67.50 | 14.83 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.13 | 69.21 | 15.71 | | 80.0 | |
| | | Z | 2.74 | 67.55 | 14.66 | | 80.0 | |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.27 | 71.87 | 18.23 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.61 | 73.22 | 18.84 | | 80.0 | |
| | | Z | 3.35 | 72.44 | 18.47 | | 80.0 | |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.21 | 68.44 | 16.77 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.45 | 69.44 | 17.24 | | 80.0 | |
| | | Z | 3.25 | 68.82 | 16.89 | | 80.0 | |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.29 | 68.29 | 16.72 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.53 | 69.24 | 17.16 | | 80.0 | |
| | | Z | 3.33 | 68.65 | 16.82 | | 80.0 | |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.51 | 70.39 | 17.81 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.78 | 71.45 | 18.28 | | 80.0 | |
| | | Z | 3.55 | 70.76 | 17.99 | | 80.0 | |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.56 | 67.76 | 16.86 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.76 | 68.54 | 17.20 | | 80.0 | |
| | | Z | 3.58 | 68.03 | 16.97 | | 80.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.62 | 67.64 | 16.82 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.82 | 68.40 | 17.14 | | 80.0 | |
| | | Z | 3.64 | 67.90 | 16.91 | | 80.0 | |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.79 | 71.83 | 18.26 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.13 | 73.06 | 18.79 | | 80.0 | |
| | | Z | 3.85 | 72.23 | 18.46 | | 80.0 | |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.59 | 68.11 | 17.06 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.79 | 68.91 | 17.40 | | 80.0 | |
| | | Z | 3.61 | 68.36 | 17.17 | | 80.0 | |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.67 | 67.87 | 17.00 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.86 | 68.62 | 17.31 | | 80.0 | |
| | | Z | 3.69 | 68.11 | 17.10 | | 80.0 | |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 1.45 | 63.41 | 11.17 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 1.92 | 66.56 | 12.95 | | 80.0 | |
| | | Z | 1.35 | 62.71 | 10.54 | | 80.0 | |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.28 | 60.00 | 8.33 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 1.38 | 60.59 | 8.91 | | 80.0 | |
| | | Z | 1.25 | 60.00 | 8.01 | | 80.0 | |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.30 | 60.00 | 8.19 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 1.33 | 60.08 | 8.49 | | 80.0 | |
| | | Z | 1.27 | 60.00 | 7.87 | | 80.0 | |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.04 | 71.93 | 17.72 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.46 | 73.67 | 18.54 | | 80.0 | |
| | | Z | 3.15 | 72.64 | 17.94 | | 80.0 | |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.98 | 68.33 | 15.79 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.31 | 69.74 | 16.50 | | 80.0 | |
| | | Z | 3.01 | 68.63 | 15.79 | | 80.0 | |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.03 | 68.16 | 15.65 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.36 | 69.55 | 16.35 | | 80.0 | |
| | | Z | 3.05 | 68.42 | 15.63 | | 80.0 | |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.23 | 71.65 | 18.12 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.56 | 73.00 | 18.74 | | 80.0 | |
| | | Z | 3.30 | 72.21 | 18.35 | | 80.0 | |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.19 | 68.33 | 16.71 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.43 | 69.33 | 17.17 | | 80.0 | |
| | | Z | 3.23 | 68.71 | 16.82 | | 80.0 | |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.27 | 68.19 | 16.66 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.51 | 69.14 | 17.10 | | 80.0 | |
| | | Z | 3.31 | 68.54 | 16.75 | | 80.0 | |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.76 | 71.67 | 18.18 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.10 | 72.90 | 18.71 | | 80.0 | |
| | | Z | 3.81 | 72.07 | 18.38 | | 80.0 | |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.57 | 68.04 | 17.02 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.78 | 68.84 | 17.36 | | 80.0 | |
| | | Z | 3.59 | 68.29 | 17.13 | | 80.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.65 | 67.79 | 16.95 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.85 | 68.55 | 17.26 | | 80.0 | |
| | | Z | 3.67 | 68.04 | 17.05 | | 80.0 | |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 4.11 | 70.47 | 17.71 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.41 | 71.52 | 18.16 | | 80.0 | |
| | | Z | 4.14 | 70.76 | 17.87 | | 80.0 | |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.05 | 67.79 | 17.05 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.24 | 68.50 | 17.33 | | 80.0 | |
| | | Z | 4.06 | 67.96 | 17.14 | | 80.0 | |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.11 | 67.57 | 17.00 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.30 | 68.25 | 17.26 | | 80.0 | |
| | | Z | 4.12 | 67.74 | 17.08 | | 80.0 | |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 4.27 | 71.92 | 18.15 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.64 | 73.17 | 18.68 | | 80.0 | |
| | | Z | 4.32 | 72.22 | 18.32 | | 80.0 | |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.94 | 68.01 | 17.14 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.13 | 68.75 | 17.43 | | 80.0 | |
| | | Z | 3.95 | 68.18 | 17.23 | | 80.0 | |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.97 | 67.63 | 17.03 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.15 | 68.33 | 17.30 | | 80.0 | |
| | | Z | 3.98 | 67.79 | 17.12 | | 80.0 | |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 0.87 | 62.63 | 14.14 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.97 | 63.74 | 15.08 | | 150.0 | |
| | | Z | 0.87 | 62.85 | 14.30 | | 150.0 | |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.49 | 69.66 | 15.70 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.68 | 73.95 | 19.23 | | 150.0 | |
| | | Z | 0.52 | 70.86 | 16.45 | | 150.0 | |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.71 | 64.33 | 14.51 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.83 | 66.01 | 15.95 | | 150.0 | |
| | | Z | 0.72 | 64.67 | 14.76 | | 150.0 | |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.38 | 66.55 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.46 | 66.94 | 16.23 | | 150.0 | |
| | | Z | 4.35 | 66.64 | 16.08 | | 150.0 | |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 4.55 | 66.77 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.62 | 67.14 | 16.33 | | 150.0 | |
| | | Z | 4.51 | 66.84 | 16.19 | | 150.0 | |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.40 | 66.71 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.48 | 67.10 | 16.26 | | 150.0 | |
| | | Z | 4.37 | 66.78 | 16.10 | | 150.0 | |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.34 | 66.70 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.42 | 67.10 | 16.25 | | 150.0 | |
| | | Z | 4.30 | 66.76 | 16.08 | | 150.0 | |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.40 | 66.82 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.48 | 67.21 | 16.34 | | 150.0 | |
| | | Z | 4.36 | 66.90 | 16.19 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.29 | 66.70 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.37 | 67.12 | 16.22 | | 150.0 | |
| | | Z | 4.26 | 66.81 | 16.06 | | 150.0 | |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.34 | 66.74 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.42 | 67.13 | 16.31 | | 150.0 | |
| | | Z | 4.30 | 66.82 | 16.16 | | 150.0 | |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) | X | 4.34 | 65.80 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.43 | 66.22 | 15.92 | | 150.0 | |
| | | Z | 4.32 | 65.90 | 15.77 | | 150.0 | |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) | X | 4.50 | 66.14 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.58 | 66.55 | 16.05 | | 150.0 | |
| | | Z | 4.46 | 66.22 | 15.90 | | 150.0 | |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) | X | 4.42 | 66.09 | 15.80 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.50 | 66.52 | 16.00 | | 150.0 | |
| | | Z | 4.38 | 66.18 | 15.84 | | 150.0 | |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) | X | 4.44 | 66.11 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.52 | 66.53 | 16.03 | | 150.0 | |
| | | Z | 4.40 | 66.19 | 15.87 | | 150.0 | |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.44 | 66.11 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.52 | 66.53 | 16.03 | | 150.0 | |
| | | Z | 4.40 | 66.19 | 15.87 | | 150.0 | |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) | X | 4.42 | 66.18 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.50 | 66.61 | 16.03 | | 150.0 | |
| | | Z | 4.37 | 66.25 | 15.86 | | 150.0 | |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | X | 4.29 | 66.04 | 15.76 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.37 | 66.48 | 15.97 | | 150.0 | |
| | | Z | 4.25 | 66.11 | 15.79 | | 150.0 | |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | X | 4.44 | 66.17 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.53 | 66.60 | 16.03 | | 150.0 | |
| | | Z | 4.41 | 66.26 | 15.87 | | 150.0 | |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle) | X | 4.98 | 66.20 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.05 | 66.57 | 16.06 | | 150.0 | |
| | | Z | 4.95 | 66.26 | 15.95 | | 150.0 | |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | X | 5.05 | 66.39 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.11 | 66.72 | 16.13 | | 150.0 | |
| | | Z | 5.01 | 66.43 | 16.03 | | 150.0 | |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | X | 4.92 | 66.34 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.99 | 66.70 | 16.10 | | 150.0 | |
| | | Z | 4.89 | 66.40 | 15.99 | | 150.0 | |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle) | X | 4.98 | 66.30 | 15.94 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.04 | 66.66 | 16.08 | | 150.0 | |
| | | Z | 4.95 | 66.35 | 15.97 | | 150.0 | |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle) | X | 5.06 | 66.31 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.12 | 66.65 | 16.12 | | 150.0 | |
| | | Z | 5.02 | 66.35 | 16.01 | | 150.0 | |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 4.99 | 66.30 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.05 | 66.64 | 16.13 | | 150.0 | |
| | | Z | 4.95 | 66.33 | 16.02 | | 150.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | X | 4.97 | 66.19 | 15.93 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.03 | 66.55 | 16.07 | | 150.0 | |
| | | Z | 4.93 | 66.22 | 15.95 | | 150.0 | |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle) | X | 5.12 | 66.28 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.19 | 66.62 | 16.12 | | 150.0 | |
| | | Z | 5.09 | 66.32 | 16.02 | | 150.0 | |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | X | 5.19 | 66.29 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.25 | 66.63 | 16.15 | | 150.0 | |
| | | Z | 5.15 | 66.34 | 16.05 | | 150.0 | |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle) | X | 5.31 | 66.31 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.37 | 66.66 | 16.05 | | 150.0 | |
| | | Z | 5.28 | 66.35 | 15.94 | | 150.0 | |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle) | X | 5.50 | 66.75 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.54 | 67.02 | 16.18 | | 150.0 | |
| | | Z | 5.47 | 66.79 | 16.11 | | 150.0 | |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | X | 5.36 | 66.48 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.42 | 66.83 | 16.10 | | 150.0 | |
| | | Z | 5.33 | 66.50 | 15.98 | | 150.0 | |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle) | X | 5.43 | 66.54 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.49 | 66.87 | 16.11 | | 150.0 | |
| | | Z | 5.40 | 66.57 | 16.01 | | 150.0 | |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | X | 5.66 | 67.42 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.65 | 67.55 | 16.42 | | 150.0 | |
| | | Z | 5.60 | 67.37 | 16.38 | | 150.0 | |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle) | X | 5.40 | 66.56 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.45 | 66.87 | 16.13 | | 150.0 | |
| | | Z | 5.37 | 66.62 | 16.05 | | 150.0 | |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle) | X | 5.39 | 66.55 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.45 | 66.88 | 16.09 | | 150.0 | |
| | | Z | 5.35 | 66.53 | 15.97 | | 150.0 | |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle) | X | 5.32 | 66.38 | 15.89 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.38 | 66.76 | 16.04 | | 150.0 | |
| | | Z | 5.29 | 66.43 | 15.92 | | 150.0 | |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 5.39 | 66.39 | 15.93 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.45 | 66.75 | 16.07 | | 150.0 | |
| | | Z | 5.36 | 66.42 | 15.95 | | 150.0 | |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.72 | 66.67 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.77 | 67.00 | 16.12 | | 150.0 | |
| | | Z | 5.70 | 66.69 | 16.02 | | 150.0 | |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.84 | 66.96 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.88 | 67.25 | 16.23 | | 150.0 | |
| | | Z | 5.81 | 66.97 | 16.14 | | 150.0 | |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.87 | 67.02 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.91 | 67.31 | 16.25 | | 150.0 | |
| | | Z | 5.84 | 67.04 | 16.17 | | 150.0 | |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.83 | 66.90 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.87 | 67.22 | 16.22 | | 150.0 | |
| | | Z | 5.80 | 66.91 | 16.13 | | 150.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle) | X | 5.87 | 67.06 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.91 | 67.36 | 16.31 | | 150.0 | |
| | | Z | 5.83 | 67.06 | 16.21 | | 150.0 | |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle) | X | 5.86 | 66.91 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.92 | 67.23 | 16.28 | | 150.0 | |
| | | Z | 5.83 | 66.92 | 16.18 | | 150.0 | |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle) | X | 5.80 | 66.89 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.84 | 67.19 | 16.30 | | 150.0 | |
| | | Z | 5.77 | 66.91 | 16.21 | | 150.0 | |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle) | X | 5.89 | 67.20 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.93 | 67.48 | 16.44 | | 150.0 | |
| | | Z | 5.84 | 67.16 | 16.34 | | 150.0 | |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle) | X | 6.00 | 67.15 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.02 | 67.38 | 16.35 | | 150.0 | |
| | | Z | 5.93 | 67.06 | 16.25 | | 150.0 | |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle) | X | 4.70 | 66.60 | 16.19 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.77 | 66.96 | 16.34 | | 150.0 | |
| | | Z | 4.67 | 66.68 | 16.22 | | 150.0 | |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.92 | 67.06 | 16.53 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.99 | 67.39 | 16.67 | | 150.0 | |
| | | Z | 4.88 | 67.12 | 16.55 | | 150.0 | |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.75 | 66.88 | 16.33 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.82 | 67.22 | 16.47 | | 150.0 | |
| | | Z | 4.71 | 66.94 | 16.35 | | 150.0 | |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.79 | 67.31 | 16.72 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.86 | 67.67 | 16.87 | | 150.0 | |
| | | Z | 4.75 | 67.38 | 16.75 | | 150.0 | |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.66 | 66.64 | 16.08 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.73 | 66.98 | 16.23 | | 150.0 | |
| | | Z | 4.62 | 66.69 | 16.09 | | 150.0 | |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.76 | 67.45 | 16.81 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.83 | 67.82 | 16.96 | | 150.0 | |
| | | Z | 4.73 | 67.57 | 16.86 | | 150.0 | |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.78 | 67.26 | 16.71 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.85 | 67.62 | 16.86 | | 150.0 | |
| | | Z | 4.74 | 67.35 | 16.75 | | 150.0 | |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 1.05 | 63.78 | 14.98 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.16 | 64.84 | 15.77 | | 130.0 | |
| | | Z | 1.06 | 64.03 | 15.14 | | 130.0 | |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 1.06 | 64.35 | 15.34 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.17 | 65.47 | 16.16 | | 130.0 | |
| | | Z | 1.07 | 64.63 | 15.52 | | 130.0 | |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 1.81 | 84.33 | 21.65 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 2.93 | 92.85 | 25.80 | | 130.0 | |
| | | Z | 2.19 | 87.52 | 22.91 | | 130.0 | |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 1.15 | 70.21 | 18.29 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.33 | 72.12 | 19.55 | | 130.0 | |
| | | Z | 1.19 | 70.90 | 18.68 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) | X | 4.49 | 66.39 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.55 | 66.72 | 16.36 | | 130.0 | |
| | | Z | 4.46 | 66.48 | 16.26 | | 130.0 | |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle) | X | 4.51 | 66.57 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.58 | 66.91 | 16.44 | | 130.0 | |
| | | Z | 4.48 | 66.67 | 16.34 | | 130.0 | |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.70 | 66.85 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.77 | 67.17 | 16.60 | | 130.0 | |
| | | Z | 4.67 | 66.93 | 16.51 | | 130.0 | |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.60 | 67.01 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.67 | 67.35 | 16.72 | | 130.0 | |
| | | Z | 4.57 | 67.10 | 16.62 | | 130.0 | |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.36 | 66.21 | 15.83 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.42 | 66.54 | 15.97 | | 130.0 | |
| | | Z | 4.32 | 66.26 | 15.84 | | 130.0 | |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.40 | 66.27 | 15.86 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.46 | 66.59 | 16.00 | | 130.0 | |
| | | Z | 4.36 | 66.33 | 15.88 | | 130.0 | |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.50 | 67.05 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.57 | 67.39 | 16.67 | | 130.0 | |
| | | Z | 4.47 | 67.15 | 16.57 | | 130.0 | |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.29 | 65.96 | 15.60 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.35 | 66.28 | 15.74 | | 130.0 | |
| | | Z | 4.25 | 66.00 | 15.61 | | 130.0 | |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | X | 4.49 | 66.39 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.55 | 66.72 | 16.36 | | 130.0 | |
| | | Z | 4.46 | 66.48 | 16.26 | | 130.0 | |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.51 | 66.57 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.58 | 66.91 | 16.44 | | 130.0 | |
| | | Z | 4.48 | 66.67 | 16.34 | | 130.0 | |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | X | 4.70 | 66.85 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.77 | 67.17 | 16.60 | | 130.0 | |
| | | Z | 4.67 | 66.93 | 16.51 | | 130.0 | |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.60 | 67.01 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.67 | 67.35 | 16.72 | | 130.0 | |
| | | Z | 4.57 | 67.10 | 16.62 | | 130.0 | |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.36 | 66.21 | 15.83 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.42 | 66.54 | 15.97 | | 130.0 | |
| | | Z | 4.32 | 66.26 | 15.84 | | 130.0 | |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.40 | 66.27 | 15.86 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.46 | 66.59 | 16.00 | | 130.0 | |
| | | Z | 4.36 | 66.33 | 15.88 | | 130.0 | |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | X | 4.50 | 67.05 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.57 | 67.39 | 16.67 | | 130.0 | |
| | | Z | 4.47 | 67.15 | 16.57 | | 130.0 | |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.29 | 65.96 | 15.60 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.35 | 66.28 | 15.74 | | 130.0 | |
| | | Z | 4.25 | 66.00 | 15.61 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.64 | 66.47 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.70 | 66.79 | 16.47 | | 130.0 | |
| | | Z | 4.61 | 66.56 | 16.38 | | 130.0 | |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.78 | 66.80 | 16.49 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.84 | 67.11 | 16.60 | | 130.0 | |
| | | Z | 4.75 | 66.87 | 16.51 | | 130.0 | |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.70 | 66.68 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.76 | 67.00 | 16.47 | | 130.0 | |
| | | Z | 4.66 | 66.75 | 16.37 | | 130.0 | |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.76 | 66.86 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.82 | 67.18 | 16.63 | | 130.0 | |
| | | Z | 4.72 | 66.94 | 16.54 | | 130.0 | |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.72 | 66.81 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.78 | 67.13 | 16.53 | | 130.0 | |
| | | Z | 4.68 | 66.89 | 16.44 | | 130.0 | |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.66 | 66.80 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.72 | 67.12 | 16.53 | | 130.0 | |
| | | Z | 4.62 | 66.87 | 16.43 | | 130.0 | |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.60 | 66.68 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.67 | 67.01 | 16.40 | | 130.0 | |
| | | Z | 4.57 | 66.74 | 16.29 | | 130.0 | |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.59 | 66.93 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.66 | 67.26 | 16.68 | | 130.0 | |
| | | Z | 4.56 | 67.00 | 16.58 | | 130.0 | |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.32 | 67.00 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.34 | 67.19 | 16.62 | | 130.0 | |
| | | Z | 5.28 | 67.04 | 16.61 | | 130.0 | |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.45 | 67.42 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.44 | 67.51 | 16.75 | | 130.0 | |
| | | Z | 5.41 | 67.45 | 16.79 | | 130.0 | |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.34 | 67.16 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.36 | 67.35 | 16.69 | | 130.0 | |
| | | Z | 5.30 | 67.21 | 16.68 | | 130.0 | |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.45 | 67.27 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.48 | 67.47 | 16.67 | | 130.0 | |
| | | Z | 5.43 | 67.37 | 16.68 | | 130.0 | |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.52 | 67.55 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.54 | 67.72 | 16.93 | | 130.0 | |
| | | Z | 5.50 | 67.66 | 16.96 | | 130.0 | |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.38 | 67.16 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.41 | 67.36 | 16.73 | | 130.0 | |
| | | Z | 5.38 | 67.32 | 16.78 | | 130.0 | |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.44 | 67.34 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.45 | 67.47 | 16.78 | | 130.0 | |
| | | Z | 5.41 | 67.37 | 16.80 | | 130.0 | |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.17 | 66.57 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.21 | 66.82 | 16.32 | | 130.0 | |
| | | Z | 5.14 | 66.65 | 16.29 | | 130.0 | |

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|---|---|---|---|---|---|---|---|---|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.48 | 65.79 | 15.98 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.55 | 66.14 | 16.12 | | 130.0 | |
| | | Z | 4.46 | 65.89 | 16.02 | | 130.0 | |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.65 | 66.17 | 16.14 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.72 | 66.52 | 16.28 | | 130.0 | |
| | | Z | 4.61 | 66.26 | 16.18 | | 130.0 | |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.54 | 66.00 | 15.96 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.61 | 66.36 | 16.11 | | 130.0 | |
| | | Z | 4.51 | 66.08 | 15.99 | | 130.0 | |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.59 | 66.17 | 16.14 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.66 | 66.53 | 16.28 | | 130.0 | |
| | | Z | 4.56 | 66.26 | 16.17 | | 130.0 | |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.51 | 65.97 | 15.97 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.57 | 66.32 | 16.12 | | 130.0 | |
| | | Z | 4.47 | 66.05 | 16.01 | | 130.0 | |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.51 | 66.11 | 16.01 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.58 | 66.46 | 16.16 | | 130.0 | |
| | | Z | 4.47 | 66.19 | 16.05 | | 130.0 | |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.51 | 65.96 | 15.88 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.57 | 66.31 | 16.02 | | 130.0 | |
| | | Z | 4.46 | 66.02 | 15.90 | | 130.0 | |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.46 | 66.18 | 16.13 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.53 | 66.55 | 16.29 | | 130.0 | |
| | | Z | 4.43 | 66.26 | 16.17 | | 130.0 | |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.50 | 65.78 | 15.73 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.57 | 66.13 | 15.88 | | 130.0 | |
| | | Z | 4.46 | 65.86 | 15.76 | | 130.0 | |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.13 | 66.23 | 16.19 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.18 | 66.52 | 16.28 | | 130.0 | |
| | | Z | 5.10 | 66.28 | 16.22 | | 130.0 | |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.21 | 66.44 | 16.26 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.24 | 66.68 | 16.33 | | 130.0 | |
| | | Z | 5.17 | 66.48 | 16.29 | | 130.0 | |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.09 | 66.44 | 16.28 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.14 | 66.73 | 16.37 | | 130.0 | |
| | | Z | 5.07 | 66.51 | 16.32 | | 130.0 | |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.10 | 66.22 | 16.10 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.14 | 66.49 | 16.19 | | 130.0 | |
| | | Z | 5.07 | 66.27 | 16.13 | | 130.0 | |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.19 | 66.25 | 16.17 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.23 | 66.52 | 16.25 | | 130.0 | |
| | | Z | 5.15 | 66.30 | 16.20 | | 130.0 | |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.20 | 66.42 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.25 | 66.70 | 16.46 | | 130.0 | |
| | | Z | 5.17 | 66.46 | 16.41 | | 130.0 | |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.21 | 66.59 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.25 | 66.84 | 16.53 | | 130.0 | |
| | | Z | 5.16 | 66.58 | 16.46 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle) | X | 5.08 | 66.07 | 16.06 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.13 | 66.35 | 16.15 | | 130.0 | |
| | | Z | 5.04 | 66.08 | 16.07 | | 130.0 | |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle) | X | 5.27 | 66.29 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.32 | 66.55 | 16.31 | | 130.0 | |
| | | Z | 5.24 | 66.33 | 16.26 | | 130.0 | |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle) | X | 5.56 | 67.05 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.57 | 67.20 | 16.69 | | 130.0 | |
| | | Z | 5.45 | 66.85 | 16.58 | | 130.0 | |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle) | X | 5.45 | 66.29 | 16.15 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.49 | 66.58 | 16.24 | | 130.0 | |
| | | Z | 5.42 | 66.33 | 16.18 | | 130.0 | |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle) | X | 5.69 | 66.90 | 16.42 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.70 | 67.08 | 16.45 | | 130.0 | |
| | | Z | 5.66 | 66.94 | 16.45 | | 130.0 | |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle) | X | 5.46 | 66.33 | 16.07 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.50 | 66.60 | 16.14 | | 130.0 | |
| | | Z | 5.42 | 66.33 | 16.07 | | 130.0 | |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle) | X | 5.54 | 66.41 | 16.10 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.57 | 66.66 | 16.17 | | 130.0 | |
| | | Z | 5.51 | 66.44 | 16.12 | | 130.0 | |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle) | X | 5.93 | 67.80 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.86 | 67.72 | 16.70 | | 130.0 | |
| | | Z | 5.85 | 67.67 | 16.74 | | 130.0 | |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle) | X | 5.84 | 67.65 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.86 | 67.82 | 16.94 | | 130.0 | |
| | | Z | 5.79 | 67.61 | 16.91 | | 130.0 | |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle) | X | 5.66 | 66.99 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.68 | 67.19 | 16.65 | | 130.0 | |
| | | Z | 5.64 | 67.07 | 16.66 | | 130.0 | |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle) | X | 5.53 | 66.52 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.57 | 66.82 | 16.28 | | 130.0 | |
| | | Z | 5.50 | 66.56 | 16.22 | | 130.0 | |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle) | X | 5.51 | 66.55 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.56 | 66.86 | 16.37 | | 130.0 | |
| | | Z | 5.48 | 66.58 | 16.29 | | 130.0 | |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle) | X | 5.38 | 65.83 | 15.63 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.42 | 66.12 | 15.72 | | 130.0 | |
| | | Z | 5.34 | 65.82 | 15.63 | | 130.0 | |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.87 | 66.66 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.90 | 66.93 | 16.31 | | 130.0 | |
| | | Z | 5.85 | 66.69 | 16.27 | | 130.0 | |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.02 | 67.05 | 16.42 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.04 | 67.25 | 16.46 | | 130.0 | |
| | | Z | 5.99 | 67.06 | 16.43 | | 130.0 | |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.02 | 67.01 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.04 | 67.26 | 16.44 | | 130.0 | |
| | | Z | 5.99 | 67.04 | 16.40 | | 130.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle) | X | 5.99 | 66.94 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.02 | 67.20 | 16.45 | | 130.0 | |
| | | Z | 5.96 | 66.96 | 16.40 | | 130.0 | |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle) | X | 5.99 | 66.93 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.01 | 67.17 | 16.38 | | 130.0 | |
| | | Z | 5.95 | 66.93 | 16.33 | | 130.0 | |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle) | X | 6.05 | 66.90 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.06 | 67.10 | 16.36 | | 130.0 | |
| | | Z | 6.02 | 66.93 | 16.35 | | 130.0 | |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle) | X | 6.08 | 67.13 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.11 | 67.39 | 16.68 | | 130.0 | |
| | | Z | 6.05 | 67.15 | 16.64 | | 130.0 | |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle) | X | 5.92 | 66.82 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.94 | 67.04 | 16.40 | | 130.0 | |
| | | Z | 5.89 | 66.84 | 16.37 | | 130.0 | |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle) | X | 6.04 | 67.19 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.06 | 67.41 | 16.60 | | 130.0 | |
| | | Z | 5.99 | 67.13 | 16.53 | | 130.0 | |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle) | X | 6.20 | 67.30 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.18 | 67.42 | 16.57 | | 130.0 | |
| | | Z | 6.12 | 67.19 | 16.53 | | 130.0 | |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7) | X | 13.97 | 103.27 | 34.96 | 9.30 | 60.0 | ± 9.6 % |
| | | Y | 20.81 | 112.89 | 38.12 | | 60.0 | |
| | | Z | 13.67 | 103.09 | 35.06 | | 60.0 | |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 12.30 | 101.10 | 34.41 | 9.30 | 60.0 | ± 9.6 % |
| | | Y | 17.37 | 109.51 | 37.26 | | 60.0 | |
| | | Z | 12.00 | 100.85 | 34.49 | | 60.0 | |
| 10648-AAA | CDMA2000 (1x Advanced) | X | 0.49 | 61.28 | 8.20 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.65 | 63.85 | 10.60 | | 150.0 | |
| | | Z | 0.46 | 61.03 | 7.80 | | 150.0 | |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | X | 3.40 | 66.41 | 16.15 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.58 | 67.18 | 16.52 | | 80.0 | |
| | | Z | 3.42 | 66.69 | 16.22 | | 80.0 | |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | X | 3.94 | 65.81 | 16.40 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.08 | 66.40 | 16.64 | | 80.0 | |
| | | Z | 3.94 | 66.00 | 16.46 | | 80.0 | |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | X | 3.93 | 65.47 | 16.42 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.06 | 66.03 | 16.64 | | 80.0 | |
| | | Z | 3.94 | 65.63 | 16.48 | | 80.0 | |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | X | 3.99 | 65.43 | 16.46 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.13 | 65.99 | 16.67 | | 80.0 | |
| | | Z | 4.01 | 65.58 | 16.52 | | 80.0 | |
| 10658-AAA | Pulse Waveform (200Hz, 10%) | X | 7.13 | 77.36 | 16.21 | 10.00 | 50.0 | ± 9.6 % |
| | | Y | 16.32 | 87.94 | 19.95 | | 50.0 | |
| | | Z | 9.11 | 80.61 | 17.72 | | 50.0 | |
| 10659-AAA | Pulse Waveform (200Hz, 20%) | X | 35.68 | 94.53 | 19.76 | 6.99 | 60.0 | ± 9.6 % |
| | | Y | 100.00 | 107.23 | 23.45 | | 60.0 | |
| | | Z | 100.00 | 106.51 | 23.11 | | 60.0 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 100.10 | 18.83 | 3.98 | 80.0 | ± 9.6 % |
| | | Y | 100.00 | 106.47 | 21.86 | | 80.0 | |
| | | Z | 100.00 | 102.58 | 20.01 | | 80.0 | |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 1.25 | 67.33 | 8.37 | 2.22 | 100.0 | ± 9.6 % |
| | | Y | 100.00 | 108.17 | 21.47 | | 100.0 | |
| | | Z | 100.00 | 96.28 | 16.23 | | 100.0 | |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 0.30 | 60.00 | 2.55 | 0.97 | 120.0 | ± 9.6 % |
| | | Y | 100.00 | 113.09 | 21.91 | | 120.0 | |
| | | Z | 0.20 | 60.00 | 3.18 | | 120.0 | |

[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

# APPENDIX D: SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

1) The network analyzer and probe system was configured and calibrated.
2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
3) The complex admittance with respect to the probe aperture was measured
4) The complex relative permittivity ε' can be calculated from the below equation (Pournaropoulos and Misra):

$$Y = \frac{j2\omega\varepsilon_r\varepsilon_0}{\left[\ln(b/a)\right]^2}\int_a^b\int_a^b\int_0^\pi \cos\phi' \frac{\exp\left[-j\omega r(\mu_0\varepsilon_r^{'}\varepsilon_0)^{1/2}\right]}{r} d\phi' d\rho' d\rho$$

where $Y$ is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^2 = \rho^2 + \rho'^2 - 2\rho\rho'\cos\phi'$ , $\omega$ is the angular frequency, and $j = \sqrt{-1}$ .

**Table D-I**
**Composition of the Tissue Equivalent Matter**

| Frequency (MHz) | 750 | 750 | 835 | 835 | 1750 | 1750 | 1900 | 1900 | 2450 | 2450 | 3500 - 5800 | 3500 - 5800 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tissue | Head | Body | Head | Body | Head | Body | Head | Body | Head | Body | Head | Body |
| Ingredients (% by weight) | | | | | | | | | | | | |
| Bactericide | See page 2-3 | See page 2 | 0.1 | 0.1 | | | | | See page 4 | | See page 5 | See page 6 |
| DGBE | | | | | 47 | 31 | 44.92 | 29.44 | | 26.7 | | |
| HEC | | | 1 | 1 | | | | | | | | |
| NaCl | | | 1.45 | 0.94 | 0.4 | 0.2 | 0.18 | 0.39 | | 0.1 | | |
| Sucrose | | | 57 | 44.9 | | | | | | | | |
| Polysorbate (Tween) 80 | | | | | | | | | | | | |
| Water | | | 40.45 | 53.06 | 52.6 | 68.8 | 54.9 | 70.17 | | 73.2 | | |


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## 2 Composition / Information on ingredients

The Item is composed of the following ingredients:

| | |
|---|---|
| $H_2O$ | Water, 35 – 58% |
| Sucrose | Sugar, white, refined, 40 – 60% |
| NaCl | Sodium Chloride, 0 – 6% |
| Hydroxyethyl-cellulose | Medium Viscosity (CAS# 9004-62-0), <0.3% |
| Preventol-D7 | Preservative: aqueous preparation, (CAS# 55965-84-9), containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone, 0.1 – 0.7% |
| | Relevant for safety; Refer to the respective Safety Data Sheet*. |

**Figure D-1**
**Composition of 750 MHz Head and Body Tissue Equivalent Matter**

**Note:** 750MHz liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Schmid & Partner Engineering AG

**s p e a g**

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

**Measurement Certificate / Material Test**

| | |
|---|---|
| Item Name | **Body Tissue Simulating Liquid (MSL750V2)** |
| Product No. | SL AAM 075 AA (Batch: 170608-1) |
| Manufacturer | SPEAG |

**Measurement Method**

TSL dielectric parameters measured using calibrated DAK probe.

**Setup Validation**

Validation results were within ± 2.5% towards the target values of Methanol.

**Target Parameters**

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

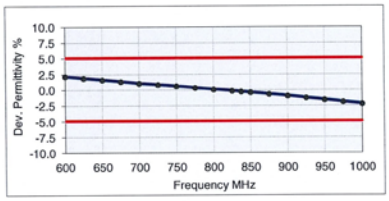
**Test Condition**

| | |
|---|---|
| Ambient | Environment temperatur (22 ± 3)°C and humidity < 70%. |
| TSL Temperature | 22°C |
| Test Date | 20-Jun-17 |
| Operator | CL |

**Additional Information**

| | |
|---|---|
| TSL Density | 1.212 g/cm$^3$ |
| TSL Heat-capacity | 3.006 kJ/(kg*K) |

| | Measured | | | Target | | Diff.to Target [%] | |
|---|---|---|---|---|---|---|---|
| f [MHz] | e' | e'' | sigma | eps | sigma | Δ-eps | Δ-sigma |
| 600 | 57.3 | 25.02 | 0.84 | 56.1 | 0.95 | 2.2 | -12.2 |
| 625 | 57.1 | 24.67 | 0.86 | 56.0 | 0.95 | 1.9 | -10.1 |
| 650 | 56.8 | 24.32 | 0.88 | 55.9 | 0.96 | 1.6 | -8.0 |
| 675 | 56.6 | 24.02 | 0.90 | 55.8 | 0.96 | 1.3 | -5.8 |
| 700 | 56.3 | 23.71 | 0.92 | 55.7 | 0.96 | 1.1 | -3.8 |
| 725 | 56.1 | 23.48 | 0.95 | 55.6 | 0.96 | 0.8 | -1.5 |
| 750 | 55.9 | 23.25 | 0.97 | 55.5 | 0.96 | 0.6 | 0.7 |
| 775 | 55.6 | 23.04 | 0.99 | 55.4 | 0.97 | 0.3 | 2.9 |
| 800 | 55.4 | 22.82 | 1.02 | 55.3 | 0.97 | 0.1 | 5.0 |
| 825 | 55.2 | 22.65 | 1.04 | 55.2 | 0.98 | -0.1 | 6.3 |
| 838 | 55.1 | 22.56 | 1.05 | 55.2 | 0.98 | -0.3 | 6.9 |
| 850 | 54.9 | 22.47 | 1.06 | 55.2 | 0.99 | -0.4 | 7.5 |
| 875 | 54.7 | 22.34 | 1.09 | 55.1 | 1.02 | -0.7 | 6.7 |
| 900 | 54.5 | 22.21 | 1.11 | 55.0 | 1.05 | -0.9 | 5.9 |
| 925 | 54.3 | 22.08 | 1.14 | 55.0 | 1.06 | -1.3 | 6.9 |
| 950 | 54.1 | 21.95 | 1.16 | 54.9 | 1.08 | -1.6 | 7.9 |
| 975 | 53.8 | 21.86 | 1.19 | 54.9 | 1.09 | -1.9 | 9.1 |
| 1000 | 53.6 | 21.76 | 1.21 | 54.8 | 1.10 | -2.2 | 10.2 |



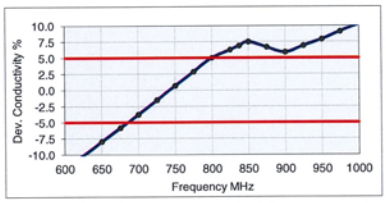




**Figure D-2**
**750MHz Body Tissue Equivalent Matter**



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Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

## Measurement Certificate / Material Test

| | |
|---|---|
| Item Name | **Head Tissue Simulating Liquid (HSL750V2)** |
| Product No. | SL AAH 075 AA (Batch: 170612-4) |
| Manufacturer | SPEAG |

**Measurement Method**

TSL dielectric parameters measured using calibrated DAK probe.

**Setup Validation**

Validation results were within ± 2.5% towards the target values of Methanol.

**Target Parameters**

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

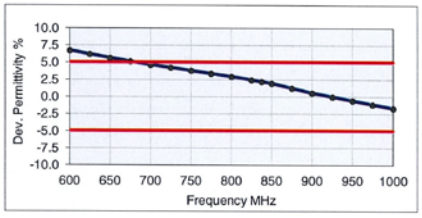
**Test Condition**

| | |
|---|---|
| Ambient | Environment temperatur (22 ± 3)°C and humidity < 70%. |
| TSL Temperature | 22°C |
| Test Date | 20-Jun-17 |
| Operator | CL |

**Additional Information**

| | |
|---|---|
| TSL Density | 1.284 g/cm$^3$ |
| TSL Heat-capacity | 2.701 kJ/(kg*K) |

| | Measured | | | Target | | Diff.to Target [%] | |
|---|---|---|---|---|---|---|---|
| f [MHz] | e' | e'' | sigma | eps | sigma | Δ-eps | Δ-sigma |
| 600 | 45.6 | 22.97 | 0.77 | 42.7 | 0.88 | 6.7 | -13.1 |
| 625 | 45.2 | 22.73 | 0.79 | 42.6 | 0.88 | 6.2 | -10.6 |
| 650 | 44.9 | 22.49 | 0.81 | 42.5 | 0.89 | 5.6 | -8.2 |
| 675 | 44.5 | 22.27 | 0.84 | 42.3 | 0.89 | 5.1 | -5.8 |
| 700 | 44.2 | 22.05 | 0.86 | 42.2 | 0.89 | 4.6 | -3.5 |
| 725 | 43.8 | 21.88 | 0.88 | 42.1 | 0.89 | 4.2 | -1.0 |
| 750 | 43.5 | 21.72 | 0.91 | 41.9 | 0.89 | 3.8 | 1.4 |
| 775 | 43.2 | 21.55 | 0.93 | 41.8 | 0.90 | 3.4 | 3.7 |
| 800 | 42.9 | 21.38 | 0.95 | 41.7 | 0.90 | 2.9 | 6.0 |
| 825 | 42.6 | 21.24 | 0.97 | 41.6 | 0.91 | 2.4 | 7.5 |
| 838 | 42.5 | 21.17 | 0.99 | 41.5 | 0.91 | 2.2 | 8.2 |
| 850 | 42.3 | 21.09 | 1.00 | 41.5 | 0.92 | 2.0 | 8.9 |
| 875 | 42.0 | 20.98 | 1.02 | 41.5 | 0.94 | 1.2 | 8.3 |
| 900 | 41.7 | 20.87 | 1.05 | 41.5 | 0.97 | 0.5 | 7.7 |
| 925 | 41.5 | 20.76 | 1.07 | 41.5 | 0.98 | 0.0 | 8.7 |
| 950 | 41.2 | 20.64 | 1.09 | 41.4 | 0.99 | -0.6 | 9.7 |
| 975 | 40.9 | 20.55 | 1.11 | 41.4 | 1.00 | -1.1 | 10.9 |
| 1000 | 40.6 | 20.46 | 1.14 | 41.3 | 1.01 | -1.7 | 12.1 |



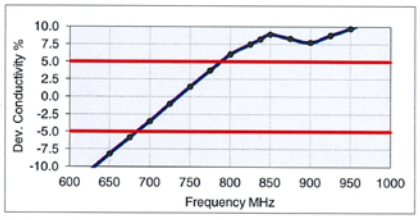




**Figure D-3**
**750MHz Head Tissue Equivalent Matter**



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**3 Composition / Information on ingredients**

The Item is composed of the following ingredients:

| | | |
|---|---|---|
| Water | 50 – 73 % | |
| Non-ionic detergents | 25 – 50 % | polyoxyethylenesorbitan monolaurate |
| NaCl | 0 – 2 % | |
| Preservative | 0.05 – 0.1% | Preventol-D7 |

Safety relevant ingredients:

| | | |
|---|---|---|
| CAS-No. 55965-84-9 | < 0.1 % | aqueous preparation, containing 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone |
| CAS-No. 9005-64-5 | <50 % | polyoxyethylenesorbitan monolaurate |

According to international guidelines, the product is not a dangerous mixture and therefore not required to be marked by symbols.

**Figure D-4**
**Composition of 2.4 GHz Head Tissue Equivalent Matter**

**Note:** 2.4 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Schmid & Partner Engineering AG

**s p e a g**

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

**Measurement Certificate / Material Test**

| | |
|---|---|
| Item Name | **Head Tissue Simulating Liquid (HBBL1900-3800V3)** |
| Product No. | SL AAH 196 AB (Batch: 170619-1) |
| Manufacturer | SPEAG |

**Measurement Method**

TSL dielectric parameters measured using calibrated DAK probe.

**Setup Validation**

Validation results were within ± 2.5% towards the target values of Methanol.

**Target Parameters**

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

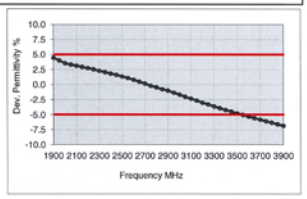
**Test Condition**

| | |
|---|---|
| Ambient | Environment temperatur (22 ± 3)°C and humidity < 70%. |
| TSL Temperature | 22°C |
| Test Date | 20-Jun-17 |
| Operator | CL |

**Additional Information**

TSL Density 1.054 g/cm$^3$
TSL Heat-capacity 3.389 kJ/(kg*K)

| | Measured | | | Target | | Diff.to Target [%] | |
|---|---|---|---|---|---|---|---|
| f [MHz] | e' | e'' | sigma | eps | sigma | Δ-eps | Δ-sigma |
| 1900 | 41.8 | 12.2 | 1.3 | 40.0 | 1.4 | 4.5 | -8.2 |
| 1950 | 41.6 | 12.3 | 1.3 | 40.0 | 1.4 | 4.0 | -4.6 |
| 2000 | 41.4 | 12.4 | 1.4 | 40.0 | 1.4 | 3.6 | -1.3 |
| 2050 | 41.2 | 12.6 | 1.4 | 39.9 | 1.4 | 3.3 | -0.9 |
| 2100 | 41.1 | 12.7 | 1.5 | 39.8 | 1.5 | 3.1 | -0.6 |
| 2150 | 40.9 | 12.8 | 1.5 | 39.7 | 1.5 | 2.9 | -0.2 |
| 2200 | 40.7 | 12.9 | 1.6 | 39.6 | 1.6 | 2.7 | 0.2 |
| 2250 | 40.6 | 13.0 | 1.6 | 39.6 | 1.6 | 2.5 | 0.5 |
| 2300 | 40.4 | 13.2 | 1.7 | 39.5 | 1.7 | 2.3 | 1.1 |
| 2350 | 40.2 | 13.3 | 1.7 | 39.4 | 1.7 | 2.1 | 1.5 |
| 2400 | 40.0 | 13.4 | 1.8 | 39.3 | 1.8 | 1.8 | 2.1 |
| 2450 | 39.8 | 13.5 | 1.8 | 39.2 | 1.8 | 1.6 | 2.6 |
| 2500 | 39.7 | 13.7 | 1.9 | 39.1 | 1.9 | 1.3 | 2.6 |
| 2550 | 39.5 | 13.7 | 2.0 | 39.1 | 1.9 | 1.1 | 2.2 |
| 2600 | 39.3 | 13.9 | 2.0 | 39.0 | 2.0 | 0.8 | 2.5 |
| 2650 | 39.1 | 14.0 | 2.1 | 38.9 | 2.0 | 0.5 | 2.6 |
| 2700 | 39.0 | 14.2 | 2.1 | 38.9 | 2.1 | 0.2 | 2.7 |
| 2750 | 38.7 | 14.3 | 2.2 | 38.8 | 2.1 | -0.2 | 2.6 |
| 2800 | 38.6 | 14.4 | 2.2 | 38.8 | 2.2 | -0.4 | 2.5 |
| 2850 | 38.4 | 14.5 | 2.3 | 38.7 | 2.2 | -0.8 | 2.6 |
| 2900 | 38.2 | 14.6 | 2.3 | 38.6 | 2.3 | -1.0 | 2.6 |
| 2950 | 38.1 | 14.7 | 2.4 | 38.6 | 2.3 | -1.3 | 2.6 |
| 3000 | 37.9 | 14.8 | 2.5 | 38.5 | 2.4 | -1.7 | 2.6 |
| 3050 | 37.7 | 14.8 | 2.5 | 38.4 | 2.5 | -2.0 | 2.8 |
| 3100 | 37.5 | 14.9 | 2.6 | 38.4 | 2.5 | -2.3 | 2.8 |
| 3150 | 37.3 | 15.0 | 2.6 | 38.3 | 2.6 | -2.6 | 2.9 |
| 3200 | 37.1 | 15.1 | 2.7 | 38.3 | 2.6 | -3.0 | 2.9 |
| 3250 | 37.0 | 15.1 | 2.7 | 38.2 | 2.7 | -3.3 | 3.0 |
| 3300 | 36.8 | 15.2 | 2.8 | 38.2 | 2.7 | -3.6 | 3.1 |
| 3350 | 36.6 | 15.3 | 2.8 | 38.1 | 2.8 | -3.9 | 3.2 |
| 3400 | 36.4 | 15.3 | 2.9 | 38.0 | 2.8 | -4.2 | 3.3 |
| 3450 | 36.3 | 15.4 | 3.0 | 38.0 | 2.9 | -4.5 | 3.4 |
| 3500 | 36.1 | 15.5 | 3.0 | 37.9 | 2.9 | -4.8 | 3.5 |
| 3550 | 36.0 | 15.5 | 3.1 | 37.9 | 3.0 | -5.0 | 3.6 |
| 3600 | 35.8 | 15.6 | 3.1 | 37.8 | 3.0 | -5.3 | 3.8 |
| 3650 | 35.7 | 15.7 | 3.2 | 37.8 | 3.1 | -5.6 | 3.7 |
| 3700 | 35.5 | 15.7 | 3.2 | 37.7 | 3.1 | -5.8 | 3.9 |
| 3750 | 35.4 | 15.8 | 3.3 | 37.6 | 3.2 | -6.1 | 3.9 |
| 3800 | 35.2 | 15.9 | 3.4 | 37.6 | 3.2 | -6.3 | 4.1 |
| 3850 | 35.1 | 15.9 | 3.4 | 37.5 | 3.3 | -6.6 | 4.1 |



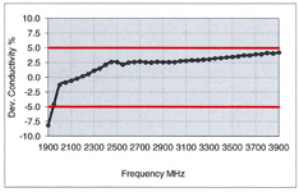




**Figure D-5**
**2.4 GHz Head Tissue Equivalent Matter**



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## 2 Composition / Information on ingredients

The Item is composed of the following ingredients:

| | |
|---|---|
| Water | 50 – 65% |
| Mineral oil | 10 – 30% |
| Emulsifiers | 8 – 25% |
| Sodium salt | 0 – 1.5% |

**Figure D-6**
**Composition of 3.5 – 5 GHz Head Tissue Equivalent Matter**

**Note:** 3.5 – 5 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Schmid & Partner Engineering AG

**s p e a g**

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

**Measurement Certificate / Material Test**

| | |
|---|---|
| Item Name | **Head Tissue Simulating Liquid (HBBL3500-5800V5)** |
| Product No. | SL AAH 502 AG (Batch: 170613-1) |
| Manufacturer | SPEAG |

**Measurement Method**
TSL dielectric parameters measured using calibrated DAK probe.

**Setup Validation**
Validation results were within ± 2.5% towards the target values of Methanol.

**Target Parameters**
Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

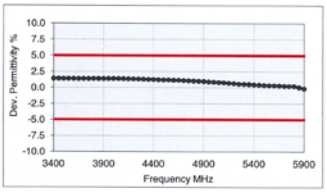
**Test Condition**

| | |
|---|---|
| Ambient | Environment temperatur (22 ± 3)°C and humidity < 70%. |
| TSL Temperature | 22°C |
| Test Date | 20-Jun-17 |
| Operator | CL |

**Additional Information**

| | |
|---|---|
| TSL Density | 0.985 g/cm$^3$ |
| TSL Heat-capacity | 3.383 kJ/(kg*K) |

| | Measured | | | Target | | Diff.to Target [%] | |
|---|---|---|---|---|---|---|---|
| f [MHz] | e' | e'' | sigma | eps | sigma | Δ-eps | Δ-sigma |
| 3400 | 38.6 | 15.03 | 2.84 | 38.0 | 2.81 | 1.5 | 1.1 |
| 3500 | 38.5 | 15.00 | 2.92 | 37.9 | 2.91 | 1.5 | 0.3 |
| 3600 | 38.3 | 14.98 | 3.00 | 37.8 | 3.02 | 1.3 | -0.5 |
| 3700 | 38.2 | 14.96 | 3.08 | 37.7 | 3.12 | 1.3 | -1.2 |
| 3800 | 38.1 | 14.96 | 3.16 | 37.6 | 3.22 | 1.4 | -1.9 |
| 3900 | 38.0 | 14.95 | 3.24 | 37.5 | 3.32 | 1.4 | -2.5 |
| 4000 | 37.9 | 14.95 | 3.33 | 37.4 | 3.43 | 1.5 | -2.8 |
| 4100 | 37.8 | 14.96 | 3.41 | 37.2 | 3.53 | 1.5 | -3.3 |
| 4200 | 37.6 | 15.00 | 3.50 | 37.1 | 3.63 | 1.3 | -3.6 |
| 4300 | 37.5 | 15.05 | 3.60 | 37.0 | 3.73 | 1.3 | -3.5 |
| 4400 | 37.4 | 15.11 | 3.70 | 36.9 | 3.84 | 1.4 | -3.5 |
| 4500 | 37.2 | 15.18 | 3.80 | 36.8 | 3.94 | 1.1 | -3.5 |
| 4600 | 37.1 | 15.24 | 3.90 | 36.7 | 4.04 | 1.2 | -3.5 |
| 4700 | 37.0 | 15.29 | 4.00 | 36.6 | 4.14 | 1.2 | -3.4 |
| 4800 | 36.8 | 15.35 | 4.10 | 36.4 | 4.25 | 1.0 | -3.4 |
| 4850 | 36.8 | 15.35 | 4.14 | 36.4 | 4.30 | 1.1 | -3.6 |
| 4900 | 36.7 | 15.38 | 4.19 | 36.3 | 4.35 | 1.0 | -3.6 |
| 4950 | 36.6 | 15.39 | 4.24 | 36.3 | 4.40 | 0.9 | -3.6 |
| 5000 | 36.5 | 15.42 | 4.29 | 36.2 | 4.45 | 0.8 | -3.6 |
| 5050 | 36.5 | 15.43 | 4.34 | 36.2 | 4.50 | 0.9 | -3.6 |
| 5100 | 36.4 | 15.46 | 4.39 | 36.1 | 4.55 | 0.8 | -3.6 |
| 5150 | 36.3 | 15.48 | 4.43 | 36.0 | 4.60 | 0.7 | -3.8 |
| 5200 | 36.2 | 15.50 | 4.48 | 36.0 | 4.66 | 0.6 | -3.8 |
| 5250 | 36.1 | 15.53 | 4.54 | 35.9 | 4.71 | 0.5 | -3.5 |
| 5300 | 36.1 | 15.55 | 4.58 | 35.9 | 4.76 | 0.6 | -3.7 |
| 5350 | 36.0 | 15.56 | 4.63 | 35.8 | 4.81 | 0.5 | -3.7 |
| 5400 | 35.9 | 15.57 | 4.68 | 35.8 | 4.86 | 0.4 | -3.7 |
| 5450 | 35.9 | 15.59 | 4.73 | 35.7 | 4.91 | 0.6 | -3.7 |
| 5500 | 35.8 | 15.61 | 4.78 | 35.6 | 4.96 | 0.4 | -3.7 |
| 5550 | 35.7 | 15.65 | 4.83 | 35.6 | 5.01 | 0.3 | -3.7 |
| 5600 | 35.6 | 15.66 | 4.88 | 35.5 | 5.07 | 0.2 | -3.7 |
| 5650 | 35.6 | 15.70 | 4.93 | 35.5 | 5.12 | 0.4 | -3.6 |
| 5700 | 35.5 | 15.72 | 4.98 | 35.4 | 5.17 | 0.2 | -3.6 |
| 5750 | 35.4 | 15.76 | 5.04 | 35.4 | 5.22 | 0.1 | -3.4 |
| 5800 | 35.4 | 15.78 | 5.09 | 35.3 | 5.27 | 0.3 | -3.4 |
| 5850 | 35.3 | 15.81 | 5.14 | 35.3 | 5.34 | 0.0 | -3.7 |
| 5900 | 35.3 | 15.82 | 5.19 | 35.3 | 5.40 | 0.0 | -3.9 |



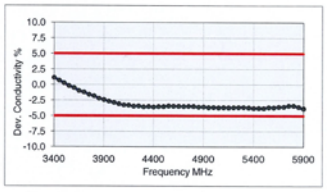




**Figure D-7**
**3.5 – 5 GHz Head Tissue Equivalent Matter**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## 3 Composition / Information on ingredients

The Item is composed of the following ingredients:

| | |
|---|---|
| Water | 60 – 80% |
| Esters, Emulsifiers, Inhibitors | 20 – 40% |
| Sodium salt | 0 – 1.5% |

**Figure D-8**
**Composition of 3.5 – 5 GHz Body Tissue Equivalent Matter**

**Note:** 3.5 – 5 GHz Body liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.

Schmid & Partner Engineering AG

**s p e a g**

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

**Measurement Certificate / Material Test**

| | |
|---|---|
| Item Name | **Body Tissue Simulating Liquid (MBBL3500-5800V5)** |
| Product No. | SL AAM 501 EA (Batch: 180423-2) |
| Manufacturer | SPEAG |

**Measurement Method**

TSL dielectric parameters measured using calibrated DAK probe.

**Setup Validation**

Validation results were within ± 2.5% towards the target values of Methanol.

**Target Parameters**

Target parameters as defined in the KDB 865664 compliance standard.

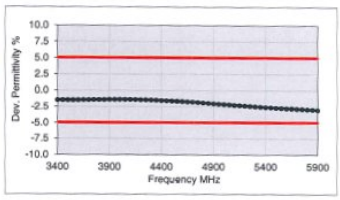
**Test Condition**

| | |
|---|---|
| Ambient | Environment temperatur (22 ± 3)°C and humidity < 70%. |
| TSL Temperature | 22°C |
| Test Date | 25-Apr-18 |
| Operator | WM |

**Additional Information**

| | |
|---|---|
| TSL Density | 0.996 g/cm3 |
| TSL Heat-capacity | 3.765 kJ/(kg*K) |

| | Measured | | | Target | | Diff.to Target [%] | |
|---|---|---|---|---|---|---|---|
| f [MHz] | e' | e'' | sigma | eps | sigma | Δ-eps | Δ-sigma |
| 3400 | 50.7 | 16.46 | 3.11 | 51.5 | 3.20 | -1.5 | -2.7 |
| 3500 | 50.5 | 16.50 | 3.21 | 51.3 | 3.31 | -1.6 | -3.1 |
| 3600 | 50.4 | 16.56 | 3.32 | 51.2 | 3.43 | -1.5 | -3.2 |
| 3700 | 50.3 | 16.63 | 3.42 | 51.1 | 3.55 | -1.5 | -3.6 |
| 3800 | 50.2 | 16.72 | 3.53 | 50.9 | 3.66 | -1.4 | -3.7 |
| 3900 | 50.1 | 16.81 | 3.65 | 50.8 | 3.78 | -1.3 | -3.5 |
| 4000 | 49.9 | 16.93 | 3.77 | 50.6 | 3.90 | -1.5 | -3.3 |
| 4100 | 49.8 | 17.05 | 3.89 | 50.5 | 4.01 | -1.4 | -3.1 |
| 4200 | 49.6 | 17.18 | 4.01 | 50.4 | 4.13 | -1.5 | -2.9 |
| 4300 | 49.5 | 17.32 | 4.14 | 50.2 | 4.25 | -1.5 | -2.5 |
| 4400 | 49.3 | 17.46 | 4.27 | 50.1 | 4.37 | -1.6 | -2.2 |
| 4500 | 49.2 | 17.59 | 4.40 | 50.0 | 4.48 | -1.5 | -1.8 |
| 4600 | 49.0 | 17.73 | 4.54 | 49.8 | 4.60 | -1.7 | -1.3 |
| 4700 | 48.8 | 17.86 | 4.67 | 49.7 | 4.72 | -1.8 | -1.0 |
| 4800 | 48.6 | 17.99 | 4.80 | 49.6 | 4.83 | -1.9 | -0.7 |
| 4850 | 48.5 | 18.05 | 4.87 | 49.5 | 4.89 | -2.0 | -0.4 |
| 4900 | 48.4 | 18.11 | 4.94 | 49.4 | 4.95 | -2.1 | -0.2 |
| 4950 | 48.3 | 18.17 | 5.00 | 49.4 | 5.01 | -2.1 | -0.1 |
| 5000 | 48.2 | 18.23 | 5.07 | 49.3 | 5.07 | -2.2 | 0.1 |
| 5050 | 48.1 | 18.29 | 5.14 | 49.2 | 5.12 | -2.3 | 0.3 |
| 5100 | 48.0 | 18.34 | 5.20 | 49.2 | 5.18 | -2.3 | 0.3 |
| 5150 | 47.9 | 18.39 | 5.27 | 49.1 | 5.24 | -2.4 | 0.6 |
| 5200 | 47.9 | 18.45 | 5.34 | 49.0 | 5.30 | -2.3 | 0.8 |
| 5250 | 47.8 | 18.50 | 5.40 | 48.9 | 5.36 | -2.3 | 0.8 |
| 5300 | 47.7 | 18.56 | 5.47 | 48.9 | 5.42 | -2.4 | 1.0 |
| 5350 | 47.6 | 18.61 | 5.54 | 48.8 | 5.47 | -2.5 | 1.2 |
| 5400 | 47.5 | 18.67 | 5.61 | 48.7 | 5.53 | -2.5 | 1.4 |
| 5450 | 47.4 | 18.72 | 5.68 | 48.7 | 5.59 | -2.6 | 1.6 |
| 5500 | 47.3 | 18.77 | 5.74 | 48.6 | 5.65 | -2.7 | 1.6 |
| 5550 | 47.2 | 18.83 | 5.81 | 48.5 | 5.71 | -2.8 | 1.8 |
| 5600 | 47.1 | 18.88 | 5.88 | 48.5 | 5.77 | -2.8 | 2.0 |
| 5650 | 47.1 | 18.93 | 5.95 | 48.4 | 5.82 | -2.7 | 2.1 |
| 5700 | 47.0 | 18.99 | 6.02 | 48.3 | 5.88 | -2.8 | 2.3 |
| 5750 | 46.9 | 19.04 | 6.09 | 48.3 | 5.94 | -2.8 | 2.5 |
| 5800 | 46.8 | 19.10 | 6.16 | 48.2 | 6.00 | -2.9 | 2.7 |
| 5850 | 46.7 | 19.16 | 6.23 | 48.1 | 6.06 | -3.0 | 2.8 |
| 5900 | 46.6 | 19.22 | 6.31 | 48.1 | 6.12 | -3.0 | 3.2 |



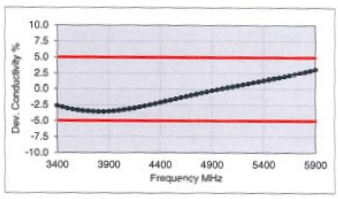




**Figure D-9**
**3.5 – 5 GHz Body Tissue Equivalent Matter**



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# APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

**Table E-1**
**SAR System Validation Summary – 1g**

| SAR System | Freq. (MHz) | Date | Probe SN | Probe Cal Point | | Cond. (σ) | Perm. (εr) | CW VALIDATION | | | MOD. VALIDATION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | SENSITIVITY | PROBE LINEARITY | PROBE ISOTROPY | MOD. TYPE | DUTY FACTOR | PAR |
| I | 750 | 11/1/2018 | 7406 | 750 | Head | 0.898 | 42.449 | PASS | PASS | PASS | N/A | N/A | N/A |
| M | 750 | 11/2/2018 | 3287 | 750 | Head | 0.908 | 42.19 | PASS | PASS | PASS | N/A | N/A | N/A |
| L | 835 | 11/12/2018 | 7308 | 835 | Head | 0.893 | 42.128 | PASS | PASS | PASS | GMSK | PASS | N/A |
| M | 1750 | 11/5/2018 | 3287 | 1750 | Head | 1.342 | 39.217 | PASS | PASS | PASS | N/A | N/A | N/A |
| E | 1900 | 5/22/2018 | 3213 | 1900 | Head | 1.447 | 38.909 | PASS | PASS | PASS | GMSK | PASS | N/A |
| M | 1900 | 11/5/2018 | 3287 | 1900 | Head | 1.43 | 39.014 | PASS | PASS | PASS | GMSK | PASS | N/A |
| G | 2300 | 8/8/2018 | 7410 | 2300 | Head | 1.701 | 40.133 | PASS | PASS | PASS | N/A | N/A | N/A |
| G | 2450 | 8/7/2018 | 7410 | 2450 | Head | 1.865 | 39.618 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| G | 2600 | 8/8/2018 | 7410 | 2600 | Head | 2.04 | 39.033 | PASS | PASS | PASS | TDD | PASS | N/A |
| H | 3500 | 10/30/2018 | 3949 | 3500 | Head | 2.803 | 38.5 | PASS | PASS | PASS | TDD | PASS | N/A |
| H | 3700 | 10/30/2018 | 3949 | 3700 | Head | 2.997 | 38.156 | PASS | PASS | PASS | TDD | PASS | N/A |
| H | 5250 | 7/5/2018 | 7409 | 5250 | Head | 4.492 | 34.994 | PASS | PASS | PASS | OFDM | N/A | PASS |
| H | 5600 | 7/5/2018 | 7409 | 5600 | Head | 4.839 | 34.496 | PASS | PASS | PASS | OFDM | N/A | PASS |
| H | 5750 | 7/5/2018 | 7409 | 5750 | Head | 4.995 | 34.288 | PASS | PASS | PASS | OFDM | N/A | PASS |
| I | 750 | 7/19/2018 | 7406 | 750 | Body | 0.969 | 53.451 | PASS | PASS | PASS | N/A | N/A | N/A |
| D | 750 | 8/15/2018 | 7357 | 750 | Body | 0.97 | 53.479 | PASS | PASS | PASS | N/A | N/A | N/A |
| G | 835 | 8/29/2018 | 7410 | 835 | Body | 0.956 | 54.177 | PASS | PASS | PASS | GMSK | PASS | N/A |
| I | 835 | 8/8/2018 | 7406 | 835 | Body | 0.98 | 53.497 | PASS | PASS | PASS | GMSK | PASS | N/A |
| J | 835 | 9/11/2018 | 3347 | 835 | Body | 0.984 | 54.197 | PASS | PASS | PASS | GMSK | PASS | N/A |
| J | 1750 | 9/5/2018 | 3347 | 1750 | Body | 1.454 | 53.515 | PASS | PASS | PASS | N/A | N/A | N/A |
| H | 1900 | 9/25/2018 | 7409 | 1900 | Body | 1.541 | 50.669 | PASS | PASS | PASS | GMSK | PASS | N/A |
| E | 1900 | 8/9/2018 | 3213 | 1900 | Body | 1.57 | 51.136 | PASS | PASS | PASS | GMSK | PASS | N/A |
| E | 1900 | 12/3/2018 | 3332 | 1900 | Body | 1.518 | 51.796 | PASS | PASS | PASS | GMSK | PASS | N/A |
| K | 2300 | 4/3/2018 | 3319 | 2300 | Body | 1.871 | 51.575 | PASS | PASS | PASS | N/A | N/A | N/A |
| I | 2450 | 12/27/2018 | 7406 | 2450 | Body | 2.028 | 51.4 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| K | 2450 | 4/3/2018 | 3319 | 2450 | Body | 2.043 | 51.13 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| K | 2600 | 4/3/2018 | 3319 | 2600 | Body | 2.225 | 50.665 | PASS | PASS | PASS | TDD | PASS | N/A |
| L | 3500 | 11/1/2018 | 3914 | 3500 | Body | 3.336 | 51.607 | PASS | PASS | PASS | TDD | PASS | N/A |
| L | 3700 | 11/2/2018 | 3914 | 3700 | Body | 3.55 | 51.31 | PASS | PASS | PASS | TDD | PASS | N/A |
| D | 5250 | 6/11/2018 | 7357 | 5250 | Body | 5.529 | 48.096 | PASS | PASS | PASS | OFDM | N/A | PASS |
| D | 5600 | 6/11/2018 | 7357 | 5600 | Body | 6.007 | 47.521 | PASS | PASS | PASS | OFDM | N/A | PASS |
| D | 5750 | 6/11/2018 | 7357 | 5750 | Body | 6.214 | 47.275 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5250 | 10/29/2018 | 7308 | 5250 | Body | 5.511 | 48.77 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5600 | 10/29/2018 | 7308 | 5600 | Body | 5.994 | 48.2 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5750 | 10/29/2018 | 7308 | 5750 | Body | 6.219 | 47.96 | PASS | PASS | PASS | OFDM | N/A | PASS |


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**Table E-2**
**SAR System Validation Summary – 10g**

| SAR System | Freq. (MHz) | Date | Probe SN | Probe Cal Point | | Cond. (σ) | Perm. (εr) | CW VALIDATION | | | MOD. VALIDATION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | SENSITIVITY | PROBE LINEARITY | PROBE ISOTROPY | MOD. TYPE | DUTY FACTOR | PAR |
| J | 1750 | 9/5/2018 | 3347 | 1750 | Body | 1.454 | 53.515 | PASS | PASS | PASS | N/A | N/A | N/A |
| E | 1900 | 8/9/2018 | 3213 | 1900 | Body | 1.57 | 51.136 | PASS | PASS | PASS | GMSK | PASS | N/A |
| E | 1900 | 12/3/2018 | 3332 | 1900 | Body | 1.518 | 51.796 | PASS | PASS | PASS | GMSK | PASS | N/A |
| K | 2300 | 4/3/2018 | 3319 | 2300 | Body | 1.871 | 51.575 | PASS | PASS | PASS | N/A | N/A | N/A |
| K | 2450 | 4/3/2018 | 3319 | 2450 | Body | 2.043 | 51.13 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| K | 2600 | 4/3/2018 | 3319 | 2600 | Body | 2.225 | 50.665 | PASS | PASS | PASS | TDD | PASS | N/A |
| L | 3500 | 11/1/2018 | 3914 | 3500 | Body | 3.336 | 51.607 | PASS | PASS | PASS | TDD | PASS | N/A |
| L | 3700 | 11/2/2018 | 3914 | 3700 | Body | 3.55 | 51.31 | PASS | PASS | PASS | TDD | PASS | N/A |
| D | 5250 | 6/11/2018 | 7357 | 5250 | Body | 5.529 | 48.096 | PASS | PASS | PASS | OFDM | N/A | PASS |
| D | 5600 | 6/11/2018 | 7357 | 5600 | Body | 6.007 | 47.521 | PASS | PASS | PASS | OFDM | N/A | PASS |
| D | 5750 | 6/11/2018 | 7357 | 5750 | Body | 6.214 | 47.275 | PASS | PASS | PASS | OFDM | N/A | PASS |

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.


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# APPENDIX G POWER REDUCTION VERIFICATION

Per the May 2017 TCBC Workshop Notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process was divided into two parts: (1) evaluation of output power levels for individual or multiple triggering mechanisms and (2) evaluation of the triggering distances for proximity-based sensors.

## G.1 Power Verification Procedure

The power verification was performed according to the following procedure:

1. A base station simulator was used to establish a conducted RF connection and the output power was monitored. The power measurements were confirmed to be within expected tolerances for all states before and after a power reduction mechanism was triggered.

2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.

3. Steps 1 and 2 were repeated for all individual power reduction mechanisms and combinations thereof. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated.

## G.2 Distance Verification Procedure

The distance verification procedure was performed according to the following procedure:

1. A base station simulator was used to establish an RF connection and to monitor the power levels. The device being tested was placed below the relevant section of the phantom with the relevant side or edge of the device facing toward the phantom.

2. The device was moved toward and away from the phantom to determine the distance at which the mechanism triggers and the output power is reduced, per KDB Publication 616217 D04v01r02 and FCC Guidance. Each applicable test position was evaluated. The distances were confirmed to be the same or larger (more conservative) than the minimum distances provided by the manufacturer.

3. Steps 1 and 2 were repeated for low, mid, and high bands, as appropriate (see note below Table G-2 for more details).

4. Steps 1 through 3 were repeated for all distance-based power reduction mechanisms.


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## G.3 Main Antenna Verification Summary

**Table G-1**
**Power Measurement Verification for Main Antenna**

| Mechanism(s) | | Mode/Band | Conducted Power (dBm) | | |
|---|---|---|---|---|---|
| 1st | 2nd | | Un-triggered (Max) | Mechanism #1 (Reduced) | Mechanism #2 (Reduced) |
| Hotspot On | | PCS CDMA | 24.48 | 19.3 | |
| Hotspot On | Grip | PCS CDMA | 24.52 | 19.34 | 19.34 |
| Grip | | PCS CDMA | 24.5 | 20.32 | |
| Grip | Hotspot On | PCS CDMA | 24.54 | 20.37 | 19.45 |
| Hotspot On | | GPRS 1900 | 28.68 | 26.89 | |
| Hotspot On | Grip | GPRS 1900 | 28.65 | 26.89 | 26.88 |
| Grip | | GPRS 1900 | 28.65 | 26.9 | |
| Grip | Hotspot On | GPRS 1900 | 28.68 | 26.88 | 26.85 |
| Hotspot On | | UMTS 1750 | 24.3 | 20.25 | |
| Hotspot On | Grip | UMTS 1750 | 24.25 | 20.28 | 20.31 |
| Grip | | UMTS 1750 | 24.3 | 21.31 | |
| Grip | Hotspot On | UMTS 1750 | 24.35 | 21.36 | 20.3 |
| Hotspot On | | UMTS 1900 | 24.35 | 19.47 | |
| Hotspot On | Grip | UMTS 1900 | 24.31 | 19.44 | 19.3 |
| Grip | | UMTS 1900 | 24.33 | 20.31 | |
| Grip | Hotspot On | UMTS 1900 | 24.29 | 20.35 | 19.29 |
| Hotspot On | | LTE FDD Band 66 | 24.65 | 19.64 | |
| Hotspot On | Grip | LTE FDD Band 66 | 24.64 | 19.61 | 19.59 |
| Grip | | LTE FDD Band 66 | 24.65 | 19.45 | |
| Grip | Hotspot On | LTE FDD Band 66 | 24.62 | 19.41 | 19.63 |
| Hotspot On | | LTE FDD Band 4 | 24.61 | 19.54 | |
| Hotspot On | Grip | LTE FDD Band 4 | 24.52 | 19.57 | 19.52 |
| Grip | | LTE FDD Band 4 | 24.54 | 19.44 | |
| Grip | Hotspot On | LTE FDD Band 4 | 24.53 | 19.43 | 19.6 |
| Hotspot On | | LTE FDD Band 25 | 24.52 | 19.54 | |
| Hotspot On | Grip | LTE FDD Band 25 | 24.52 | 19.51 | 19.52 |
| Grip | | LTE FDD Band 25 | 24.54 | 20.57 | |
| Grip | Hotspot On | LTE FDD Band 25 | 24.42 | 21.45 | 20.4 |
| Hotspot On | | LTE FDD Band 2 | 24.26 | 19.69 | |
| Hotspot On | Grip | LTE FDD Band 2 | 24.34 | 19.63 | 19.65 |
| Grip | | LTE FDD Band 2 | 24.38 | 20.79 | |
| Grip | Hotspot On | LTE FDD Band 2 | 24.25 | 20.66 | 19.68 |
| Hotspot On | | LTE FDD Band 30 | 23.32 | 20.17 | |
| Hotspot On | Grip | LTE FDD Band 30 | 23.33 | 20.19 | 20.27 |
| Grip | | LTE FDD Band 30 | 23.32 | 20.25 | |
| Grip | Hotspot On | LTE FDD Band 30 | 23.35 | 20.31 | 20.34 |
| Hotspot On | | LTE FDD Band 7 | 23.52 | 19.88 | |
| Hotspot On | Grip | LTE FDD Band 7 | 23.53 | 19.89 | 19.82 |
| Grip | | LTE FDD Band 7 | 23.51 | 19.86 | |
| Grip | Hotspot On | LTE FDD Band 7 | 23.55 | 19.88 | 19.83 |
| Hotspot On | | LTE FDD Band 7 Ant A | 23.74 | 20.74 | |
| Hotspot On | Grip | LTE FDD Band 7 Ant A | 23.77 | 20.7 | 20.69 |
| Grip | | LTE FDD Band 7 Ant A | 23.71 | 20.72 | |
| Grip | Hotspot On | LTE FDD Band 7 Ant A | 23.72 | 20.68 | 20.69 |
| Hotspot On | | LTE TDD Band 48 | 23.69 | 20.72 | |
| Hotspot On | Grip | LTE TDD Band 48 | 23.71 | 20.73 | 20.78 |
| Grip | | LTE TDD Band 48 | 23.22 | 20.21 | |
| Grip | Hotspot On | LTE TDD Band 48 | 23.26 | 20.26 | 20.25 |
| Hotspot On | | LTE TDD Band 41 (PC3) | 24.19 | 21.22 | |
| Hotspot On | Grip | LTE TDD Band 41 (PC3) | 24.2 | 21.19 | 21.21 |
| Grip | | LTE TDD Band 41 (PC3) | 24.25 | 22.21 | |
| Grip | Hotspot On | LTE TDD Band 41 (PC3) | 24.2 | 22.18 | 21.17 |
| Hotspot On | | LTE TDD Band 41 (PC2) | 26.8 | 21.21 | |
| Hotspot On | Grip | LTE TDD Band 41 (PC2) | 26.81 | 21.19 | 21.2 |
| Grip | | LTE TDD Band 41 (PC2) | 26.82 | 22.21 | |
| Grip | Hotspot On | LTE TDD Band 41 (PC2) | 26.8 | 22.2 | 21.18 |
| Hotspot On | | LTE TDD Band 38 | 22.87 | 19.82 | |
| Hotspot On | Grip | LTE TDD Band 38 | 22.89 | 19.86 | 19.88 |
| Grip | | LTE TDD Band 38 | 22.91 | 19.9 | |
| Grip | Hotspot On | LTE TDD Band 38 | 22.89 | 19.88 | 19.87 |


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**Table G-2**
**Distance Measurement Verification for Main Antenna**

| Mechanism(s) | Test Condition | Band | Distance Measurements (mm) | | Minimum Distance per Manufacturer (mm) |
|---|---|---|---|---|---|
| | | | Moving Toward | Moving Away | |
| Grip | Phablet - Back Side | Mid | 8 | 10 | 8 |
| Grip | Phablet - Back Side | High | 8 | 10 | 8 |
| Grip | Phablet - Front Side | Mid | 6 | 8 | 6 |
| Grip | Phablet - Front Side | High | 6 | 8 | 6 |
| Grip | Phablet - Bottom Edge | Mid | 10 | 12 | 10 |
| Grip | Phablet - Bottom Edge | High | 10 | 12 | 10 |

*Note: Mid band refers to: CDMA BC1, GSM1900, UMTS B2/4, LTE B2/4/25/66;
High band refers to: LTE B7 Ant A & Ant B, LTE B41 PC2, LTE B41 PC3, LTE B48, LTE B30/38.

## G.4 WIFI Verification Summary

**Table G-3**
**Power Measurement Verification WIFI**

| Mechanism(s) | Mode/Band | Conducted Power (dBm) | |
|---|---|---|---|
| 1st | | Un-triggered (Max) | Mechanism #1 (Reduced) |
| Held-to-Ear | 802.11b | 19.59 | 15.89 |
| Held-to-Ear | 802.11g | 17.36 | 15.72 |
| Held-to-Ear | 802.11n (2.4GHz) | 17.54 | 15.93 |
| Held-to-Ear | 802.11a | 16.53 | 13.01 |
| Held-to-Ear | 802.11n (5GHz, 20MHz BW) | 16.66 | 13.21 |
| Held-to-Ear | 802.11ac (20MHz BW) | 16.74 | 13.35 |
| Held-to-Ear | 802.11n (5GHz, 40MHz BW) | 15.99 | 13.06 |
| Held-to-Ear | 802.11ac (40MHz BW) | 15.5 | 12.39 |
| Held-to-Ear | 802.11ac (80MHz BW) | 14.65 | 13.19 |

*Note: 802.11ax and MIMO WIFI modes were not evaluated due to equipment limitations.


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# APPENDIX H: DOWNLINK LTE CA RF CONDUCTED POWERS

## 1.1 LTE Downlink Only Carrier Aggregation Test Reduction Methodology

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.
- Downlink CA combinations for SISO and 4x4 Downlink MIMO operations were measured independently, per May 2017 TCBC Workshop notes.

Table 1 – Example of Exclusion Table for SISO Configurations

| Index | 2CC | Supported Channel Bandwidth [MHz] | | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|
| | | CC1 | CC2 | | |
| 2CC #1 | CA_2C | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #4 |
| 2CC #2 | CA_2A-5A | 5, 10, 15, 20 | 5, 10 | | 3CC #1 |
| 2CC #3 | CA_2A-13A | 5, 10, 15, 20 | 5, 10 | | 3CC #3 |
| 2CC #4 | CA_2A-13A | 5, 10, 15, 20 | 10 | | 3CC #9 |
| 2CC #5 | CA_2A-17A | 5, 10 | 5, 10 | | No |
| 2CC #6 | CA_2A-30A | 5, 10, 15, 20 | 5, 10 | | 3CC #14 |
| 2CC #8 | CA_2A-66A (2) | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #1 |
| 2CC #9 | CA_2A-71A | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #10 |
| 2CC #10 | CA_4A-5A | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #5 |
| 2CC #11 | CA_4A-5A (1) | 5, 10, 15, 20 | 5, 10 | | 4CC #1 |
| 2CC #12 | CA_4A-12A (4) | 5, 10, 15, 20 | 5, 10 | | 3CC #8 |
| 2CC #13 | CA_4A-13A | 5, 10, 15, 20 | 10 | | 3CC #9 |
| 2CC #14 | CA_4A-17A | 5, 10 | 5, 10 | B17 SCC Only | No |
| 2CC #15 | CA_5B | 5, 10 | 5, 10 | | 3CC #1 |
| 2CC #16 | CA_5A-23A | 5, 10 | 5, 10, 15, 20 | | No |
| 2CC #17 | CA_7C | 15, 20 | 15, 20 | | No |
| 2CC #18 | CA_7A-7A (1) | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 2CC #19 | CA_7A-12A | 5, 10, 15, 20 | 5, 10 | | 3CC #12 |
| 2CC #20 | CA_12B | 5 | 5, 10 | | 3CC #13 |
| 2CC #21 | CA_13A-25A | 5, 10 | 5, 10, 15, 20 | | No |
| 2CC #22 | CA_12A-30A | 5, 10 | 5, 10 | | 3CC #14 |
| 2CC #23 | CA_41A-41A (1) | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |

| Index | 3CC | Supported Channel Bandwidth [MHz] | | | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|---|
| | | CC1 | CC2 | CC3 | | |
| 3CC #1 | CA_2A-2A-4A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | 4CC #1 |
| 3CC #2 | CA_2A-2A-5A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | 4CC #1 |
| 3CC #3 | CA_2A-2A-12A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 3CC #4 | CA_2C-66A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #5 | CA_2A-2A-71A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #6 | CA_2A-4A-4A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #7 | CA_2A-4A-5A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | 4CC #1 |
| 3CC #8 | CA_2A-4A-12A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 3CC #9 | CA_2A-4A-13A | 5, 10, 15, 20 | 5, 10, 15, 20 | 10 | | No |
| 3CC #10 | CA_2A-4A-71A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #11 | CA_2A-5B | 5, 10, 15, 20 | 5, 10 | 5, 10 | | 4CC #5 |
| 3CC #12 | CA_2A-7A-12A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 3CC #13 | CA_2A-12B | 5, 10, 15, 20 | 5 | 5, 10 | | No |
| 3CC #14 | CA_2A-12A-30A | 5, 10, 15, 20 | 5, 10 | 5, 10 | | No |
| 3CC #15 | CA_4A-4A-5A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 3CC #16 | CA_5B-30A | 5, 10 | 5, 10 | 5, 10 | | 3CC #1 |
| 3CC #17 | CA_5B-66A | 5, 10 | 5, 10 | 5, 10, 15, 20 | | 3CC #3 |
| 3CC #18 | CA_5A-30A-66A | 5, 10 | 5, 10 | 5, 10, 15, 20 | | 3CC #9 |
| 3CC #19 | CA_12A-66C | 5, 10 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #20 | CA_30A-66A-66A | 5, 10 | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #9 |
| 3CC #21 | CA_41D | 10, 15, 20 | 10, 15, 20 | 10, 15, 20 | | No |
| 3CC #22 | CA_41A-41C | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #23 | CA_66D | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #24 | CA_66A-66C | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |

| Index | 4CC | Supported Channel Bandwidth [MHz] | | | | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|---|---|
| | | CC1 | CC2 | CC3 | CC4 | | |
| 4CC #1 | CA_2A-2A-4A-5A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 4CC #2 | CA_2A-2A-4A-12A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | B12 SCC Only | No |
| 4CC #3 | CA_2A-2A-5A-30A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | 5, 10 | | No |
| 4CC #4 | CA_2A-2A-5A-66A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | | No |
| 4CC #5 | CA_2A-5B-30A | 5, 10, 15, 20 | 5, 10 | 5, 10 | 5, 10 | | 3CC #1 |
| 4CC #6 | CA_2A-5B-66A | 5, 10, 15, 20 | 5, 10 | 5, 10 | 5, 10, 15, 20 | | 3CC #1 |
| 4CC #7 | CA_5B-30A-66A | 5, 10 | 5, 10 | 5, 10 | 5, 10 | | 3CC #1 |
| 4CC #8 | CA_5B-66A-66A | 5, 10 | 5, 10 | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #2 |
| 4CC #9 | CA_5A-30A-66A-66A | 5, 10 | 5, 10 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 4CC #10 | CA_41E | 15, 20 | 15, 20 | 15, 20 | 20 | | No |

| Index | 5CC | Supported Channel Bandwidth [MHz] | | | | | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|---|---|---|
| | | CC1 | CC2 | CC3 | CC4 | CC5 | | |
| 5CC #1 | CA_2A-5B-30A-66A | 5, 10, 15, 20 | 5, 10 | 5, 10 | 5, 10 | 5, 10, 15, 20 | | No |
| 5CC #2 | CA_2A-5B-66A-66A | 5, 10, 15, 20 | 5, 10 | 5, 10 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |

Table 2 – Example of Exclusion Table for 4x4 Downlink MIMO Configurations

| Index | 2CC | Supported Channel Bandwidth [MHz] | | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|
| | | CC1 | CC2 | | |
| 2CC #M1 | CA_[2C] | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #M6 |
| 2CC #M2 | CA_[2A]-2A | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #M1 |
| 2CC #M3 | CA_[2A]-[2A] | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 2CC #M4 | CA_[2A]-4A (2) | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #M1 |
| 2CC #M5 | CA_[2A]-[4A] (2) | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 2CC #M6 | CA_[2A]-5A | 5, 10, 15, 20 | 5, 10 | | 4CC #M3 |
| 2CC #M7 | CA_[2A]-12A (1) | 5, 10, 15, 20 | 3, 5, 10 | | No |
| 2CC #M8 | CA_[2A]-13A | 5, 10, 15, 20 | 10 | | 3CC #M4 |
| 2CC #M9 | CA_[2A]-17A | 5, 10 | 5, 10 | | No |
| 2CC #M10 | CA_[2A]-29A (2) | 5, 10, 15, 20 | 5, 10 | B29 SCC Only | 3CC #M12 |
| 2CC #M11 | CA_[2A]-30A | 5, 10, 15, 20 | 5, 10 | | 3CC #M5 |
| 2CC #M12 | CA_[2A]-66A (2) | 5, 10, 15, 20 | 5, 10, 15, 20 | | 4CC #M1 |
| 2CC #M13 | CA_2A-[66A] (2) | 5, 10, 15, 20 | 5, 10, 15, 20 | | 4CC #M2 |
| 2CC #M14 | CA_[2A]-[66A] (2) | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 2CC #M15 | CA_[2A]-71A | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #M11 |
| 2CC #M16 | CA_5A-[66A] | 5, 10 | 5, 10, 15, 20 | | 3CC #M16 |
| 2CC #M17 | CA_12A-[66A] (4) | 5, 10 | 5, 10, 15, 20 | | 3CC #M17 |
| 2CC #M18 | CA_13A-[66A] | 5, 10 | 5, 10, 15, 20 | | 3CC #M19 |
| 2CC #M19 | CA_30A-[66A] | 5, 10 | 5, 10, 15, 20 | | 3CC #M20 |
| 2CC #M20 | CA_[66B] | 5, 10, 15 | 5, 10, 15 | | 4CC #M4 |
| 2CC #M21 | CA_[66C] | 5, 10, 15, 20 | 5, 10, 15, 20 | | 4CC #M6 |
| 2CC #M22 | CA_[66A]-66A | 5, 10, 15, 20 | 5, 10, 15, 20 | | 3CC #M28 |
| 2CC #M23 | CA_[66A]-[66A] | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |

| Index | 3CC | Supported Channel Bandwidth [MHz] | | | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|---|
| | | CC1 | CC2 | CC3 | | |
| 3CC #M1 | CA_[2A]-2A-4A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M2 | CA_[2A]-2A-5A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 3CC #M3 | CA_[2A]-2A-12A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 3CC #M4 | CA_[2A]-2A-13A | 5, 10, 15, 20 | 5, 10, 15, 20 | 10 | | No |
| 3CC #M5 | CA_[2A]-2A-30A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | | No |
| 3CC #M6 | CA_[2C]-66A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M7 | CA_2C-[66A] | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M8 | CA_[2C]-[66A] | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M9 | CA_[2A]-2A-66A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M10 | CA_2A-2A-[66A] | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M11 | CA_[2A]-2A-71A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M12 | CA_[2A]-4A-29A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10 | B29 SCC Only | No |
| 3CC #M13 | CA_[2A]-4A-71A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M14 | CA_[2A]-5B | 5, 10, 15, 20 | 5, 10 | 5, 10 | | 4CC #M1 |
| 3CC #M15 | CA_[2A]-5A-66A | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | | No |
| 3CC #M16 | CA_2A-5A-[66A] | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | | No |
| 3CC #M17 | CA_2A-12A-[66A] | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | | No |
| 3CC #M18 | CA_[2A]-13A-66A | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | | No |
| 3CC #M19 | CA_2A-13A-[66A] | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | | No |
| 3CC #M20 | CA_2A-30A-[66A] | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | | No |
| 3CC #M21 | CA_[2A]-66B | 5, 10, 15, 20 | 5, 10, 15 | 5, 10, 15 | | 4CC #M3 |
| 3CC #M22 | CA_[2A]-[66B] | 5, 10, 15, 20 | 5, 10, 15 | 5, 10, 15 | | 4CC #M4 |
| 3CC #M23 | CA_[2A]-[66B] | 5, 10, 15, 20 | 5, 10, 15 | 5, 10, 15 | | No |
| 3CC #M24 | CA_[2A]-66C | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | 4CC #M5 |
| 3CC #M25 | CA_2A-[66C] | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | 4CC #M6 |
| 3CC #M26 | CA_[2A]-[66C] | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M27 | CA_[2A]-66A-66A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M28 | CA_2A-[66A]-66A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 3CC #M29 | CA_[2A]-66A-71A | 5, 10, 15, 20 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |

| Index | 4CC | Supported Channel Bandwidth [MHz] | | | | Restriction | Completely Covered by Measurement Superset |
|---|---|---|---|---|---|---|---|
| | | CC1 | CC2 | CC3 | CC4 | | |
| 4CC #M1 | CA_[2A]-5B-66A | 5, 10, 15, 20 | 5, 10 | 5, 10 | 5, 10, 15, 20 | | No |
| 4CC #M2 | CA_2A-5B-[66A] | 5, 10, 15, 20 | 5, 10 | 5, 10 | 5, 10, 15, 20 | | No |
| 4CC #M3 | CA_[2A]-5A-66B | 5, 10, 15, 20 | 5, 10 | 5, 10, 15 | 5, 10, 15 | | No |
| 4CC #M4 | CA_2A-5A-[66B] | 5, 10, 15, 20 | 5, 10 | 5, 10, 15 | 5, 10, 15 | | No |
| 4CC #M5 | CA_[2A]-5A-66C | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |
| 4CC #M6 | CA_2A-5A-[66C] | 5, 10, 15, 20 | 5, 10 | 5, 10, 15, 20 | 5, 10, 15, 20 | | No |

Note: [CC] indicates component carrier with 4x4 DL MIMO antenna configuration



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## 1.2 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation 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.

This device supports LAA with downlink carrier aggregation only. It uses carrier aggregation in the downlink to combine LTE in the unlicensed spectrum (i.e. LTE Band 46) with LTE in the licensed band (served as PCC). All uplink communications and acknowledgements on the PCC remain identical to specifications when downlink carrier aggregation is inactive.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)ii) of KBD 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.

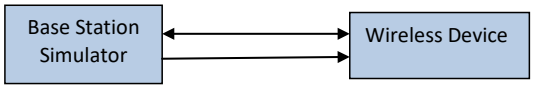


**Figure 1**
**DL CA Power Measurement Setup**


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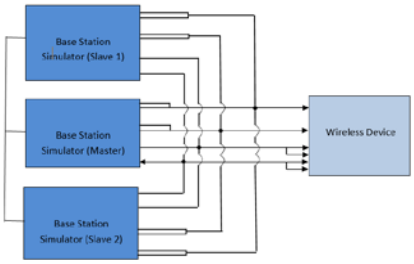


**Figure 2**
**DL CA with DL 4x4 MIMO Power Measurement Setup**

## 1.3 Downlink Carrier Aggregation RF Conducted Powers

### 1.3.1 LTE Band 71 as PCC

**Table 1**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_4A-4A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE B4 | 20 | 2175 | 2132.5 | LTE B4 | 10 | 2350 | 2150 | - | - | - | - | 25.11 | 24.97 |
| CA_2A-2A-4A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B4 | 20 | 2175 | 2132.5 | 25.14 | 24.97 |
| CA_2A-2A-66A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B66 | 20 | 66786 | 2145 | 25.17 | 24.97 |
| CA_2A-66A-66A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 25.14 | 24.97 |
| CA_2A-66C-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 66984 | 2164.8 | 25.21 | 24.97 |

### 1.3.2 LTE Band 12 as PCC

**Table 2**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-12A (1) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | LTE B2 | 20 | 900 | 1960 | - | - | - | - | - | - | - | - | - | - | - | - | 24.73 | 24.69 |
| CA_4A-12A (1) | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B4 | 20 | 2175 | 2132.5 | - | - | - | - | - | - | - | - | - | - | - | - | 24.50 | 24.48 |
| CA_4A-12A (2) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | LTE B4 | 20 | 2175 | 2132.5 | - | - | - | - | - | - | - | - | - | - | - | - | 24.80 | 24.69 |
| CA_12A-25A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B25 | 20 | 8365 | 1962.5 | - | - | - | - | - | - | - | - | - | - | - | - | 24.48 | 24.48 |
| CA_12A-66A (1) | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | - | - | - | - | - | - | - | - | 24.53 | 24.48 |
| CA_12A-66A (2) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | - | - | - | - | - | - | - | - | 24.78 | 24.69 |
| CA_4A-4A-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B4 | 20 | 2175 | 2132.5 | LTE B4 | 10 | 2350 | 2150 | - | - | - | - | - | - | - | - | 24.52 | 24.48 |
| CA_2A-2A-4A-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B4 | 20 | 2175 | 2132.5 | - | - | - | - | 24.42 | 24.48 |
| CA_2A-2A-12A-30A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B30 | 10 | 9820 | 2355 | - | - | - | - | 24.52 | 24.48 |
| CA_2A-12A-66A-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | - | - | - | - | 24.48 | 24.48 |
| CA_2A-12A-66C | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 66984 | 2164.8 | - | - | - | - | 24.45 | 24.48 |
| CA_4A-7A-12B | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B12 | 10 | 5107 | 738.7 | LTE B4 | 20 | 2175 | 2132.5 | LTE B7 | 20 | 3100 | 2655 | - | - | - | - | 24.43 | 24.48 |
| CA_2A-2A-7A-12A-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B7 | 20 | 3100 | 2655 | LTE B66 | 20 | 66786 | 2145 | 24.72 | 24.48 |
| CA_2A-7A-12B-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | LTE B12 | 10 | 5107 | 738.7 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2655 | LTE B66 | 20 | 66786 | 2145 | 24.44 | 24.48 |

### 1.3.3 LTE Band 13 as PCC

**Table 3**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-13A-46A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.29 | 24.45 |
| CA_13A-46A-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B46 | 20 | 50665 | 5537.5 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | - | - | - | - | 24.36 | 24.45 |
| CA_2A-13A-46C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 24.26 | 24.45 |
| CA_2A-13A-66B | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 15 | 66786 | 2145 | LTE B66 | 5 | 66879 | 2154.3 | - | - | - | - | 24.53 | 24.45 |
| CA_2A-13A-66C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 66984 | 2164.8 | - | - | - | - | 24.47 | 24.45 |
| CA_13A-46C-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | 24.35 | 24.45 |
| CA_13A-46A-66B | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B66 | 5 | 66879 | 2154.3 | LTE B66 | 15 | 66786 | 2145 | - | - | - | - | 24.61 | 24.45 |
| CA_13A-48A-66C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B66 | 20 | 66734 | 2139.8 | LTE B66 | 20 | 66536 | 2120 | - | - | - | - | 24.50 | 24.45 |
| CA_2A-2A-4A-4A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B4 | 20 | 2175 | 2132.5 | LTE B4 | 10 | 2350 | 2150 | 24.44 | 24.45 |
| CA_2A-2A-13A-66A-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 24.51 | 24.45 |
| CA_2A-13A-46D | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B48 | 20 | 50863 | 5557.3 | 24.70 | 24.45 |
| CA_2A-13A-48A-48C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56640 | 3690 | LTE B48 | 20 | 56442 | 3670.2 | 24.45 | 24.45 |
| CA_2A-13A-48D | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | 24.33 | 24.45 |
| CA_2A-13A-48A-48A-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56640 | 3690 | LTE B66 | 20 | 66786 | 2145 | 24.62 | 24.45 |
| CA_2A-13A-48C-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B66 | 20 | 66536 | 2120 | 24.51 | 24.45 |
| CA_13A-46E | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B46 | 20 | 51061 | 5577.1 | 24.62 | 24.45 |
| CA_13A-46D-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B66 | 20 | 66786 | 2145 | 24.58 | 24.45 |
| CA_13A-48A-48D | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | LTE B48 | 20 | 55736 | 3599.6 | 24.52 | 24.45 |
| CA_13A-48C-48C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.66 | 24.45 |
| CA_13A-48E | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | LTE B48 | 20 | 56584 | 3684.4 | 24.64 | 24.45 |
| CA_13A-48A-48C-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | LTE B66 | 20 | 66786 | 2145 | 24.60 | 24.45 |
| CA_13A-48D-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | LTE B66 | 20 | 66786 | 2145 | 24.55 | 24.45 |
| CA_13A-48C-66B | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B66 | 15 | 66786 | 2145 | LTE B66 | 5 | 66879 | 2154.3 | 24.66 | 24.45 |
| CA_13A-48C-66C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 66984 | 2164.8 | 24.62 | 24.45 |


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## 1.3.4 LTE Band 14 as PCC

**Table 4**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-2A-14A-30A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | 24.57 | 24.62 |
| CA_2A-2A-14A-66A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 24.63 | 24.62 |
| CA_2A-14A-30A-66A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | LTE B2 | 20 | 900 | 1960 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 24.67 | 24.62 |

## 1.3.5 LTE Band 5 as PCC

**Table 5**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_5A-5A (1) | LTE B5 | 3 | 20525 | 836.5 | QPSK | 1 | 14 | 2525 | 881.5 | LTE B5 | 5 | 2625 | 891.5 | - | - | - | - | - | - | - | - | - | - | - | - | 25.05 | 25.01 |
| CA_5B (1) | LTE B5 | 3 | 20525 | 836.5 | QPSK | 1 | 14 | 2525 | 881.5 | LTE B5 | 5 | 2486 | 877.6 | - | - | - | - | - | - | - | - | - | - | - | - | 24.97 | 25.01 |
| CA_5A-7A | LTE B5 | 3 | 20525 | 836.5 | QPSK | 1 | 14 | 2525 | 881.5 | LTE B7 | 20 | 3100 | 2655 | - | - | - | - | - | - | - | - | - | - | - | - | 24.98 | 25.01 |
| CA_5A-25A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B25 | 20 | 8365 | 1962.5 | - | - | - | - | - | - | - | - | - | - | - | - | 24.95 | 24.85 |
| CA_5A-38A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B38 | 20 | 38000 | 2595 | - | - | - | - | - | - | - | - | - | - | - | - | 24.90 | 24.85 |
| CA_5A-46A (1) | LTE B5 | 3 | 20525 | 836.5 | QPSK | 1 | 14 | 2525 | 881.5 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | - | - | - | - | 25.06 | 25.01 |
| CA_2A-5A-46A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 25.01 | 24.85 |
| CA_5B-46A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.99 | 24.85 |
| CA_5A-46A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | - | - | - | - | 24.98 | 24.85 |
| CA_5A-46C (1) | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | - | - | - | - | 24.94 | 24.85 |
| CA_2A-4A-5A-30A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | LTE B30 | 10 | 9820 | 2355 | - | - | - | - | 24.84 | 24.85 |
| CA_2A-5A-46C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 24.89 | 24.85 |
| CA_5A-5A-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 5 | 2425 | 871.5 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | - | - | - | - | 24.97 | 24.85 |
| CA_5A-5A-66B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 5 | 2425 | 871.5 | LTE B66 | 15 | 66786 | 2145 | LTE B66 | 5 | 66879 | 2154.3 | - | - | - | - | 24.87 | 24.85 |
| CA_5A-5A-66C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 5 | 2425 | 871.5 | LTE B66 | 20 | 66984 | 2164.8 | LTE B66 | 20 | 66984 | 2164.8 | - | - | - | - | 24.92 | 24.85 |
| CA_5B-46C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 24.91 | 24.85 |
| CA_5A-46C-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | 24.95 | 24.85 |
| CA_5A-46D (1) | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | - | - | - | - | 24.99 | 24.85 |
| CA_2A-2A-4A-4A-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B4 | 20 | 2175 | 2132.5 | LTE B4 | 10 | 2350 | 2150 | 24.77 | 24.85 |
| CA_2A-2A-4A-5B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B4 | 20 | 2175 | 2132.5 | 24.47 | 24.85 |
| CA_2A-2A-5A-30A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | 24.53 | 24.85 |
| CA_2A-2A-5A-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 24.65 | 24.85 |
| CA_2A-2A-5A-66B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B66 | 15 | 66786 | 2145 | LTE B66 | 5 | 66879 | 2154.3 | 24.71 | 24.85 |
| CA_2A-2A-5A-66C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 66984 | 2164.8 | 24.34 | 24.85 |
| CA_2A-4A-4A-5B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | LTE B4 | 10 | 2350 | 2150 | 24.61 | 24.85 |
| CA_2A-5A-46D | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 24.73 | 24.85 |
| CA_2A-5B-30A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B2 | 20 | 900 | 1960 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | 24.69 | 24.85 |
| CA_2A-5B-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 24.68 | 24.85 |
| CA_2A-5B-66B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 15 | 66786 | 2145 | LTE B66 | 5 | 66879 | 2154.3 | 24.74 | 24.85 |
| CA_2A-5B-66C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 66984 | 2164.8 | 24.60 | 24.85 |
| CA_2A-5A-30A-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 24.61 | 24.85 |
| CA_2A-5A-48A-48C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.77 | 24.85 |
| CA_2A-5A-48D | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | 24.72 | 24.85 |
| CA_2A-5A-48A-48A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B66 | 20 | 66786 | 2145 | 24.66 | 24.85 |
| CA_2A-5A-48C-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B66 | 20 | 66786 | 2145 | 24.64 | 24.85 |
| CA_5B-30A-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B30 | 10 | 9820 | 2355 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 24.78 | 24.85 |
| CA_5B-46D | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B5 | 10 | 2553 | 884.3 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 24.93 | 24.85 |
| CA_5A-46E | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B46 | 20 | 51061 | 5577.1 | 24.94 | 24.85 |
| CA_5A-46D-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B66 | 20 | 66786 | 2145 | 24.58 | 24.85 |
| CA_5A-48A-48D | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56640 | 3690 | LTE B48 | 20 | 56442 | 3670.2 | LTE B66 | 20 | 56244 | 3650.4 | 24.86 | 24.85 |
| CA_5A-48C-48C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.84 | 24.85 |
| CA_5A-48E | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | LTE B48 | 20 | 56584 | 3684.4 | 24.83 | 24.85 |
| CA_5A-48A-48C-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | LTE B66 | 20 | 66786 | 2145 | 25.00 | 24.85 |
| CA_5A-48D-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | LTE B66 | 20 | 66786 | 2145 | 24.98 | 24.85 |

## 1.3.6 LTE Band 26 as PCC

**Table 6**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_25A-26A | LTE B26 | 10 | 26990 | 844 | QPSK | 1 | 25 | 8990 | 889 | LTE B25 | 20 | 8365 | 1962.5 | - | - | - | - | 25.13 | 25.04 |
| CA_26A-41A | LTE B26 | 10 | 26990 | 844 | QPSK | 1 | 25 | 8990 | 889 | LTE B41 | 20 | 40620 | 2593 | - | - | - | - | 25.08 | 25.04 |
| CA_25A-25A-26A | LTE B26 | 5 | 26865 | 831.5 | QPSK | 1 | 0 | 8865 | 876.5 | LTE B25 | 20 | 8365 | 1962.5 | LTE B25 | 20 | 8590 | 1985 | 24.90 | 24.85 |
| CA_26A-41C | LTE B26 | 10 | 26990 | 844 | QPSK | 1 | 25 | 8990 | 889 | LTE B41 | 20 | 40620 | 2593 | LTE B41 | 20 | 40422 | 2573.2 | 25.07 | 25.04 |


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## 1.3.7 LTE Band 66 as PCC

**Table 7**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | - | - | - | - | - | - | - | - | - | - | - | - | 24.58 | 24.54 |
| CA_12A-66A (1) | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | - | - | - | - | - | - | - | - | 24.65 | 24.54 |
| CA_12A-66A (2) | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | - | - | - | - | - | - | - | - | 24.72 | 24.54 |
| CA_5A-46A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B5 | 10 | 2525 | 881.5 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.66 | 24.54 |
| CA_7A-46A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B7 | 20 | 3100 | 2655 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.78 | 24.54 |
| CA_13A-46A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B13 | 10 | 5230 | 751 | - | - | - | - | - | - | - | - | 24.76 | 24.54 |
| CA_46A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.77 | 24.54 |
| CA_46A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.76 | 24.54 |
| CA_66A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67038 | 2170.2 | LTE B66 | 20 | 67236 | 2190 | - | - | - | - | - | - | - | - | 24.75 | 24.54 |
| CA_66C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B66 | 20 | 67236 | 2190 | - | - | - | - | - | - | - | - | 24.75 | 24.54 |
| CA_2C-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 702 | 1940.2 | - | - | - | - | 24.68 | 24.54 |
| CA_2A-2A-66A-71A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B71 | 20 | 68761 | 634.5 | - | - | - | - | 24.78 | 24.54 |
| CA_2A-7A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2655 | - | - | - | - | 24.78 | 24.54 |
| CA_2A-7A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2655 | - | - | - | - | 24.77 | 24.54 |
| CA_2A-12A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | 24.77 | 24.54 |
| CA_2A-12A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B2 | 20 | 900 | 1960 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | 24.76 | 24.54 |
| CA_2A-13A-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B2 | 20 | 900 | 1960 | LTE B13 | 10 | 5230 | 751 | - | - | - | - | 24.49 | 24.36 |
| CA_2A-13A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B2 | 20 | 900 | 1960 | LTE B13 | 10 | 5230 | 751 | - | - | - | - | 24.68 | 24.54 |
| CA_2A-29A-30A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B29 | 10 | 9715 | 722.5 | LTE B30 | 10 | 9820 | 2355 | - | - | - | - | 24.70 | 24.54 |
| CA_2A-46A-46A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 47090 | 5180 | - | - | - | - | 24.75 | 24.54 |
| CA_2A-46A-48A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B48 | 20 | 55990 | 3625 | - | - | - | - | 24.69 | 24.54 |
| CA_2A-66A-66A-71A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B71 | 20 | 68761 | 634.5 | - | - | - | - | 24.76 | 24.54 |
| CA_2A-66C-71A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B2 | 20 | 900 | 1960 | LTE B71 | 20 | 68761 | 634.5 | - | - | - | - | 24.76 | 24.54 |
| CA_5A-5A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2425 | 871.5 | - | - | - | - | 24.74 | 24.54 |
| CA_5A-5A-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2425 | 871.5 | - | - | - | - | 24.55 | 24.36 |
| CA_5A-5A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2425 | 871.5 | - | - | - | - | 24.76 | 24.54 |
| CA_5A-46C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B5 | 10 | 2525 | 881.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 24.69 | 24.54 |
| CA_7A-46C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B7 | 20 | 3100 | 2655 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 24.76 | 24.54 |
| CA_13A-46C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B13 | 10 | 5230 | 751 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 24.75 | 24.54 |
| CA_13A-48A-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | - | - | - | - | 24.55 | 24.36 |
| CA_13A-48A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | - | - | - | - | 24.72 | 24.54 |
| CA_29A-30A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B29 | 10 | 9715 | 722.5 | LTE B30 | 10 | 9820 | 2355 | - | - | - | - | 24.68 | 24.54 |
| CA_46C-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 24.66 | 24.54 |
| CA_48A-48A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | - | - | - | - | 24.59 | 24.54 |
| CA_48A-48A-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | - | - | - | - | 24.48 | 24.36 |
| CA_48A-48A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | - | - | - | - | 24.65 | 24.54 |
| CA_48C-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | - | - | - | - | 24.59 | 24.54 |
| CA_2A-2A-5A-30A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B5 | 10 | 2525 | 881.5 | LTE B30 | 10 | 9820 | 2355 | 24.63 | 24.54 |
| CA_2A-2A-5A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B5 | 10 | 2525 | 881.5 | 24.64 | 24.54 |
| CA_2A-2A-5A-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B5 | 10 | 2525 | 881.5 | 24.53 | 24.36 |
| CA_2A-2A-5A-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B5 | 10 | 2525 | 881.5 | 24.78 | 24.54 |
| CA_2A-2A-7A-12A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B7 | 20 | 3100 | 2655 | LTE B12 | 10 | 5095 | 737.5 | 24.79 | 24.54 |
| CA_2A-2A-12A-30A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B12 | 10 | 5095 | 737.5 | LTE B30 | 10 | 9820 | 2355 | 24.72 | 24.54 |
| CA_2A-2A-12A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B12 | 10 | 5095 | 737.5 | 24.72 | 24.54 |
| CA_2A-2A-13A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B13 | 10 | 5230 | 751 | 24.69 | 24.54 |
| CA_2A-2A-14A-30A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B14 | 10 | 5330 | 763 | LTE B30 | 10 | 9820 | 2355 | 24.60 | 24.54 |
| CA_2A-2A-14A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B14 | 10 | 5330 | 763 | 24.55 | 24.54 |
| CA_2A-5B-30A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2453 | 874.3 | LTE B30 | 10 | 9820 | 2355 | 24.64 | 24.54 |
| CA_2A-5B-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2453 | 874.3 | 24.70 | 24.54 |
| CA_2A-5B-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2453 | 874.3 | 24.57 | 24.36 |
| CA_2A-5B-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2453 | 874.3 | 24.73 | 24.54 |
| CA_2A-5A-30A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B30 | 10 | 9820 | 2355 | 24.61 | 24.54 |
| CA_2A-5A-48A-48A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | 24.69 | 24.54 |
| CA_2A-5A-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.76 | 24.54 |
| CA_2A-7A-12B-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B7 | 20 | 3100 | 2655 | LTE B12 | 5 | 5095 | 737.5 | LTE B12 | 5 | 5047 | 732.7 | 24.74 | 24.54 |
| CA_2A-12A-30A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B12 | 10 | 5095 | 737.5 | LTE B30 | 10 | 9820 | 2355 | 24.56 | 24.54 |
| CA_2A-13A-48A-48A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | 24.65 | 24.54 |
| CA_2A-13A-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.69 | 24.54 |
| CA_2A-14A-30A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B2 | 20 | 900 | 1960 | LTE B14 | 10 | 5330 | 763 | LTE B30 | 10 | 9820 | 2355 | 24.53 | 24.54 |
| CA_2A-46A-46C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 53540 | 5825 | 24.47 | 24.54 |
| CA_2A-46D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 24.56 | 24.54 |
| CA_2A-46C-48A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B48 | 20 | 55990 | 3625 | 24.52 | 24.54 |
| CA_2A-46A-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.51 | 24.54 |
| CA_2A-48A-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.53 | 24.54 |
| CA_2A-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | 24.67 | 24.54 |
| CA_5B-30A-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2453 | 874.3 | LTE B30 | 10 | 9820 | 2355 | 24.63 | 24.54 |
| CA_5A-46D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B5 | 10 | 2525 | 881.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 24.58 | 24.54 |
| CA_5A-48A-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B5 | 10 | 2525 | 881.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.63 | 24.54 |
| CA_5A-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B5 | 10 | 2525 | 881.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | 24.65 | 24.54 |
| CA_7A-46D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B7 | 20 | 3100 | 2655 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 24.62 | 24.54 |
| CA_13A-46D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B13 | 10 | 5230 | 751 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 24.71 | 24.54 |
| CA_13A-48A-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.73 | 24.54 |
| CA_13A-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | 24.53 | 24.54 |
| CA_13A-48C-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.37 | 24.36 |
| CA_13A-48C-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B13 | 10 | 5230 | 751 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.54 | 24.54 |
| CA_46D-66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 24.58 | 24.54 |
| CA_46A-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | 24.57 | 24.54 |
| CA_46C-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.58 | 24.54 |
| CA_46A-46D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 53540 | 5825 | LTE B46 | 20 | 53342 | 5805.2 | LTE B46 | 20 | 53144 | 5785.4 | 24.38 | 24.54 |
| CA_46C-46C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 53540 | 5825 | LTE B46 | 20 | 53342 | 5805.2 | 24.41 | 24.54 |
| CA_46E-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B46 | 20 | 51061 | 5577.1 | 24.55 | 24.54 |
| CA_46D-48A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B48 | 20 | 55990 | 3625 | 24.62 | 24.54 |
| CA_48A-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56640 | 3690 | LTE B48 | 20 | 56442 | 3670.2 | LTE B48 | 20 | 56244 | 3650.4 | 24.44 | 24.54 |
| CA_48C-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.37 | 24.54 |
| CA_48E-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | LTE B48 | 20 | 56584 | 3684.4 | 24.55 | 24.54 |
| CA_48A-48C-66B | LTE B66 | 5 | 132322 | 1745 | QPSK | 1 | 12 | 66786 | 2145 | LTE B66 | 15 | 66693 | 2135.7 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.24 | 24.36 |
| CA_48A-48C-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 24.48 | 24.54 |

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | SCC 5 | | | | SCC 6 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Channel | PCC (UL) Freq. [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-46E-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B46 | 20 | 50269 | 5497.9 | - | - | - | - | 24.53 | 24.54 |
| CA_2A-46D-48A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B48 | 20 | 55990 | 3625 | - | - | - | - | 24.55 | 24.54 |
| CA_2A-46C-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | - | - | - | - | 24.58 | 24.54 |
| CA_2A-46A-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | - | - | - | - | 24.57 | 24.54 |
| CA_46E-48A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B46 | 20 | 50269 | 5497.9 | LTE B48 | 20 | 55990 | 3625 | - | - | - | - | 24.54 | 24.54 |
| CA_46A-48E-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | LTE B48 | 20 | 55792 | 3605.2 | - | - | - | - | 24.62 | 24.54 |
| CA_2A-46D-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50269 | 5497.9 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.62 | 24.54 |
| CA_2A-46C-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | 24.64 | 24.54 |
| CA_46E-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50269 | 5497.9 | LTE B46 | 20 | 50863 | 5557.3 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | 24.50 | 24.54 |
| CA_46C-48E-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B48 | 20 | 55990 | 3625 | LTE B48 | 20 | 56188 | 3644.8 | LTE B48 | 20 | 56386 | 3664.6 | LTE B48 | 20 | 55792 | 3605.2 | 24.44 | 24.54 |

## 1.3.8 LTE Band 25 as PCC

**Table 8**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_5A-25A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | LTE B5 | 10 | 2525 | 881.5 | - | - | - | - | - | - | - | - | 24.33 | 24.34 |
| CA_12A-25A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | - | - | - | - | 24.32 | 24.34 |
| CA_25A-26A | LTE B25 | 3 | 26365 | 1882.5 | QPSK | 1 | 14 | 8365 | 1962.5 | LTE B26 | 15 | 8865 | 876.5 | - | - | - | - | - | - | - | - | 24.52 | 24.46 |
| CA_25A-41A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | LTE B41 | 20 | 40620 | 2593 | - | - | - | - | - | - | - | - | 24.58 | 24.34 |
| CA_25A-46A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.34 | 24.34 |
| CA_25A-25A-26A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | LTE B25 | 20 | 8590 | 1985 | LTE B26 | 5 | 8865 | 876.5 | - | - | - | - | 24.28 | 24.34 |
| CA_25A-41C | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | LTE B41 | 20 | 40620 | 2593 | LTE B41 | 20 | 40422 | 2573.2 | - | - | - | - | 24.56 | 24.34 |
| CA_25A-41D | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | LTE B41 | 20 | 40422 | 2573.2 | LTE B41 | 20 | 40620 | 2593 | LTE B41 | 20 | 40818 | 2612.8 | 24.58 | 24.34 |



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## 1.3.9 LTE Band 30 as PCC

**Table 9**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-2A-12A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | 22.81 | 22.62 |
| CA_2A-2A-29A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B29 | 10 | 9715 | 722.5 | - | - | - | - | 22.87 | 22.62 |
| CA_2A-4A-5A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | LTE B5 | 10 | 2525 | 881.5 | - | - | - | - | 22.87 | 22.62 |
| CA_2A-4A-12A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | 22.86 | 22.62 |
| CA_2A-4A-29A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | LTE B29 | 10 | 9715 | 722.5 | - | - | - | - | 22.85 | 22.62 |
| CA_2A-29A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B29 | 10 | 9715 | 722.5 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | 22.87 | 22.62 |
| CA_29A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B29 | 10 | 9715 | 722.5 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | - | - | - | - | 22.87 | 22.62 |
| CA_2A-2A-5A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B5 | 10 | 2525 | 881.5 | LTE B66 | 20 | 66786 | 2145 | 22.78 | 22.62 |
| CA_2A-2A-12A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B12 | 10 | 5095 | 737.5 | LTE B66 | 20 | 66786 | 2145 | 22.77 | 22.62 |
| CA_2A-2A-14A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B14 | 10 | 5330 | 763 | LTE B66 | 20 | 66786 | 2145 | 22.81 | 22.62 |
| CA_2A-5B-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2453 | 874.3 | LTE B66 | 20 | 66786 | 2145 | 22.66 | 22.62 |
| CA_2A-5A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B5 | 10 | 2525 | 881.5 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 22.60 | 22.62 |
| CA_2A-12A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B12 | 10 | 5095 | 737.5 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 22.63 | 22.62 |
| CA_2A-14A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B2 | 20 | 900 | 1960 | LTE B14 | 10 | 5330 | 763 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 22.61 | 22.62 |
| CA_5B-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | LTE B5 | 10 | 2525 | 881.5 | LTE B5 | 5 | 2453 | 874.3 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 22.82 | 22.62 |

## 1.3.10 LTE Band 7 Ant A as PCC

**Table 10**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE AntA Tx Power (dBm) |
| CA_5A-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B5 | 10 | 2525 | 881.5 | - | - | - | - | - | - | - | - | - | - | - | - | 23.74 | 23.76 |
| CA_2A-7A^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 23.79 | 23.76 |
| CA_4A-4A-7A^ (1) | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B4 | 20 | 2175 | 2132.5 | LTE B4 | 10 | 2350 | 2150 | - | - | - | - | - | - | - | - | 23.70 | 23.76 |
| CA_7A^-46A-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B46 | 20 | 50665 | 5537.5 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | - | - | - | - | 23.83 | 23.76 |
| CA_2A-4A-7A^-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B7 | 20 | 2850 | 2630 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | - | - | - | - | 23.79 | 23.76 |
| CA_2A-4A-7C^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B7 | 20 | 3152 | 2660.2 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | - | - | - | - | 23.94 | 23.76 |
| CA_2A-4A-7A^-12A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B2 | 20 | 900 | 1960 | LTE B4 | 20 | 2175 | 2132.5 | LTE B12 | 10 | 5095 | 737.5 | - | - | - | - | 23.62 | 23.76 |
| CA_2A-7A^-7A^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B7 | 20 | 3152 | 2660.2 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | 23.98 | 23.76 |
| CA_2A-7A^-66A-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | - | - | - | - | 23.73 | 23.76 |
| CA_2A-7A^-46C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B2 | 20 | 900 | 1960 | LTE B66 | 20 | 66786 | 2145 | LTE B66 | 20 | 66984 | 2164.8 | - | - | - | - | 24.00 | 23.76 |
| CA_4A-7A^-12B | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B4 | 20 | 2625 | 2132.5 | LTE B12 | 5 | 5095 | 737.5 | LTE B12 | 5 | 5047 | 732.7 | - | - | - | - | 23.59 | 23.76 |
| CA_7A^-46C-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B66 | 20 | 66786 | 2145 | - | - | - | - | 23.71 | 23.76 |
| CA_2A-2A-7A^-12A-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B2 | 20 | 900 | 1960 | LTE B2 | 20 | 700 | 1940 | LTE B12 | 10 | 5095 | 737.5 | LTE B66 | 20 | 66786 | 2145 | 23.71 | 23.76 |
| CA_2A-7A^-7A^-46C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B7 | 20 | 2850 | 2630 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | 23.70 | 23.76 |
| CA_2A-7A^-12B-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B2 | 20 | 900 | 1960 | LTE B12 | 5 | 5095 | 737.5 | LTE B12 | 5 | 5047 | 732.7 | LTE B66 | 20 | 66786 | 2145 | 23.91 | 23.76 |
| CA_2A-7A^-46D | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B2 | 20 | 900 | 1960 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 23.90 | 23.76 |
| CA_7A^-46D-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B66 | 20 | 66786 | 2145 | 23.72 | 23.76 |

Note: ^ - Indicates that Band 7 operations are using antenna A

## 1.3.11 LTE Band 7 Ant B as PCC

**Table 11**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_7C (1) | LTE B7 | 10 | 20800 | 2505 | QPSK | 1 | 49 | 2800 | 2625 | LTE B7 | 20 | 2944 | 2639.4 | - | - | - | - | - | - | - | - | - | - | - | - | 23.90 | 23.79 |
| CA_7A-46A (1) | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | - | - | - | - | 23.80 | 23.89 |
| CA_7A-7A-46A | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | LTE B7 | 20 | 3350 | 2680 | LTE B46 | 20 | 50665 | 5537.5 | - | - | - | - | - | - | - | - | 24.03 | 23.89 |
| CA_7A-46C (1) | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | - | - | - | - | 23.84 | 23.89 |
| CA_7A-7A-46C | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | LTE B7 | 20 | 3350 | 2680 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | - | - | - | - | 23.75 | 23.89 |
| CA_7A-46D (1) | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | - | - | - | - | 23.75 | 23.89 |
| CA_7A-7A-46D | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | LTE B7 | 20 | 3350 | 2680 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | 23.97 | 23.89 |
| CA_7A-46E | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | LTE B46 | 20 | 50665 | 5537.5 | LTE B46 | 20 | 50467 | 5517.7 | LTE B46 | 20 | 50863 | 5557.3 | LTE B46 | 20 | 51061 | 5577.1 | 23.88 | 23.89 |

## 1.3.12 LTE Band 41 as PCC

**Table 12**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | SCC 2 | | | | SCC 3 | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41A-41A (1) | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 41490 | 2680 | - | - | - | - | - | - | - | - | - | - | - | - | 24.04 | 24.11 |
| CA_41A-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 41292 | 2660.2 | LTE B41 | 20 | 41490 | 2680 | - | - | - | - | - | - | - | - | 24.23 | 24.11 |
| CA_41C-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 41490 | 2680 | - | - | - | - | - | - | - | - | 24.16 | 24.11 |
| CA_41A-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 41094 | 2640.4 | LTE B41 | 20 | 41292 | 2660.2 | LTE B41 | 20 | 41490 | 2680 | - | - | - | - | 24.06 | 24.11 |
| CA_41D-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 40554 | 2586.4 | LTE B41 | 20 | 41490 | 2680 | - | - | - | - | 24.32 | 24.11 |
| CA_41C-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 41292 | 2660.2 | LTE B41 | 20 | 41490 | 2680 | - | - | - | - | 24.30 | 24.11 |
| CA_41E | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 40554 | 2586.4 | LTE B41 | 20 | 40752 | 2606.2 | - | - | - | - | 24.25 | 24.11 |
| CA_41C-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 41094 | 2640.4 | LTE B41 | 20 | 41292 | 2660.2 | LTE B41 | 20 | 41490 | 2680 | 24.30 | 24.11 |
| CA_41D-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 40554 | 2586.4 | LTE B41 | 20 | 41292 | 2660.2 | LTE B41 | 20 | 41490 | 2680 | 24.08 | 24.11 |
| CA_41F | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | LTE B41 | 20 | 40356 | 2566.6 | LTE B41 | 20 | 40554 | 2586.4 | LTE B41 | 20 | 40752 | 2606.2 | LTE B41 | 20 | 40950 | 2626 | 24.12 | 24.11 |


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### 1.3.13 LTE Band 41 PC2 as PCC

**Table 13**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41A-41A (1) | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 41490 | 2680 | - | - | - | - | - | - | - | - | - | - | - | - | 26.93 | 27.13 |
| CA_41A-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 41292 | 2660.2 | LTE B41 PC2 | 20 | 41490 | 2680 | - | - | - | - | - | - | - | - | 26.87 | 27.13 |
| CA_41C-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 39921 | 2523.1 | LTE B41 PC2 | 20 | 41490 | 2680 | - | - | - | - | - | - | - | - | 27.07 | 27.13 |
| CA_41A-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 41094 | 2640.4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | LTE B41 PC2 | 20 | 41490 | 2680 | - | - | - | - | 26.90 | 27.13 |
| CA_41D-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 39921 | 2523.1 | LTE B41 PC2 | 20 | 40119 | 2542.9 | LTE B41 PC2 | 20 | 41490 | 2680 | - | - | - | - | 27.09 | 27.13 |
| CA_41C-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 39921 | 2523.1 | LTE B41 PC2 | 20 | 41292 | 2660.2 | LTE B41 PC2 | 20 | 41490 | 2680 | - | - | - | - | 27.18 | 27.13 |
| CA_41E | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 39921 | 2523.1 | LTE B41 PC2 | 20 | 40119 | 2542.9 | LTE B41 PC2 | 20 | 40317 | 2562.7 | | | | | 26.84 | 27.13 |
| CA_41C-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 39921 | 2523.1 | LTE B41 PC2 | 20 | 41094 | 2640.4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | LTE B41 PC2 | 20 | 41490 | 2680 | 27.00 | 27.13 |
| CA_41D-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 39921 | 2523.1 | LTE B41 PC2 | 20 | 40119 | 2542.9 | LTE B41 PC2 | 20 | 41292 | 2660.2 | LTE B41 PC2 | 20 | 41490 | 2680 | 27.01 | 27.13 |
| CA_41F | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | LTE B41 PC2 | 20 | 39921 | 2523.1 | LTE B41 PC2 | 20 | 40119 | 2542.9 | LTE B41 PC2 | 20 | 40317 | 2562.7 | LTE B41 PC2 | 20 | 40515 | 2582.5 | 27.07 | 27.13 |

### 1.3.14 LTE Band 48 as PCC

**Table 14**
**Maximum Output Powers**

| | PCC | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | SCC Band | SCC BW [MHz] | SCC (DL) Channel | SCC (DL) Freq. [MHz] | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_48A-48A | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 56640 | 3690 | - | - | - | - | - | - | - | - | - | - | - | - | 23.95 | 23.75 |
| CA_48A-48C | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | - | - | - | - | - | - | - | - | 23.96 | 23.75 |
| CA_48C-48A | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 56494 | 3675.4 | LTE B48 | 20 | 55340 | 3560 | - | - | - | - | - | - | - | - | 23.95 | 23.75 |
| CA_48A-48D | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | LTE B48 | 20 | 55736 | 3599.6 | - | - | - | - | 23.99 | 23.75 |
| CA_48D-48A | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 56494 | 3675.4 | LTE B48 | 20 | 56296 | 3655.6 | LTE B48 | 20 | 55340 | 3560 | - | - | - | - | 23.97 | 23.75 |
| CA_48C-48C | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 56494 | 3675.4 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | - | - | - | - | 23.95 | 23.75 |
| CA_48A-48E | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | LTE B48 | 20 | 55736 | 3599.6 | LTE B48 | 20 | 55934 | 3619.4 | 23.89 | 23.75 |
| CA_48E-48A | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 56494 | 3675.4 | LTE B48 | 20 | 56296 | 3655.6 | LTE B48 | 20 | 56098 | 3635.8 | LTE B48 | 20 | 55340 | 3560 | 23.85 | 23.75 |
| CA_48C-48D | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 56494 | 3675.4 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | LTE B48 | 20 | 55736 | 3599.6 | 23.92 | 23.75 |
| CA_48D-48C | LTE B48 | 15 | 56665 | 3692.5 | QPSK | 1 | 74 | 56665 | 3692.5 | LTE B48 | 20 | 56494 | 3675.4 | LTE B48 | 20 | 56296 | 3655.6 | LTE B48 | 20 | 55340 | 3560 | LTE B48 | 20 | 55538 | 3579.8 | 23.85 | 23.75 |

## 1.4 DL CA with DL 4x4 MIMO RF Conduction Powers

This device supports downlink 4x4 MIMO operations for some LTE bands. Uplink transmission is limited to a single output stream. When carrier aggregation was applicable, the general test selection and setup procedures described in Section 1.2 were applied.

Per May 2017 TCB Workshop Notes, SAR for 4x4 DL MIMO was not needed since the maximum average output power in 4x4 DL MIMO mode was not more than 0.25 dB higher than the maximum output power with 4x4 DL MIMO inactive. Additionally, SAR for 4x4 MIMO Downlink Carrier Aggregation was not needed since the maximum average output power in 4x4 MIMO Downlink Carrier Aggregation mode was not more than 0.25 dB higher than the maximum output power with 4x4 MIMO Downlink and downlink carrier aggregation inactive.

### 1.4.1 LTE 4x4 MIMO DL Standalone Powers

**Table 15**
**Maximum Output Powers**

| LTE Band | Bandwidth [MHz] | Channel | Frequency [MHz] | Modulation | RB Size | RB Offset | 4x4 DL MIMO Tx. Power [dBm] | Single Antenna Tx. Power [dBm] |
|---|---|---|---|---|---|---|---|---|
| 66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 24.37 | 24.54 |
| 25 | 3 | 26365 | 1882.5 | QPSK | 1 | 14 | 24.33 | 24.46 |
| 7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 23.77 | 23.89 |
| 30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 22.61 | 22.62 |
| 41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 24.18 | 24.11 |
| 41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 26.97 | 27.13 |


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## 1.4.2 LTE Band 71 as PCC

**Table 16**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_[4A]-4A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 2x2 | - | - | - | - | - | 25.02 | 24.97 |
| CA_[4A]-[4A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 4x4 | - | - | - | - | - | 24.99 | 24.97 |
| CA_2A-2A-[4A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.95 | 24.97 |
| CA_[2A]-2A-4A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | 24.97 | 24.97 |
| CA_[2A]-2A-[4A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.92 | 24.97 |
| CA_[2A]-[2A]-4A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | 24.89 | 24.97 |
| CA_[2A]-[2A]-[4A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.90 | 24.97 |
| CA_2A-2A-[66A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.99 | 24.97 |
| CA_[2A]-2A-66A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 25.02 | 24.97 |
| CA_[2A]-2A-[66A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.98 | 24.97 |
| CA_[2A]-[2A]-66A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.96 | 24.97 |
| CA_[2A]-[2A]-[66A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 25.00 | 24.97 |
| CA_2A-[66A]-66A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 25.05 | 24.97 |
| CA_[2A]-66A-66A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.92 | 24.97 |
| CA_2A-[66A]-[66A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 25.00 | 24.97 |
| CA_[2A]-[66A]-66A-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.99 | 24.97 |
| CA_[2A]-[66A]-[66A]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 25.03 | 24.97 |
| CA_2A-[66C]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.96 | 24.97 |
| CA_[2A]-66C-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | 24.93 | 24.97 |
| CA_[2A]-[66C]-71A | LTE B71 | 20 | 133297 | 680.5 | QPSK | 1 | 0 | 68761 | 634.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.97 | 24.97 |

## 1.4.3 LTE Band 12 as PCC

**Table 17**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_[2A]-12A (1) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.69 | 24.69 |
| CA_[4A]-12A (1) | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.49 | 24.48 |
| CA_[4A]-12A (2) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.72 | 24.69 |
| CA_12A-[66A] (1) | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.42 | 24.48 |
| CA_12A-[66A] (2) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.61 | 24.69 |
| CA_2A-[7A]-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B7 | 20 | 3100 | 2655 | 4x4 | - | - | - | - | - | 24.50 | 24.48 |
| CA_[2A]-7A-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B7 | 20 | 3100 | 2655 | 2x2 | - | - | - | - | - | 24.52 | 24.48 |
| CA_[2A]-[7A]-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B7 | 20 | 3100 | 2655 | 4x4 | - | - | - | - | - | 24.61 | 24.48 |
| CA_[4A]-4A-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 2x2 | - | - | - | - | - | 24.49 | 24.48 |
| CA_[4A]-[4A]-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 4x4 | - | - | - | - | - | 24.49 | 24.48 |
| CA_[7A]-12B | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B12 | 10 | 5107 | 738.7 | 2x2 | LTE B7 | 20 | 3100 | 2655 | 4x4 | - | - | - | - | - | 24.45 | 24.48 |
| CA_12B-[66A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B12 | 10 | 5107 | 738.7 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.49 | 24.48 |
| CA_2A-2A-[4A]-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.68 | 24.48 |
| CA_[2A]-2A-4A-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | 24.54 | 24.48 |
| CA_[2A]-2A-[4A]-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.67 | 24.48 |
| CA_[2A]-[2A]-4A-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | 24.68 | 24.48 |
| CA_[2A]-[2A]-[4A]-12A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.71 | 24.48 |
| CA_2A-2A-12A-[30A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | 24.50 | 24.48 |
| CA_[2A]-2A-12A-30A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | 24.49 | 24.48 |
| CA_[2A]-2A-12A-[30A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | 24.61 | 24.48 |
| CA_[2A]-[2A]-12A-30A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 2x2 | 24.58 | 24.48 |
| CA_[2A]-[2A]-12A-[30A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 4x4 | 24.65 | 24.48 |
| CA_2A-2A-12A-[66A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.48 | 24.48 |
| CA_[2A]-2A-12A-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.50 | 24.48 |
| CA_[2A]-2A-12A-[66A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.67 | 24.48 |
| CA_[2A]-[2A]-12A-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.66 | 24.48 |
| CA_[2A]-[2A]-12A-[66A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.58 | 24.48 |
| CA_2A-12A-[66A]-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.53 | 24.48 |
| CA_[2A]-12A-66A-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.64 | 24.48 |
| CA_2A-12A-[66A]-[66A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.59 | 24.48 |
| CA_[2A]-12A-[66A]-66A | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.58 | 24.48 |
| CA_[2A]-12A-[66A]-[66A] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.57 | 24.48 |
| CA_2A-12A-[66C] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.62 | 24.48 |
| CA_[2A]-12A-66C | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | 24.67 | 24.48 |
| CA_[2A]-12A-[66C] | LTE B12 | 5 | 23035 | 701.5 | QPSK | 1 | 0 | 5035 | 731.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.56 | 24.48 |


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## 1.4.4 LTE Band 13 as PCC

**Table 18**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_[2A]-13A-46A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.28 | 24.45 |
| CA_13A-46A-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.51 | 24.45 |
| CA_[2A]-[2A]-[4A]-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | 24.47 | 24.45 |
| CA_[2A]-[2A]-13A-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.27 | 24.45 |
| CA_[2A]-[4A]-[4A]-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 4x4 | - | - | - | - | - | 24.44 | 24.45 |
| CA_2A-13A-48A-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.34 | 24.45 |
| CA_[2A]-13A-48A-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.40 | 24.45 |
| CA_[2A]-13A-[66A]-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 24.43 | 24.45 |
| CA_2A-13A-[66B] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 15 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 4x4 | - | - | - | - | - | 24.31 | 24.45 |
| CA_[2A]-13A-[66B] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 15 | 66786 | 2145 | 2x2 | LTE B66 | 5 | 66879 | 2154.3 | 2x2 | - | - | - | - | - | 24.45 | 24.45 |
| CA_[2A]-13A-[66B] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 15 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 4x4 | - | - | - | - | - | 24.47 | 24.45 |
| CA_2A-13A-[66C] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | - | - | - | - | - | 24.23 | 24.45 |
| CA_[2A]-13A-66C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | - | - | - | - | - | 24.40 | 24.45 |
| CA_[2A]-13A-[66C] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | - | - | - | - | - | 24.27 | 24.45 |
| CA_13A-48A-48A-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.42 | 24.45 |
| CA_13A-48A-[66B] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B66 | 5 | 66879 | 2154.3 | 4x4 | LTE B66 | 15 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.25 | 24.45 |
| CA_13A-48A-[66C] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B66 | 20 | 66734 | 2139.8 | 4x4 | LTE B66 | 20 | 66536 | 2120 | 4x4 | - | - | - | - | - | 24.41 | 24.45 |
| CA_[2A]-13A-46C | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | - | - | - | - | - | 24.21 | 24.45 |
| CA_13A-46C-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.39 | 24.45 |
| CA_2A-2A-[4A]-4A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.47 | 24.45 |
| CA_[2A]-2A-4A-4A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.37 | 24.45 |
| CA_2A-2A-[4A]-[4A]-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 4x4 | 24.51 | 24.45 |
| CA_[2A]-2A-[4A]-4A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.29 | 24.45 |
| CA_[2A]-[2A]-4A-4A-13A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.26 | 24.45 |
| CA_2A-2A-13A-[66A]-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.49 | 24.45 |
| CA_[2A]-2A-13A-66A-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.41 | 24.45 |
| CA_2A-2A-13A-[66A]-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.47 | 24.45 |
| CA_[2A]-2A-13A-[66A]-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.47 | 24.45 |
| CA_[2A]-[2A]-13A-66A-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.40 | 24.45 |
| CA_[2A]-13A-48A-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56640 | 3690 | 2x2 | LTE B48 | 20 | 56442 | 3670.2 | 2x2 | 24.49 | 24.45 |
| CA_[2A]-13A-48D | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | 24.53 | 24.45 |
| CA_[2A]-13A-48A-48A-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56640 | 3690 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.16 | 24.45 |
| CA_2A-13A-48C-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 66536 | 2120 | 4x4 | 24.47 | 24.45 |
| CA_[2A]-13A-48C-66A | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 66536 | 2120 | 2x2 | 24.17 | 24.45 |
| CA_[2A]-13A-48C-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 66536 | 2120 | 4x4 | 24.45 | 24.45 |
| CA_13A-48A-48C-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 2x2 | LTE B48 | 20 | 55538 | 3579.8 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.42 | 24.45 |
| CA_13A-48D-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.44 | 24.45 |
| CA_13A-48C-[66B] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 15 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 4x4 | 24.55 | 24.45 |
| CA_13A-48C-[66C] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.54 | 24.45 |
| CA_[2A]-13A-46D | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | 24.44 | 24.45 |
| CA_13A-46D-[66A] | LTE B13 | 10 | 23230 | 782 | QPSK | 1 | 0 | 5230 | 751 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.52 | 24.45 |

## 1.4.5 LTE Band 14 as PCC

**Table 19**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_[2A]-2A-14A-[30A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | - | - | - | - | - | 24.75 | 24.62 |
| CA_[2A]-[2A]-14A-[30A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 4x4 | - | - | - | - | - | 24.78 | 24.62 |
| CA_[2A]-[2A]-14A-[66A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 10 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.72 | 24.62 |
| CA_[2A]-14A-[30A]-[66A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.75 | 24.62 |
| CA_[2A]-14A-[66A]-[66A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 24.74 | 24.62 |
| CA_[2A]-[30A]-[66A]-[66A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 24.69 | 24.62 |
| CA_2A-2A-14A-30A-[66A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.72 | 24.62 |
| CA_2A-2A-14A-[30A]-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.63 | 24.62 |
| CA_[2A]-2A-14A-30A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.65 | 24.62 |
| CA_[2A]-[2A]-14A-30A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.75 | 24.62 |
| CA_2A-2A-14A-[66A]-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.73 | 24.62 |
| CA_[2A]-2A-14A-66A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.79 | 24.62 |
| CA_2A-2A-14A-[66A]-[66A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.81 | 24.62 |
| CA_[2A]-2A-14A-[66A]-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.71 | 24.62 |
| CA_[2A]-[2A]-14A-66A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.75 | 24.62 |
| CA_2A-14A-30A-[66A]-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.81 | 24.62 |
| CA_2A-14A-[30A]-66A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.74 | 24.62 |
| CA_[2A]-14A-30A-66A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.76 | 24.62 |
| CA_2A-14A-30A-[66A]-[66A] | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.70 | 24.62 |
| CA_2A-14A-[30A]-[66A]-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.82 | 24.62 |
| CA_[2A]-14A-30A-[66A]-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.79 | 24.62 |
| CA_[2A]-14A-[30A]-66A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 49 | 5330 | 763 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.73 | 24.62 |


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## 1.4.6 LTE Band 5 as PCC

### Table 20
### Maximum Output Powers

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_4A-5A-[30A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.82 | 24.85 |
| CA_[2A]-5A-46A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.85 | 24.85 |
| CA_5A-46A-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.85 | 24.85 |
| CA_[2A]-[2A]-[4A]-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | 24.89 | 24.85 |
| CA_[2A]-2A-5A-[30A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | - | - | - | - | - | 24.94 | 24.85 |
| CA_[2A]-[2A]-5A-[30A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 4x4 | - | - | - | - | - | 24.95 | 24.85 |
| CA_[2A]-[2A]-5A-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.92 | 24.85 |
| CA_[2A]-[4A]-[4A]-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 4x4 | - | - | - | - | - | 24.93 | 24.85 |
| CA_[2A]-5A-[30A]-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.89 | 24.85 |
| CA_[2A]-5A-[66A]-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 24.92 | 24.85 |
| CA_5A-5A-[66A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 5 | 2425 | 871.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 24.96 | 24.85 |
| CA_5A-5A-[66A]-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 5 | 2425 | 871.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 25.03 | 24.85 |
| CA_5A-5A-[66B] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 5 | 2425 | 871.5 | 2x2 | LTE B66 | 15 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 4x4 | - | - | - | - | - | 24.93 | 24.85 |
| CA_5A-5A-[66C] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 5 | 2425 | 871.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | - | - | - | - | - | 24.94 | 24.85 |
| CA_5A-[30A]-[66A]-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 24.91 | 24.85 |
| CA_[2A]-5A-46C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | - | - | - | - | - | 24.88 | 24.85 |
| CA_5A-46C-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 24.87 | 24.85 |
| CA_2A-2A-[4A]-4A-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.91 | 24.85 |
| CA_[2A]-2A-4A-4A-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.92 | 24.85 |
| CA_2A-2A-[4A]-[4A]-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 4x4 | 24.86 | 24.85 |
| CA_[2A]-2A-[4A]-4A-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.85 | 24.85 |
| CA_[2A]-[2A]-4A-4A-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B4 | 10 | 2350 | 2150 | 2x2 | 24.91 | 24.85 |
| CA_2A-2A-[4A]-4A-5A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.84 | 24.85 |
| CA_[2A]-2A-4A-5B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | 24.87 | 24.85 |
| CA_[2A]-2A-[4A]-5B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.90 | 24.85 |
| CA_[2A]-2A-4A-5B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | 24.82 | 24.85 |
| CA_[2A]-[2A]-[4A]-5B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | 24.86 | 24.85 |
| CA_2A-2A-5A-[30A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.88 | 24.85 |
| CA_2A-2A-5A-[66A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.91 | 24.85 |
| CA_[2A]-2A-5A-30A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.82 | 24.85 |
| CA_[2A]-[2A]-5A-30A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.86 | 24.85 |
| CA_[2A]-[2A]-5A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 2x2 | 24.87 | 24.85 |
| CA_[2A]-2A-5A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.93 | 24.85 |
| CA_2A-2A-5A-[66A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.82 | 24.85 |
| CA_[2A]-2A-5A-[66A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.90 | 24.85 |
| CA_[2A]-[2A]-5A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.89 | 24.85 |
| CA_2A-2A-5A-[66B] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 15 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 4x4 | 24.84 | 24.85 |
| CA_[2A]-2A-5A-66B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 15 | 66786 | 2145 | 2x2 | LTE B66 | 5 | 66879 | 2154.3 | 2x2 | 24.91 | 24.85 |
| CA_[2A]-2A-5A-[66B] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 15 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 4x4 | 24.92 | 24.85 |
| CA_[2A]-[2A]-5A-66B | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 15 | 66786 | 2145 | 2x2 | LTE B66 | 5 | 66879 | 2154.3 | 2x2 | 24.87 | 24.85 |
| CA_[2A]-[2A]-5A-[66B] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 15 | 66786 | 2145 | 4x4 | LTE B66 | 5 | 66879 | 2154.3 | 2x2 | 24.94 | 24.85 |
| CA_2A-2A-5A-[66C] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.89 | 24.85 |
| CA_[2A]-2A-5A-66C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | 24.91 | 24.85 |
| CA_[2A]-2A-5A-[66C] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.86 | 24.85 |
| CA_[2A]-[2A]-5A-66C | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | 24.87 | 24.85 |
| CA_2A-5A-[30A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.84 | 24.85 |
| CA_2A-5A-[30A]-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.87 | 24.85 |
| CA_[2A]-5A-[30A]-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.95 | 24.85 |
| CA_5A-30A-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.88 | 24.85 |
| CA_5A-5A-[30A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.87 | 24.85 |
| CA_[2A]-5A-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | 24.88 | 24.85 |
| CA_[2A]-5A-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | 24.87 | 24.85 |
| CA_5A-5A-48A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 2x2 | LTE B48 | 20 | 55538 | 3579.8 | 2x2 | 24.86 | 24.85 |
| CA_[2A]-5A-48A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | 24.89 | 24.85 |
| CA_5A-48A-48A-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.94 | 24.85 |
| CA_[2A]-5A-48A-48A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.84 | 24.85 |
| CA_[2A]-5A-48A-48A-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.89 | 24.85 |
| CA_2A-5A-48C-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.79 | 24.85 |
| CA_[2A]-5A-48C-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 24.88 | 24.85 |
| CA_[2A]-5A-48C-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.84 | 24.85 |
| CA_5B-30A-[66A]-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.92 | 24.85 |
| CA_5B-[30A]-66A-66A | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.91 | 24.85 |
| CA_5B-30A-[66A]-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 24.89 | 24.85 |
| CA_5B-[30A]-[66A]-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B5 | 10 | 2553 | 884.3 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 24.87 | 24.85 |
| CA_5A-48A-48C-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 55340 | 3560 | 2x2 | LTE B48 | 20 | 55538 | 3579.8 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.79 | 24.85 |
| CA_5A-48D-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.78 | 24.85 |
| CA_[2A]-5A-46D | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | 24.87 | 24.85 |
| CA_5A-46D-[66A] | LTE B5 | 5 | 20625 | 846.5 | QPSK | 1 | 0 | 2625 | 891.5 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 24.82 | 24.85 |

## 1.4.7 LTE Band 26 as PCC

### Table 21
### Maximum Output Powers

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_[25A]-26A | LTE B26 | 10 | 26990 | 844 | QPSK | 1 | 25 | 8990 | 889 | 2x2 | LTE B25 | 20 | 8365 | 1962.5 | 4x4 | - | - | - | - | - | 25.09 | 25.04 |
| CA_26A-[41A] | LTE B26 | 10 | 26990 | 844 | QPSK | 1 | 25 | 8990 | 889 | 2x2 | LTE B41 | 20 | 40620 | 2593 | 4x4 | - | - | - | - | - | 25.17 | 25.04 |
| CA_[25A]-25A-26A | LTE B26 | 5 | 26865 | 831.5 | QPSK | 1 | 0 | 8865 | 876.5 | 2x2 | LTE B25 | 20 | 8365 | 1962.5 | 4x4 | LTE B25 | 20 | 8590 | 1985 | 2x2 | 24.79 | 24.85 |
| CA_[25A]-[25A]-26A | LTE B26 | 5 | 26865 | 831.5 | QPSK | 1 | 0 | 8865 | 876.5 | 2x2 | LTE B25 | 20 | 8365 | 1962.5 | 4x4 | LTE B25 | 20 | 8590 | 1985 | 4x4 | 24.71 | 24.85 |
| CA_26A-[41C] | LTE B26 | 10 | 26990 | 844 | QPSK | 1 | 25 | 8990 | 889 | 2x2 | LTE B41 | 20 | 40620 | 2593 | 4x4 | LTE B41 | 20 | 40422 | 2573.2 | 4x4 | 25.15 | 25.04 |



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## 1.4.8 **LTE Band 66 as PCC**

**Table 22**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.39 | 24.54 |
| CA_[2A]-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.57 | 24.54 |
| CA_[2A]-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.48 | 24.54 |
| CA_12A-[66A] (1) | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.33 | 24.54 |
| CA_12A-[66A] (2) | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.45 | 24.54 |
| CA_7A-[66A]-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | LTE B7 | 20 | 3100 | 2655 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.55 | 24.54 |
| CA_[7A]-[66A]-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | LTE B7 | 20 | 3100 | 2655 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.64 | 24.54 |
| CA_12B-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B12 | 5 | 5095 | 737.5 | 2x2 | LTE B12 | 5 | 5047 | 732.7 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.44 | 24.54 |
| CA_66A-[66C] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67038 | 2170.2 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.49 | 24.54 |
| CA_[66C]-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66588 | 2125.2 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.52 | 24.54 |
| CA_[66A]-66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67038 | 2170.2 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.64 | 24.54 |
| CA_66C-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66588 | 2125.2 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.52 | 24.54 |
| CA_[66A]-[66C] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67038 | 2170.2 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.62 | 24.54 |
| CA_[66C]-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66588 | 2125.2 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.62 | 24.54 |
| CA_[2A]-46A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.77 | 24.54 |
| CA_5A-46A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.49 | 24.54 |
| CA_7A-46A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B7 | 20 | 3100 | 2655 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.59 | 24.54 |
| CA_[7A]-46A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B7 | 20 | 3100 | 2655 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.67 | 24.54 |
| CA_[7A]-46A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B7 | 20 | 3100 | 2655 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.58 | 24.54 |
| CA_13A-46A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B13 | 10 | 5230 | 751 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.53 | 24.54 |
| CA_46A-[66A]-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.45 | 24.54 |
| CA_46A-66A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.45 | 24.54 |
| CA_46A-[66A]-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.45 | 24.54 |
| CA_[2A]-[2A]-5A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | - | - | - | - | - | 24.74 | 24.54 |
| CA_2A-2A-12A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 24.79 | 24.54 |
| CA_[2A]-2A-12A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 24.74 | 24.54 |
| CA_[2A]-2A-12A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 24.78 | 24.54 |
| CA_[2A]-[2A]-12A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 24.79 | 24.54 |
| CA_[2A]-[2A]-12A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 24.76 | 24.54 |
| CA_[2A]-[2A]-13A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B13 | 10 | 5230 | 751 | 2x2 | - | - | - | - | - | 24.75 | 24.54 |
| CA_[2A]-[2A]-14A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B14 | 10 | 5330 | 763 | 2x2 | - | - | - | - | - | 24.74 | 24.54 |
| CA_2A-2A-[30A]-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 4x4 | - | - | - | - | - | 24.70 | 24.54 |
| CA_[2A]-2A-30A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B30 | 10 | 9820 | 2355 | 2x2 | - | - | - | - | - | 24.75 | 24.54 |
| [illegible] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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| | PCC | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | SCC 5 | | | | | SCC 6 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC [UL] Ch. | PCC [UL] Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC [DL] Ch. | PCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-46E-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 50269 | 5497.9 | 2x2 | - | - | - | - | - | 24.60 | 24.54 |
| CA_12A-46E-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 50269 | 5497.9 | 2x2 | - | - | - | - | - | 24.58 | 24.54 |
| CA_12A-46E-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 50269 | 5497.9 | 2x2 | - | - | - | - | - | 24.60 | 24.54 |
| CA_2A-46D-49A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 50960 | 3625 | 2x2 | - | - | - | - | - | 24.57 | 24.54 |
| CA_12A-46D-49A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 50960 | 3625 | 2x2 | - | - | - | - | - | 24.62 | 24.54 |
| CA_12A-46D-49A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50462 | 5517.2 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 50960 | 3625 | 2x2 | - | - | - | - | - | 24.48 | 24.54 |
| CA_2A-46C-48C-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | - | - | - | - | - | 24.59 | 24.54 |
| CA_2A1-46C-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | - | - | - | - | - | 24.57 | 24.54 |
| CA_2A1-46C-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | - | - | - | - | - | 24.46 | 24.54 |
| CA_2A-46A-48D-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | - | - | - | - | - | 24.70 | 24.54 |
| CA_2A1-46A-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | - | - | - | - | - | 24.60 | 24.54 |
| CA_2A1-46A-48D-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | 24.65 | 24.54 |
| CA_46E-48A-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | LTE B48 | 20 | 55792 | 3605.2 | 2x2 | - | - | - | - | - | 24.53 | 24.54 |
| CA_46A-48E-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | LTE B48 | 20 | 55792 | 3605.2 | 2x2 | - | - | - | - | - | 24.53 | 24.54 |
| CA_2A-46C-48D-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | 24.62 | 24.54 |
| CA_2A1-46C-48D-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | 24.65 | 24.54 |
| CA_2A1-46C-48D-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | 24.59 | 24.54 |
| CA_2A-46D-48C-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50269 | 5497.9 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | 24.59 | 24.54 |
| CA_2A1-46D-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50269 | 5497.9 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | 24.67 | 24.54 |
| CA_2A1-46D-48C-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50269 | 5497.9 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | 24.58 | 24.54 |
| CA_46E-48C-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50269 | 5497.9 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B48 | 20 | 55990 | 3625 | 2x2 | LTE B48 | 20 | 56188 | 3644.8 | 2x2 | 24.48 | 24.54 |
| CA_46C-48E-[66A] | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 50 | 66786 | 2145 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 55990 | 3625 | 2x2 | LTE B46 | 20 | 56188 | 3644.8 | 2x2 | LTE B48 | 20 | 56386 | 3664.6 | 2x2 | LTE B48 | 20 | 52792 | 3605.2 | 2x2 | 24.50 | 24.54 |

## 1.4.9 LTE Band 25 as PCC

**Table 23**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC [UL] Ch. | PCC [UL] Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC [DL] Ch. | PCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC [DL] Ch. | SCC [DL] Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_[25A]-26A | LTE B25 | 3 | 26365 | 1882.5 | QPSK | 1 | 14 | 8365 | 1962.5 | 4x4 | LTE B26 | 15 | 8865 | 876.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.49 | 24.46 |
| CA_25A-[41A] | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 2x2 | LTE B41 | 20 | 40620 | 2593 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.26 | 24.34 |
| CA_[25A]-41A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B41 | 20 | 40620 | 2593 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.14 | 24.34 |
| CA_[25A]-[41A] | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B41 | 20 | 40620 | 2593 | 4x4 | - | - | - | - | - | - | - | - | - | - | 24.16 | 24.34 |
| CA_[25A]-46A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.23 | 24.34 |
| CA_[25A]-25A-26A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B25 | 20 | 8590 | 1985 | 2x2 | LTE B26 | 5 | 8865 | 876.5 | 2x2 | - | - | - | - | - | 24.20 | 24.34 |
| CA_25A-[25A]-26A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 2x2 | LTE B25 | 20 | 8590 | 1985 | 4x4 | LTE B26 | 5 | 8865 | 876.5 | 2x2 | - | - | - | - | - | 24.24 | 24.34 |
| CA_[25A]-[25A]-26A | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B25 | 20 | 8590 | 1985 | 4x4 | LTE B26 | 5 | 8865 | 876.5 | 2x2 | - | - | - | - | - | 24.22 | 24.34 |
| CA_25A-[41C] | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 2x2 | LTE B41 | 20 | 40620 | 2593 | 4x4 | LTE B41 | 20 | 40422 | 2573.2 | 4x4 | - | - | - | - | - | 24.26 | 24.34 |
| CA_[25A]-41C | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B41 | 20 | 40620 | 2593 | 2x2 | LTE B41 | 20 | 40422 | 2573.2 | 2x2 | - | - | - | - | - | 24.21 | 24.34 |
| CA_[25A]-[41C] | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B41 | 20 | 40620 | 2593 | 4x4 | LTE B41 | 20 | 40422 | 2573.2 | 4x4 | - | - | - | - | - | 24.15 | 24.34 |
| CA_25A-[41D] | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 2x2 | LTE B41 | 20 | 40422 | 2573.2 | 4x4 | LTE B41 | 20 | 40620 | 2593 | 4x4 | LTE B41 | 20 | 40818 | 2612.8 | 4x4 | 24.21 | 24.34 |
| CA_[25A]-41D | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B41 | 20 | 40422 | 2573.2 | 2x2 | LTE B41 | 20 | 40620 | 2593 | 2x2 | LTE B41 | 20 | 40818 | 2612.8 | 2x2 | 24.08 | 24.34 |
| CA_[25A]-[41D] | LTE B25 | 20 | 26140 | 1860 | QPSK | 1 | 0 | 8140 | 1940 | 4x4 | LTE B41 | 20 | 40422 | 2573.2 | 4x4 | LTE B41 | 20 | 40620 | 2593 | 4x4 | LTE B41 | 20 | 40818 | 2612.8 | 4x4 | 24.11 | 24.34 |


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## 1.4.10 LTE Band 30 as PCC

**Table 24**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-4A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 22.47 | 22.62 |
| CA_4A-5A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 22.51 | 22.62 |
| CA_4A-12A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 22.46 | 22.62 |
| CA_4A-29A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 22.45 | 22.62 |
| CA_[2A]-2A-5A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | - | - | - | - | - | 22.54 | 22.62 |
| CA_[2A]-[2A]-5A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | - | - | - | - | - | 22.78 | 22.62 |
| CA_2A-2A-12A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 22.77 | 22.62 |
| CA_[2A]-2A-12A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 22.81 | 22.62 |
| CA_[2A]-2A-12A-[-30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 22.80 | 22.62 |
| CA_[2A]-[2A]-12A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 22.87 | 22.62 |
| CA_[2A]-[2A]-12A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | 22.76 | 22.62 |
| CA_[2A]-2A-14A-[-30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B14 | 10 | 5350 | 763 | 2x2 | - | - | - | - | - | 22.76 | 22.62 |
| CA_[2A]-[2A]-14A-[-30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B14 | 10 | 5350 | 763 | 2x2 | - | - | - | - | - | 22.79 | 22.62 |
| CA_2A-2A-29A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | - | - | - | - | - | 22.72 | 22.62 |
| CA_[2A]-2A-29A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | - | - | - | - | - | 22.67 | 22.62 |
| CA_[2A]-2A-29A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | - | - | - | - | - | 22.70 | 22.62 |
| CA_[2A]-[2A]-29A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | - | - | - | - | - | 22.72 | 22.62 |
| CA_[2A]-[2A]-29A-[30A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | - | - | - | - | - | 22.57 | 22.62 |
| CA_2A-2A-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.57 | 22.62 |
| CA_[2A]-2A-30A-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.62 | 22.62 |
| CA_[2A]-2A-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.87 | 22.62 |
| CA_[2A]-2A-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.58 | 22.62 |
| CA_[2A]-[2A]-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | - | - | - | - | - | 22.66 | 22.62 |
| CA_[2A]-5A-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.54 | 22.62 |
| CA_[2A]-12A-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.55 | 22.62 |
| CA_[2A]-14A-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B14 | 10 | 5350 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.70 | 22.62 |
| CA_2A-29A-30A-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.57 | 22.62 |
| CA_2A-29A-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | - | - | - | - | - | 22.77 | 22.62 |
| CA_[2A]-29A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | - | - | - | - | - | 22.63 | 22.62 |
| CA_2A-29A-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.63 | 22.62 |
| CA_[2A]-29A-30A-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.54 | 22.62 |
| CA_[2A]-29A-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | - | - | - | - | - | 22.76 | 22.62 |
| CA_[2A]-29A-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 22.56 | 22.62 |
| CA_[2A]-[30A]-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 22.38 | 22.62 |
| CA_5A-[30A]-[66A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 22.62 | 22.62 |
| CA_12A-[30A]-[66A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 22.68 | 22.62 |
| CA_14A-[30A]-[66A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 22.60 | 22.62 |
| CA_29A-[30A]-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 22.63 | 22.62 |
| CA_29A-[30A]-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 22.67 | 22.62 |
| CA_29A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 22.67 | 22.62 |
| CA_29A-30A-[66A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 22.46 | 22.62 |
| CA_29A-[30A]-[66A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B29 | 10 | 9715 | 722.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | 22.64 | 22.62 |
| CA_2A-2A-5A-30A-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 22.60 | 22.62 |
| CA_2A-2A-5A-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.70 | 22.62 |
| CA_[2A]-2A-5A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.84 | 22.62 |
| CA_[2A]-[2A]-5A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.80 | 22.62 |
| CA_2A-2A-12A-30A-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 22.83 | 22.62 |
| CA_2A-2A-12A-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.76 | 22.62 |
| CA_[2A]-2A-12A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.85 | 22.62 |
| CA_[2A]-[2A]-12A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.81 | 22.62 |
| CA_[2A]-2A-14A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 22.85 | 22.62 |
| CA_2A-2A-14A-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.72 | 22.62 |
| CA_[2A]-2A-14A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 2x2 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.81 | 22.62 |
| CA_[2A]-[2A]-14A-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B2 | 20 | 700 | 1940 | 4x4 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.80 | 22.62 |
| CA_2A-5B-30A-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 22.64 | 22.62 |
| CA_2A-5B-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.69 | 22.62 |
| CA_[2A]-5B-30A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.72 | 22.62 |
| CA_2A-5B-[30A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 22.75 | 22.62 |
| CA_[2A]-5B-30A-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 22.67 | 22.62 |
| CA_[2A]-5B-[30A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 22.68 | 22.62 |
| CA_2A-5A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.61 | 22.62 |
| CA_2A-5A-[30A]-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.60 | 22.62 |
| CA_[2A]-5A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.66 | 22.62 |
| CA_2A-5A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 22.52 | 22.62 |
| CA_2A-5A-[30A]-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.71 | 22.62 |
| CA_[2A]-5A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.82 | 22.62 |
| CA_[2A]-5A-[30A]-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.66 | 22.62 |
| CA_2A-12A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.54 | 22.62 |
| CA_2A-12A-[30A]-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.66 | 22.62 |
| CA_[2A]-12A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.62 | 22.62 |
| CA_2A-12A-30A-[66A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 22.70 | 22.62 |
| CA_2A-12A-[30A]-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.67 | 22.62 |
| CA_[2A]-12A-[30A]-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.81 | 22.62 |
| CA_[2A]-12A-[30A]-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.75 | 22.62 |
| CA_2A-14A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.62 | 22.62 |
| CA_2A-14A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.70 | 22.62 |
| CA_[2A]-14A-30A-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.56 | 22.62 |
| CA_2A-14A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 22.72 | 22.62 |
| CA_2A-14A-[30A]-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.74 | 22.62 |
| CA_[2A]-14A-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.73 | 22.62 |
| CA_[2A]-14A-[30A]-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B14 | 10 | 5330 | 763 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.85 | 22.62 |
| CA_5B-30A-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.71 | 22.62 |
| CA_5B-[30A]-66A-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | 22.59 | 22.62 |
| CA_5B-30A-[66A]-[66A] | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 2x2 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | 22.55 | 22.62 |
| CA_5B-[30A]-[66A]-66A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 12 | 9820 | 2355 | 4x4 | LTE B5 | 10 | 2525 | 881.5 | 2x2 | LTE B5 | 5 | 2453 | 874.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66

## 1.4.11 LTE Band 7 Ant A as PCC

**Table 25**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE AntA Tx Power (dBm) |
| CA_2A-{4A}-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.61 | 23.76 |
| CA_2A-{4A}-{7A}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.94 | 23.76 |
| CA_{2A}-{4A}-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.81 | 23.76 |
| CA_{2A}-{4A}-{7A}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.85 | 23.76 |
| CA_2A-{7A}^-12A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.75 | 23.76 |
| CA_{2A}-7A^-12A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.66 | 23.76 |
| CA_{2A}-{7A}^-12A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.91 | 23.76 |
| CA_{4A}-7A^-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 2850 | 2630 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.59 | 23.76 |
| CA_4A-{7A}^-12A (1) | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.70 | 23.76 |
| CA_{4A}-7A^-12A (1) | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | LTE B12 | 10 | 5095 | 737.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.67 | 23.76 |
| CA_{7A}^-12B | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B12 | 5 | 5095 | 737.5 | 2x2 | LTE B12 | 5 | 5047 | 732.7 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.63 | 23.76 |
| CA_7A^-{66A}-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.56 | 23.76 |
| CA_{7A}^-{66A}-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.75 | 23.76 |
| CA_2A-{7A}^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.97 | 23.76 |
| CA_{2A}-7A^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.61 | 23.76 |
| CA_{2A}-{7A}^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.88 | 23.76 |
| CA_7A^-46A-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.69 | 23.76 |
| CA_{7A}^-46A-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.84 | 23.76 |
| CA_{7A}^-46A-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | - | - | - | - | - | 23.92 | 23.76 |
| CA_2A-4A-7A^-{7A}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 2850 | 2630 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.91 | 23.76 |
| CA_2A-4A-{7A}^-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 2850 | 2630 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.93 | 23.76 |
| CA_{2A}-4A-7A^-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 2850 | 2630 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.82 | 23.76 |
| CA_2A-4A-{7A}^-{7A}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 2850 | 2630 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.70 | 23.76 |
| CA_{2A}-4A-7A^-{7A}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 2850 | 2630 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.90 | 23.76 |
| CA_{2A}-4A-{7A}^-7A^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 2850 | 2630 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.94 | 23.76 |
| CA_{2A}-4A-{7A}^-{7A}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 2850 | 2630 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.91 | 23.76 |
| CA_2A-4A-{7C}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 3152 | 2660.2 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.78 | 23.76 |
| CA_{2A}-4A-7C^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 3152 | 2660.2 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | 23.86 | 23.76 |
| CA_{2A}-4A-7C^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 3152 | 2660.2 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.88 | 23.76 |
| CA_2A-{4A}-{7C}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 3152 | 2660.2 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | 23.97 | 23.76 |
| CA_{2A}-4A-{7C}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 3152 | 2660.2 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 2x2 | - | - | - | - | - | 23.95 | 23.76 |
| CA_{2A}-{4A}-7C^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 3152 | 2660.2 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | 23.87 | 23.76 |
| CA_{2A}-{4A}-{7C}^ | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 3152 | 2660.2 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B4 | 20 | 2175 | 2132.5 | 4x4 | - | - | - | - | - | 23.94 | 23.76 |
| CA_2A-7A^-{66A}-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 23.87 | 23.76 |
| CA_2A-{7A}^-66A-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 23.92 | 23.76 |
| CA_{2A}-7A^-66A-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 23.86 | 23.76 |
| CA_{2A}-{7A}^-{66A}-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 23.98 | 23.76 |
| CA_{2A}-7A^-{66A}-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 23.98 | 23.76 |
| CA_{2A}-{7A}^-{66A}-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 23.91 | 23.76 |
| CA_{2A}-{7A}^-{66A}-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 67236 | 2190 | 2x2 | - | - | - | - | - | 23.70 | 23.76 |
| CA_2A-7A^-{66C} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | - | - | - | - | - | 23.62 | 23.76 |
| CA_{2A}-7A^-66C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | - | - | - | - | - | 23.86 | 23.76 |
| CA_{2A}-7A^-66C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | - | - | - | - | - | 23.71 | 23.76 |
| CA_2A-{7A}^-{66C} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | - | - | - | - | - | 23.71 | 23.76 |
| CA_{2A}-{7A}^-{66C} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | - | - | - | - | - | 23.81 | 23.76 |
| CA_{2A}-{7A}^-66C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 2x2 | LTE B66 | 20 | 66984 | 2164.8 | 2x2 | - | - | - | - | - | 23.70 | 23.76 |
| CA_{2A}-{7A}^-{66C} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B66 | 20 | 66786 | 2145 | 4x4 | LTE B66 | 20 | 66984 | 2164.8 | 4x4 | - | - | - | - | - | 23.96 | 23.76 |
| CA_2A-{7A}^-7A^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 3152 | 2660.2 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | 23.71 | 23.76 |
| CA_2A-7A^-{7A}^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 3152 | 2660.2 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | 23.77 | 23.76 |
| CA_{2A}-7A^-{7A}^-46A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 3152 | 2660.2 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | 23.74 | 23.76 |
| CA_{2A}-{7A}^-46C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | - | - | - | - | - | 23.70 | 23.76 |
| CA_{2A}-{7A}^-46C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | - | - | - | - | - | 23.82 | 23.76 |
| CA_7A^-46C-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 23.64 | 23.76 |
| CA_{7A}^-46C-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | - | - | - | - | - | 23.96 | 23.76 |
| CA_{7A}^-46C-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | - | - | - | - | - | 23.90 | 23.76 |
| CA_2A-7A^-{7A}^-46C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B7 AntA | 20 | 2850 | 2630 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | 23.74 | 23.76 |
| CA_2A-{7A}^-7A^-46C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 2850 | 2630 | 2x2 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | 23.74 | 23.76 |
| CA_2A-{7A}^-{7A}^-46C | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B7 AntA | 20 | 2850 | 2630 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | 23.77 | 23.76 |
| CA_2A-{7A}^-46D | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B2 | 20 | 900 | 1960 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | 23.79 | 23.76 |
| CA_7A^-46D-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | 23.65 | 23.76 |
| CA_{7A}^-46D-66A | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 2x2 | 23.80 | 23.76 |
| CA_{7A}^-46D-{66A} | LTE B7 AntA | 20 | 21350 | 2560 | QPSK | 1 | 0 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B66 | 20 | 66786 | 2145 | 4x4 | 23.66 | 23.76 |

Note: ^ - Indicates that Band 7 operations are using antenna A

## 1.4.12 LTE Band 7 Ant B as PCC

**Table 26**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_{7C} (1) | LTE B7 | 10 | 20800 | 2505 | QPSK | 1 | 49 | 2800 | 2625 | 4x4 | LTE B7 | 20 | 2944 | 2639.4 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.78 | 23.79 |
| CA_{7A}-46A (1) | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.03 | 23.89 |
| CA_7A-{7A}-46A | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 2x2 | LTE B7 | 20 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 23.99 | 23.89 |
| CA_{7A}-7A^-46A | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B7 | 20 | 3350 | 2680 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.10 | 23.89 |
| CA_{7A}-{7A}-46A | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B7 | 20 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | - | - | - | - | - | - | - | - | - | - | 24.06 | 23.89 |
| CA_7A-{7A}-46C | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 2x2 | LTE B7 | 20 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | - | - | - | - | - | 23.63 | 23.89 |
| CA_{7A}-7A-46C | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B7 | 20 | 3350 | 2680 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | - | - | - | - | - | 23.73 | 23.89 |
| CA_{7A}-{7A}-46C | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B7 | 20 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | - | - | - | - | - | 23.91 | 23.89 |
| CA_{7A}-46D (1) | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | - | - | - | - | - | 23.61 | 23.89 |
| CA_7A-{7A}-46D | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 2x2 | LTE B7 | 20 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | 23.71 | 23.89 |
| CA_{7A}-7A-46D | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B7 | 20 | 3350 | 2680 | 2x2 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | 23.65 | 23.89 |
| CA_{7A}-{7A}-46D | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B7 | 20 | 3350 | 2680 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | 23.68 | 23.89 |
| CA_{7A}-46E | LTE B7 | 5 | 20775 | 2502.5 | QPSK | 1 | 24 | 2775 | 2622.5 | 4x4 | LTE B46 | 20 | 50665 | 5537.5 | 2x2 | LTE B46 | 20 | 50467 | 5517.7 | 2x2 | LTE B46 | 20 | 50863 | 5557.3 | 2x2 | LTE B46 | 20 | 51061 | 5577.1 | 2x2 | 23.79 | 23.89 |


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## 1.4.13 LTE Band 41 as PCC

**Table 27**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41A-41A (1) | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.15 | 24.11 |
| CA_41A-41A (1) | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23.94 | 24.11 |
| CA_41A-41A (1) | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24.05 | 24.11 |
| CA_41A-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 24.15 | 24.11 |
| CA_41C-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | 24.03 | 24.11 |
| CA_41A-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | 23.98 | 24.11 |
| CA_41C-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 40356 | 2566.6 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 24.08 | 24.11 |
| CA_41A-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 24.03 | 24.11 |
| CA_41C-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 24.03 | 24.11 |
| CA_41A-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 24.11 | 24.11 |
| CA_41D-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 40554 | 2586.4 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | 24.25 | 24.11 |
| CA_41A-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41094 | 2640.4 | 2x2 | LTE B41 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | 24.04 | 24.11 |
| CA_41D-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 40356 | 2566.6 | 2x2 | LTE B41 | 20 | 40554 | 2586.4 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 24.02 | 24.11 |
| CA_41A-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 24.05 | 24.11 |
| CA_41D-41A | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 40554 | 2586.4 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 24.04 | 24.11 |
| CA_41C-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | 24.10 | 24.11 |
| CA_41C-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 40356 | 2566.6 | 2x2 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 24.16 | 24.11 |
| CA_41C-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 24.18 | 24.11 |
| CA_41E | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 40554 | 2586.4 | 4x4 | LTE B41 | 20 | 40752 | 2606.2 | 4x4 | - | - | - | - | - | 24.11 | 24.11 |
| CA_41C-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 40356 | 2566.6 | 2x2 | LTE B41 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | 23.97 | 24.11 |
| CA_41D-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 40554 | 2586.4 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 2x2 | 23.88 | 24.11 |
| CA_41C-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 41094 | 2640.4 | 2x2 | LTE B41 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 | 20 | 41490 | 2680 | 2x2 | 23.87 | 24.11 |
| CA_41D-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 2x2 | LTE B41 | 20 | 40356 | 2566.6 | 2x2 | LTE B41 | 20 | 40554 | 2586.4 | 2x2 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | 23.91 | 24.11 |
| CA_41C-41D | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | 23.97 | 24.11 |
| CA_41D-41C | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 40554 | 2586.4 | 4x4 | LTE B41 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 | 20 | 41490 | 2680 | 4x4 | 24.08 | 24.11 |
| CA_41F | LTE B41 | 15 | 40185 | 2549.5 | QPSK | 1 | 0 | 40185 | 2549.5 | 4x4 | LTE B41 | 20 | 40356 | 2566.6 | 4x4 | LTE B41 | 20 | 40554 | 2586.4 | 4x4 | LTE B41 | 20 | 40752 | 2606.2 | 4x4 | LTE B41 | 20 | 40950 | 2626 | 4x4 | 23.90 | 24.11 |

## 1.4.14 LTE Band 41 PC2 as PCC

**Table 28**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC 1 | | | | | SCC 2 | | | | | SCC 3 | | | | | SCC 4 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) Freq. [MHz] | Mod. | PCC UL# RB | PCC UL RB Offset | PCC (DL) Ch. | PCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | SCC Band | SCC BW [MHz] | SCC (DL) Ch. | SCC (DL) Freq. [MHz] | DL Ant. Config. | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_41A-41A (1) | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 26.86 | 27.13 |
| CA_41A-41A (1) | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 27.00 | 27.13 |
| CA_41A-41A (1) | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 26.83 | 27.13 |
| CA_41A-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 26.94 | 27.13 |
| CA_41C-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | 26.95 | 27.13 |
| CA_41A-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | - | - | - | - | - | - | 26.89 | 27.13 |
| CA_41C-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 26.91 | 27.13 |
| CA_41A-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 26.88 | 27.13 |
| CA_41C-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | - | - | - | - | - | - | 26.93 | 27.13 |
| CA_41A-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 26.99 | 27.13 |
| CA_41D-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | 27.07 | 27.13 |
| CA_41A-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 41094 | 2640.4 | 2x2 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | 27.03 | 27.13 |
| CA_41D-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 2x2 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 27.04 | 27.13 |
| CA_41A-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 27.04 | 27.13 |
| CA_41D-41A | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 27.08 | 27.13 |
| CA_41C-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | - | - | - | - | - | 27.06 | 27.13 |
| CA_41C-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 2x2 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 27.06 | 27.13 |
| CA_41C-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | - | - | - | - | - | 27.09 | 27.13 |
| CA_41E | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 4x4 | LTE B41 PC2 | 20 | 40317 | 2562.7 | 4x4 | - | - | - | - | - | 27.01 | 27.13 |
| CA_41C-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 2x2 | LTE B41 PC2 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | 26.99 | 27.13 |
| CA_41D-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | 27.04 | 27.13 |
| CA_41C-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 41094 | 2640.4 | 2x2 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 2x2 | LTE B41 PC2 | 20 | 41490 | 2680 | 2x2 | 27.05 | 27.13 |
| CA_41D-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 2x2 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 2x2 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 2x2 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | 27.02 | 27.13 |
| CA_41C-41D | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 41094 | 2640.4 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | 27.07 | 27.13 |
| CA_41D-41C | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 4x4 | LTE B41 PC2 | 20 | 41292 | 2660.2 | 4x4 | LTE B41 PC2 | 20 | 41490 | 2680 | 4x4 | 26.99 | 27.13 |
| CA_41F | LTE B41 PC2 | 15 | 39750 | 2506 | QPSK | 1 | 74 | 39750 | 2506 | 4x4 | LTE B41 PC2 | 20 | 39921 | 2523.1 | 4x4 | LTE B41 PC2 | 20 | 40119 | 2542.9 | 4x4 | LTE B41 PC2 | 20 | 40317 | 2562.7 | 4x4 | LTE B41 PC2 | 20 | 40515 | 2582.5 | 4x4 | 26.94 | 27.13 |


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## 1.5 Downlink Carrier Aggregation with Uplink Carrier Aggregation enabled

This device supports uplink carrier aggregation (ULCA) with additional Carrier Aggregation configurations active in the downlink. Power measurements were performed with ULCA active and additional CA configurations active in the downlink for the configuration per Fall 2017 TCB Workshop Notes.

Per FCC Guidance, additional SAR measurements for these configurations were not required since their maximum output power was not more than 0.25 dB higher than the maximum output power for with only ULCA active.

### 1.5.1 DL Carrier Aggregation RF Conducted Powers

**Table 29**
**Maximum Output Powers**

| | PCC | | | | | | | SCC1 | | | | | | | SCC2 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | ULCA Tx. Power with add'l CA configuration active in DL (dBm) | ULCA Tx. Power (dBm) |
| CA_41D | LTE B41 | 20 | 40185 | 2549.5 | QPSK | 1 | 0 | LTE B41 | 20 | 39987 | 2529.7 | QPSK | 1 | 99 | LTE B41 | 20 | 40383 | 2569.3 | 25.25 | 25.18 |

| | PCC | | | | | | | SCC1 | | | | | | | SCC2 | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination on DL | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | CA_41C ULCA Tx. Power with add'l CA configuration active in DL (dBm) | CA_41C ULCA Tx. Power (dBm) |
| CA_41D | LTE B41 PC2 | 20 | 40185 | 2549.5 | QPSK | 1 | 0 | LTE B41 PC2 | 20 | 39987 | 2529.7 | QPSK | 1 | 99 | LTE B41 PC2 | 20 | 40383 | 2569.3 | 27.88 | 27.90 |

### 1.5.2 DL Carrier Aggregation with DL 4x4 MIMO RF Conducted Powers

Note: 4x4 DL MIMO is only operating in the downlink. Uplink transmission is limited to a single output stream for each component carrier of ULCA.

#### 1.5.2.1 LTE Band 41

**Table 30**
**Maximum Output Powers**

| | PCC | | | | | | | | SCC1 | | | | | | | | SCC2 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination on DL | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | DL Ant. Config. | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | DL Ant. Config. | Modulation | SCC UL# RB | SCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | DL Ant. Config. | ULCA Tx. Power with add'l CA configuration active in DL (dBm) | ULCA Tx. Power (dBm) |
| CA_[41C] (1) | LTE B41 | 20 | 40185 | 2549.5 | 4x4 | QPSK | 1 | 0 | LTE B41 | 20 | 39987 | 2529.7 | 4x4 | QPSK | 1 | 99 | - | - | - | - | - | 25.21 | 25.18 |
| CA_[41D] | LTE B41 | 20 | 40185 | 2549.5 | 4x4 | QPSK | 1 | 0 | LTE B41 | 20 | 39987 | 2529.7 | 4x4 | QPSK | 1 | 99 | LTE B41 | 20 | 40383 | 2569.3 | 4x4 | 25.11 | 25.18 |

| | PCC | | | | | | | | SCC1 | | | | | | | | SCC2 | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination on DL | PCC Band | PCC Bandwidth [MHz] | PCC (UL/DL) Channel | PCC (UL/DL) Frequency [MHz] | Modulation | PCC UL# RB | PCC UL RB Offset | DL Ant. Config. | SCC Band | SCC Bandwidth [MHz] | SCC (UL/DL) Channel | SCC (UL/DL) Frequency [MHz] | Modulation | SCC UL# RB | SCC UL RB Offset | DL Ant. Config. | SCC Band | SCC Bandwidth [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | DL Ant. Config. | CA_41C ULCA Tx. Power with add'l CA configuration active in DL (dBm) | CA_41C ULCA Tx. Power (dBm) |
| CA_[41C] (1) | LTE B41 PC2 | 20 | 40185 | 2549.5 | QPSK | 1 | 0 | 4x4 | LTE B41 PC2 | 20 | 39987 | 2529.7 | QPSK | 1 | 99 | 4x4 | - | - | - | - | - | 27.68 | 27.90 |
| CA_[41D] | LTE B41 PC2 | 20 | 40185 | 2549.5 | QPSK | 1 | 0 | 4x4 | LTE B41 PC2 | 20 | 39987 | 2529.7 | QPSK | 1 | 99 | 4x4 | LTE B41 PC2 | 20 | 40383 | 2569.3 | 4x4 | 27.75 | 27.90 |

#### 1.5.2.2 LTE Band 66

**Table 31**
**Maximum Output Powers**

| | PCC | | | | | | | | | | SCC | | | | | | | | | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Combination on DL | PCC Band | PCC Bandwidth [MHz] | PCC UL Channel | PCC UL Frequency [MHz] | PCC DL Channel | PCC DL Frequency [MHz] | DL Ant. Config. | Modulation | PCC UL# RB | PCC UL RB Offset | SCC Band | SCC Bandwidth [MHz] | SCC UL Channel | SCC UL Frequency [MHz] | SCC DL Channel | SCC DL Frequency [MHz] | DL Ant. Config. | Modulation | SCC UL# RB | SCC UL RB Offset | ULCA Tx. Power with add'l CA configuration active in DL (dBm) | ULCA Tx. Power (dBm) |
| CA_[66C] | LTE B66 | 20 | 132322 | 1745.0 | 66786 | 2145.0 | 4x4 | QPSK | 1 | 0 | LTE B66 | 20 | 132124 | 1725.2 | 66588 | 2125.2 | 4x4 | QPSK | 1 | 99 | 23.97 | 24.20 |
| CA_[66B] | LTE B66 | 10 | 132322 | 1745.0 | 66786 | 2145.0 | 4x4 | QPSK | 1 | 0 | LTE B66 | 10 | 132223 | 1735.1 | 66687 | 2135.1 | 4x4 | QPSK | 1 | 49 | 23.88 | 24.02 |


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# APPENDIX I: IEEE 802.11AX RU SAR EXCLUSION

## 1.1 IEEE 802.11ax RU SAR Exclusion

To make the most efficient use of the additional available subcarriers (data tones), IEEE 802.11ax can utilize Orthogonal Frequency-Division Multiple Access (OFDMA) which divides the existing 802.11 channels into smaller subchannels called Resource Units (RUs). Possible RU sizes are: 26T, 52T, 106T, 242T, 484T and 996T.

Per FCC Guidance, 802.11ax was considered a higher order 802.11 mode when compared to a/b/g/n/ac to apply KDB Publication 248227 D01v02r02 for OFDM mode selection. Therefore, SAR tests were not required for 802.11ax based on the maximum allowed output powers of OFDM modes and the reported SAR values. Per FCC Guidance, maximum conducted powers were performed for each RU size to demonstrate that the output powers would not be higher than the other OFDM 802.11 modes.

## 1.2 IEEE 802.11ax RU Target Powers

### 1.2.1 Maximum 802.11ax RU WLAN Output Power

| | | SISO (ANT1/2) /in dBm | | | | MIMO (ALL) /in dBm | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tones | | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** |
| | | Ch & RU index | | | | | | | |
| 26T | Maximum | 14 | 11 | 11 | 11 | 14 | 11 | 11 | 11 |
| | Nominal | 13 | 10 | 10 | 10 | 13 | 10 | 10 | 10 |
| 52T | Maximum | 15 | 13 | 12 | 11 | 15 | 13 | 12 | 11 |
| | Nominal | 14 | 12 | 11 | 10 | 14 | 12 | 11 | 10 |
| 106T | Maximum | 16 | 15 | 13 | 12 | 16 | 15 | 13 | 12 |
| | Nominal | 15 | 14 | 12 | 11 | 15 | 14 | 12 | 11 |
| 242T | Maximum | 17<br>ch 1: 16,<br>ch 11: 15 | 16 | 14 | 13 | 17<br>ch 1: 16,<br>ch 11: 15 | 16 | 14 | 13 |
| | Nominal | 16<br>ch 1: 15,<br>ch 11: 14 | 15 | 13 | 12 | 16<br>ch 1: 15,<br>ch 11: 14 | 15 | 13 | 12 |
| 484T | Maximum | | | 14 | 13 | | | 14 | 13 |
| | Nominal | | | 13 | 12 | | | 13 | 12 |
| 996T | Maximum | | | | 13 | | | | 13 |
| | Nominal | | | | 12 | | | | 12 |



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## 1.2.2 Reduced 802.11ax RU WLAN Output Power

| | | SISO (ANT1/2) /in dBm | | | | MIMO (ALL) /in dBm | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tones | | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** |
| | | Ch & RU index | | | | | | | |
| 26T | Maximum | 14 | 11 | 11 | 11 | 14 | 11 | 11 | 11 |
| | Nominal | 13 | 10 | 10 | 10 | 13 | 10 | 10 | 10 |
| 52T | Maximum | 15 | 13 | 12 | 11 | 15 | 13 | 12 | 11 |
| | Nominal | 14 | 12 | 11 | 10 | 14 | 12 | 11 | 10 |
| 106T | Maximum | 16 | 14 | 13 | 12 | 16 | 15 | 13 | 12 |
| | Nominal | 15 | 13 | 12 | 11 | 15 | 14 | 12 | 11 |
| 242T | Maximum | 17<br>ch 1: 16,<br>ch 11: 15 | 14 | 14 | 13 | 17<br>ch 1: 16,<br>ch 11: 15 | 16 | 14 | 13 |
| | Nominal | 16<br>ch 1: 15,<br>ch 11: 14 | 13 | 13 | 12 | 16<br>ch 1: 15,<br>ch 11: 14 | 15 | 13 | 12 |
| 484T | Maximum | | | 14 | 13 | | | 14 | 13 |
| | Nominal | | | 13 | 12 | | | 13 | 12 |
| 996T | Maximum | | | | 13 | | | | 13 |
| | Nominal | | | | 12 | | | | 12 |


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### 1.2.3 Maximum 802.11ax RU WLAN Output Power During Conditions with Simultaneous 2.4 GHz WLAN and 5 GHz WLAN

| | | SISO (ANT1/2) /in dBm | | | | MIMO (ALL) /in dBm | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tones | | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** |
| | | Ch & RU index | | | | | | | |
| 26T | Maximum | 14 | 11 | 11 | 11 | 14 | 11 | 11 | 11 |
| | Nominal | 13 | 10 | 10 | 10 | 13 | 10 | 10 | 10 |
| 52T | Maximum | 15 | 13 | 12 | 11 | 15 | 13 | 12 | 11 |
| | Nominal | 14 | 12 | 11 | 10 | 14 | 12 | 11 | 10 |
| 106T | Maximum | 16 | 14 | 13 | 12 | 16 | 15 | 13 | 12 |
| | Nominal | 15 | 13 | 12 | 11 | 15 | 14 | 12 | 11 |
| 242T | Maximum | 17<br>ch 1: 16, ch 11, 15 | 14 | 14 | 13 | 17<br>ch 1: 16, ch 11, 15 | 16 | 14 | 13 |
| | Nominal | 16<br>ch 1: 15, ch 11: 14 | 13 | 13 | 12 | 16<br>ch 1: 15, ch 11: 14 | 15 | 13 | 12 |
| 484T | Maximum | | | 14 | 13 | | | 14 | 13 |
| | Nominal | | | 13 | 12 | | | 13 | 12 |
| 996T | Maximum | | | | 13 | | | | 13 |
| | Nominal | | | | 12 | | | | 12 |


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## 1.2.4 Reduced 802.11ax RU WLAN Output Power During Conditions with Simultaneous 2.4 GHz WLAN and 5 GHz WLAN

| | | SISO (ANT1/2) /in dBm | | | | MIMO (ALL) /in dBm | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tones | | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** | **2.4G** | **5G/20Mhz** | **5G/40Mhz** | **5G/80Mhz** |
| | | Ch & RU index | | | | | | | |
| 26T | Maximum | 14 | 11 | 11 | 11 | 14 | 11 | 11 | 11 |
| | Nominal | 13 | 10 | 10 | 10 | 13 | 10 | 10 | 10 |
| 52T | Maximum | 14 | 13 | 12 | 11 | 15 | 13 | 12 | 11 |
| | Nominal | 13 | 12 | 11 | 10 | 14 | 12 | 11 | 10 |
| 106T | Maximum | 14 | 14 | 13 | 12 | 16 | 15 | 13 | 12 |
| | Nominal | 13 | 13 | 12 | 11 | 15 | 14 | 12 | 11 |
| 242T | Maximum | 14 | 14 | 14 | 13 | 17<br>ch 1: 16,<br>ch 11: 15 | 16 | 14 | 13 |
| | Nominal | 13 | 13 | 13 | 12 | 16<br>ch 1: 15,<br>ch 11: 14 | 15 | 13 | 12 |
| 484T | Maximum | | | 14 | 13 | | | 14 | 13 |
| | Nominal | | | 13 | 12 | | | 13 | 12 |
| 996T | Maximum | | | | 13 | | | | 13 |
| | Nominal | | | | 12 | | | | 12 |


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## 1.3 IEEE 802.11ax Measured Powers

**Table 1**
**Maximum 2.4 GHz 802.11ax RU Output Power – Ant 1**

| RU Index | Tones | Ch. 1 | Ch. 2 | Ch. 6 | Ch. 10 | Ch. 11 |
|---|---|---|---|---|---|---|
| | | Average | Average | Average | Average | Average |
| 0 | 26 | 13.7 | | 13.63 | | 13.35 |
| 4 | 26 | 13.67 | | 13.58 | | 13.69 |
| 8 | 26 | 13.45 | | 13.49 | | 13.79 |
| 37 | 52 | 14.84 | | 14.63 | | 14.88 |
| 38 | 52 | 14.43 | | 14.69 | | 14.65 |
| 40 | 52 | 14.92 | | 14.55 | | 14.52 |
| 53 | 106 | 15.32 | | 15.79 | | 15.59 |
| 54 | 106 | 15.7 | | 15.54 | | 15.41 |
| 61 | 242 | 15.41 | 16.65 | 16.51 | 16.78 | 14.79 |

**Table 2**
**Maximum 2.4 GHz 802.11ax RU Output Power – Ant 2**

| RU Index | Tones | Ch. 1 | Ch. 2 | Ch. 6 | Ch. 10 | Ch. 11 |
|---|---|---|---|---|---|---|
| | | Average | Average | Average | Average | Average |
| 0 | 26 | 13.53 | | 13.87 | | 13.71 |
| 4 | 26 | 13.63 | | 13.82 | | 13.89 |
| 8 | 26 | 13.98 | | 13.73 | | 13.87 |
| 37 | 52 | 14.56 | | 14.58 | | 14.59 |
| 38 | 52 | 14.6 | | 14.86 | | 14.82 |
| 40 | 52 | 14.72 | | 14.79 | | 14.65 |
| 53 | 106 | 15.84 | | 15.92 | | 15.79 |
| 54 | 106 | 15.46 | | 15.37 | | 15.57 |
| 61 | 242 | 15.69 | 16.73 | 16.74 | 16.73 | 14.73 |


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**Table 3**
**Maximum 5 GHz 802.11ax RU Output Power – Ant 1**

| 5GHz - 20MHz | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RU Index | Tones | UNII 1 | | | UNII 2A | | | UNII 2C | | | UNII 3 | | |
| | | Ch. 36 | Ch. 40 | Ch. 48 | Ch. 52 | Ch. 56 | Ch. 64 | Ch. 100 | Ch. 120 | Ch. 144 | Ch. 149 | Ch. 157 | U3 - Ch. 165 |
| | | Average | Average | Average | Average | Average | Average | Average | Average | Average | Average | Average | Average |
| 0 | 26 | 10.87 | 10.85 | 10.85 | 10.52 | 10.70 | 10.88 | 10.53 | 10.81 | 10.94 | 10.48 | 10.83 | 10.70 |
| 4 | 26 | 10.75 | 10.76 | 10.77 | 10.98 | 10.46 | 10.74 | 10.83 | 10.64 | 10.76 | 10.69 | 10.96 | 10.79 |
| 8 | 26 | 10.64 | 10.64 | 10.77 | 10.93 | 10.58 | 10.55 | 10.69 | 10.54 | 10.59 | 10.87 | 10.50 | 10.84 |
| 37 | 52 | 12.91 | 12.89 | 12.96 | 12.64 | 12.73 | 12.94 | 12.56 | 12.91 | 12.85 | 12.86 | 12.75 | 12.62 |
| 38 | 52 | 12.60 | 12.58 | 12.63 | 12.84 | 12.95 | 12.69 | 12.61 | 12.95 | 12.97 | 12.87 | 12.50 | 12.94 |
| 40 | 52 | 12.71 | 12.70 | 12.77 | 12.86 | 12.58 | 12.61 | 12.66 | 12.90 | 12.87 | 12.70 | 12.54 | 12.74 |
| 53 | 106 | 14.98 | 14.44 | 14.50 | 14.70 | 14.70 | 14.88 | 14.97 | 14.65 | 14.64 | 14.85 | 14.88 | 14.74 |
| 54 | 106 | 14.73 | 14.77 | 14.75 | 14.73 | 14.91 | 14.42 | 14.51 | 14.64 | 14.70 | 14.72 | 14.99 | 14.81 |
| 61 | 242 | 15.55 | 15.59 | 15.61 | 15.72 | 15.82 | 15.93 | 15.81 | 15.42 | 15.40 | 15.64 | 15.73 | 15.66 |

| 5GHz - 40MHz | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| RU Index | Tones | UNII 1 | | UNII 2A | | UNII 2C | | | UNII 3 | |
| | | Ch. 38 | Ch. 46 | Ch. 54 | Ch. 62 | Ch. 102 | Ch. 118 | Ch. 142 | Ch. 151 | Ch. 159 |
| | | Average | Average | Average | Average | Average | Average | Average | Average | Average |
| 0 | 26 | 10.66 | 10.67 | 10.95 | 10.67 | 10.72 | 10.81 | 10.97 | 10.52 | 10.94 |
| 8 | 26 | 10.65 | 10.67 | 10.77 | 10.92 | 10.86 | 10.84 | 10.63 | 10.70 | 10.68 |
| 17 | 26 | 10.57 | 10.63 | 10.83 | 10.85 | 10.99 | 10.85 | 10.55 | 10.70 | 10.76 |
| 37 | 52 | 11.47 | 11.59 | 11.93 | 11.96 | 11.73 | 11.87 | 11.97 | 11.68 | 11.61 |
| 40 | 52 | 11.70 | 11.75 | 11.91 | 11.66 | 11.94 | 11.93 | 11.63 | 11.67 | 11.63 |
| 44 | 52 | 11.67 | 11.89 | 11.54 | 11.60 | 11.64 | 11.51 | 11.69 | 11.85 | 11.45 |
| 53 | 106 | 12.68 | 12.73 | 12.96 | 12.70 | 12.93 | 12.56 | 12.78 | 12.88 | 12.49 |
| 54 | 106 | 12.58 | 12.60 | 12.93 | 12.45 | 12.67 | 12.73 | 12.44 | 12.61 | 12.59 |
| 56 | 106 | 12.90 | 12.99 | 12.74 | 12.68 | 12.74 | 12.69 | 12.84 | 12.97 | 12.67 |
| 61 | 242 | 13.66 | 13.68 | 13.91 | 13.47 | 13.65 | 13.83 | 13.93 | 13.97 | 13.87 |
| 62 | 242 | 13.52 | 13.67 | 13.96 | 13.41 | 13.88 | 13.81 | 13.89 | 13.77 | 13.97 |
| 65 | 484 | 13.61 | 13.89 | 13.60 | 13.74 | 13.45 | 13.56 | 13.61 | 13.74 | 13.68 |

| 5GHz - 80MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| RU Index | Tones | UNII 1 | UNII 2A | UNII 2C | | | UNII 3 |
| | | Ch. 42 | Ch. 58 | Ch. 106 | Ch. 122 | Ch. 138 | Ch. 155 |
| | | Average | Average | Average | Average | Average | Average |
| 0 | 26 | 10.83 | 10.48 | 10.68 | 10.72 | 10.84 | 10.90 |
| 17 | 26 | 10.71 | 10.92 | 10.85 | 10.80 | 10.87 | 10.63 |
| 36 | 26 | 10.79 | 10.90 | 10.83 | 10.88 | 10.96 | 10.60 |
| 37 | 52 | 10.63 | 10.69 | 10.84 | 10.85 | 10.51 | 10.49 |
| 44 | 52 | 10.64 | 10.95 | 10.85 | 10.70 | 10.84 | 10.65 |
| 52 | 52 | 10.88 | 10.54 | 10.92 | 10.99 | 10.50 | 10.80 |
| 53 | 106 | 11.78 | 11.97 | 11.90 | 11.94 | 11.58 | 11.62 |
| 56 | 106 | 11.65 | 11.98 | 11.88 | 11.89 | 11.89 | 11.72 |
| 60 | 106 | 11.99 | 11.67 | 11.59 | 11.51 | 11.77 | 11.91 |
| 61 | 242 | 12.67 | 12.73 | 12.68 | 12.61 | 12.77 | 12.82 |
| 62 | 242 | 12.43 | 12.49 | 12.95 | 12.96 | 12.97 | 12.68 |
| 64 | 242 | 12.59 | 12.85 | 12.80 | 12.78 | 12.84 | 12.44 |
| 65 | 484 | 12.80 | 12.92 | 12.93 | 12.91 | 12.93 | 12.75 |
| 66 | 484 | 12.91 | 12.94 | 12.55 | 12.62 | 12.77 | 12.74 |
| 67 | 996 | 12.95 | 12.56 | 12.86 | 12.98 | 12.94 | 12.64 |


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**Table 4**
**Maximum 5 GHz 802.11ax RU Output Power – Ant 2**

| 5GHz - 20MHz | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RU Index | Tones | UNII 1 | | | UNII 2A | | | UNII 2C | | | UNII 3 | | |
| | | Ch. 36 | Ch. 40 | Ch. 48 | Ch. 52 | Ch. 56 | Ch. 64 | Ch. 100 | Ch. 120 | Ch. 144 | Ch. 149 | Ch. 157 | U3 - Ch. 165 |
| | | Average | Average | Average | Average | Average | Average | Average | Average | Average | Average | Average | Average |
| 0 | 26 | 10.48 | 10.44 | 10.53 | 10.87 | 10.86 | 10.99 | 10.68 | 10.86 | 10.60 | 10.73 | 10.50 | 10.70 |
| 4 | 26 | 10.82 | 10.78 | 10.84 | 10.54 | 10.69 | 10.69 | 10.90 | 10.97 | 10.77 | 10.79 | 10.72 | 10.63 |
| 8 | 26 | 10.75 | 10.70 | 10.71 | 10.95 | 10.98 | 10.61 | 10.64 | 10.68 | 10.48 | 10.49 | 10.66 | 10.60 |
| 37 | 52 | 12.43 | 12.50 | 12.44 | 12.71 | 12.76 | 12.85 | 12.68 | 12.92 | 12.56 | 12.63 | 12.78 | 12.85 |
| 38 | 52 | 12.65 | 12.54 | 12.71 | 12.98 | 12.44 | 12.53 | 12.86 | 12.61 | 12.75 | 12.68 | 12.95 | 12.44 |
| 40 | 52 | 12.61 | 12.61 | 12.61 | 12.80 | 12.92 | 12.53 | 12.60 | 12.80 | 12.49 | 12.73 | 12.57 | 12.61 |
| 53 | 106 | 14.41 | 14.41 | 14.86 | 14.67 | 14.77 | 14.83 | 14.58 | 14.91 | 14.59 | 14.90 | 14.74 | 14.70 |
| 54 | 106 | 14.57 | 14.54 | 14.47 | 14.91 | 14.91 | 14.49 | 14.62 | 14.86 | 14.57 | 14.67 | 14.57 | 14.64 |
| 61 | 242 | 15.49 | 15.51 | 15.94 | 15.74 | 15.86 | 15.91 | 15.58 | 15.83 | 15.95 | 15.81 | 15.71 | 15.72 |

| 5GHz - 40MHz | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| RU Index | Tones | UNII 1 | | UNII 2A | | UNII 2C | | | UNII 3 | |
| | | Ch. 38 | Ch. 46 | Ch. 54 | Ch. 62 | Ch. 102 | Ch. 118 | Ch. 142 | Ch. 151 | Ch. 159 |
| | | Average | Average | Average | Average | Average | Average | Average | Average | Average |
| 0 | 26 | 10.53 | 10.93 | 10.73 | 10.79 | 10.64 | 10.66 | 10.56 | 10.62 | 10.70 |
| 9 | 26 | 10.89 | 10.83 | 10.77 | 10.77 | 10.95 | 10.96 | 10.66 | 10.65 | 10.94 |
| 17 | 26 | 10.74 | 10.71 | 10.85 | 10.82 | 10.88 | 10.61 | 10.40 | 10.51 | 10.49 |
| 37 | 52 | 11.71 | 11.66 | 11.44 | 11.51 | 11.90 | 11.89 | 11.83 | 11.80 | 11.56 |
| 40 | 52 | 11.91 | 11.83 | 11.41 | 11.52 | 11.72 | 11.63 | 11.44 | 11.50 | 11.56 |
| 44 | 52 | 11.81 | 11.87 | 11.96 | 11.52 | 11.50 | 11.89 | 11.64 | 11.54 | 11.80 |
| 53 | 106 | 12.86 | 12.87 | 12.62 | 12.67 | 12.53 | 12.57 | 12.43 | 12.79 | 12.78 |
| 55 | 106 | 12.75 | 12.79 | 12.61 | 12.69 | 12.87 | 12.78 | 12.44 | 12.91 | 12.70 |
| 56 | 106 | 12.88 | 12.93 | 12.68 | 12.69 | 12.65 | 12.45 | 12.88 | 12.71 | 12.58 |
| 61 | 242 | 13.82 | 13.80 | 13.77 | 13.92 | 13.77 | 13.76 | 13.56 | 13.95 | 13.87 |
| 62 | 242 | 13.63 | 13.74 | 13.74 | 13.81 | 13.92 | 13.83 | 13.50 | 13.91 | 13.91 |
| 65 | 484 | 13.83 | 13.42 | 13.84 | 13.71 | 13.60 | 13.58 | 13.55 | 13.72 | 13.86 |

| 5GHz - 80MHz | | | | | | | |
|---|---|---|---|---|---|---|---|
| RU Index | Tones | UNII 1 | UNII 2A | UNII 2C | | | UNII 3 |
| | | Ch. 42 | Ch. 58 | Ch. 106 | Ch. 122 | Ch. 138 | Ch. 155 |
| | | Average | Average | Average | Average | Average | Average |
| 0 | 26 | 10.92 | 10.51 | 10.64 | 10.65 | 10.63 | 10.57 |
| 18 | 26 | 10.75 | 10.91 | 10.80 | 10.70 | 10.56 | 10.99 |
| 36 | 26 | 10.99 | 10.75 | 10.59 | 10.55 | 10.56 | 10.43 |
| 37 | 52 | 10.64 | 10.70 | 10.69 | 10.77 | 10.81 | 10.95 |
| 44 | 52 | 10.63 | 10.86 | 10.66 | 10.52 | 10.92 | 10.75 |
| 52 | 52 | 10.68 | 10.91 | 10.71 | 10.62 | 10.78 | 10.54 |
| 53 | 106 | 11.83 | 11.51 | 11.92 | 11.99 | 11.91 | 11.73 |
| 56 | 106 | 11.57 | 11.79 | 11.64 | 11.61 | 11.97 | 11.71 |
| 60 | 106 | 11.79 | 11.52 | 11.97 | 11.86 | 11.52 | 11.68 |
| 61 | 242 | 12.58 | 12.75 | 12.54 | 12.62 | 12.54 | 12.76 |
| 63 | 242 | 12.80 | 12.51 | 12.50 | 12.47 | 12.77 | 12.50 |
| 64 | 242 | 12.96 | 12.70 | 12.71 | 12.59 | 12.78 | 12.46 |
| 65 | 484 | 12.87 | 12.58 | 12.94 | 12.96 | 12.84 | 12.56 |
| 66 | 484 | 12.87 | 12.62 | 12.54 | 12.34 | 12.79 | 12.53 |
| 67 | 996 | 12.66 | 12.62 | 12.87 | 12.83 | 12.62 | 12.88 |


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