

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.80   | 66.25  | 14.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.98   | 70.12  | 17.14 |      | 150.0 |         |
|           |                                                                   | Z | 0.82   | 67.01  | 15.08 |      | 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 | 122.22 | 31.81 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 122.28 | 31.77 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.03 | 31.78 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 89.65  | 108.48 | 25.59 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 108.89 | 25.35 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 107.86 | 24.57 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 22.51  | 90.76  | 20.66 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 99.99  | 106.28 | 24.09 |      | 80.0  |         |
|           |                                                                   | Z | 26.96  | 91.52  | 20.00 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 120.48 | 30.86 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.55 | 30.82 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.00 | 30.69 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 43.12  | 99.66  | 23.41 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 108.45 | 25.13 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 107.36 | 24.32 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 14.46  | 85.63  | 19.16 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 47.56  | 97.97  | 22.07 |      | 80.0  |         |
|           |                                                                   | Z | 13.86  | 84.47  | 18.03 |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 120.66 | 30.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.74 | 30.91 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.22 | 30.79 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 51.08  | 101.72 | 23.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 108.59 | 25.19 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 107.51 | 24.40 |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 14.72  | 85.83  | 19.22 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 49.52  | 98.40  | 22.18 |      | 80.0  |         |
|           |                                                                   | Z | 14.20  | 84.72  | 18.10 |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 120.68 | 30.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.76 | 30.91 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.24 | 30.79 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 51.16  | 101.71 | 23.92 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 108.54 | 25.17 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 107.46 | 24.37 |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 14.72  | 85.81  | 19.20 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 49.74  | 98.42  | 22.17 |      | 80.0  |         |
|           |                                                                   | Z | 14.09  | 84.62  | 18.06 |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 120.66 | 30.93 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.74 | 30.90 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.21 | 30.78 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 50.22  | 101.50 | 23.87 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 108.55 | 25.17 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 107.47 | 24.37 |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 14.54  | 85.69  | 19.17 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 48.73  | 98.21  | 22.12 |      | 80.0  |         |
|           |                                                                   | Z | 13.88  | 84.48  | 18.02 |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 44.75  | 100.06 | 23.49 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 100.00 | 108.41 | 25.10 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 107.31 | 24.29 |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 14.36  | 85.53  | 19.11 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 47.45  | 97.89  | 22.03 |      | 80.0 |         |
|           |                                                                     | Z | 13.59  | 84.23  | 17.94 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 11.68  | 89.98  | 24.75 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 15.50  | 94.63  | 26.20 |      | 80.0 |         |
|           |                                                                     | Z | 19.65  | 98.59  | 27.01 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 11.85  | 85.61  | 21.94 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 17.00  | 90.84  | 23.50 |      | 80.0 |         |
|           |                                                                     | Z | 18.94  | 92.21  | 23.43 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 10.48  | 83.24  | 20.87 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 14.56  | 87.91  | 22.29 |      | 80.0 |         |
|           |                                                                     | Z | 14.75  | 87.95  | 21.81 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.86   | 75.76  | 18.52 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.17   | 79.38  | 19.99 |      | 80.0 |         |
|           |                                                                     | Z | 5.29   | 77.51  | 18.93 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 8.11   | 80.27  | 20.27 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.67   | 82.93  | 21.21 |      | 80.0 |         |
|           |                                                                     | Z | 9.18   | 82.16  | 20.45 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 7.59   | 79.10  | 19.86 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.93   | 81.58  | 20.76 |      | 80.0 |         |
|           |                                                                     | Z | 8.26   | 80.48  | 19.89 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.18   | 76.73  | 19.54 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.33   | 79.90  | 20.81 |      | 80.0 |         |
|           |                                                                     | Z | 5.63   | 78.69  | 20.17 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.50   | 71.88  | 17.42 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.03   | 73.65  | 18.23 |      | 80.0 |         |
|           |                                                                     | Z | 4.58   | 72.73  | 17.57 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.49   | 71.51  | 17.27 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.98   | 73.17  | 18.04 |      | 80.0 |         |
|           |                                                                     | Z | 4.53   | 72.24  | 17.37 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.30   | 75.62  | 19.60 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.12   | 78.00  | 20.55 |      | 80.0 |         |
|           |                                                                     | Z | 5.50   | 76.96  | 20.13 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.67   | 71.32  | 18.11 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.02   | 72.60  | 18.67 |      | 80.0 |         |
|           |                                                                     | Z | 4.67   | 71.98  | 18.34 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.75   | 71.05  | 18.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.07   | 72.23  | 18.56 |      | 80.0 |         |
|           |                                                                     | Z | 4.74   | 71.67  | 18.24 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.25   | 73.59  | 18.95 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.80   | 75.30  | 19.65 |      | 80.0 |         |
|           |                                                                     | Z | 5.32   | 74.46  | 19.33 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.94   | 70.41  | 17.99 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.21   | 71.41  | 18.42 |      | 80.0 |         |
|           |                                                                     | Z | 4.89   | 70.85  | 18.17 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.00 | 70.23 | 17.94 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.25 | 71.18 | 18.35 |      | 80.0 |         |
|           |                                                                      | Z | 4.94 | 70.65 | 18.11 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.77 | 75.18 | 19.38 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.51 | 77.24 | 20.19 |      | 80.0 |         |
|           |                                                                      | Z | 5.91 | 76.23 | 19.83 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.02 | 70.92 | 18.19 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.32 | 71.99 | 18.65 |      | 80.0 |         |
|           |                                                                      | Z | 4.98 | 71.36 | 18.38 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.07 | 70.56 | 18.09 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.34 | 71.53 | 18.51 |      | 80.0 |         |
|           |                                                                      | Z | 5.01 | 70.96 | 18.27 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.86 | 72.54 | 16.62 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.99 | 76.26 | 18.22 |      | 80.0 |         |
|           |                                                                      | Z | 3.91 | 73.12 | 16.47 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.11 | 67.19 | 13.57 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.71 | 69.63 | 14.80 |      | 80.0 |         |
|           |                                                                      | Z | 2.77 | 66.23 | 12.69 |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.05 | 66.68 | 13.23 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.62 | 69.02 | 14.43 |      | 80.0 |         |
|           |                                                                      | Z | 2.68 | 65.57 | 12.26 |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.09 | 75.81 | 19.42 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.01 | 78.50 | 20.51 |      | 80.0 |         |
|           |                                                                      | Z | 5.40 | 77.46 | 19.99 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.57 | 71.58 | 17.65 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.00 | 73.09 | 18.34 |      | 80.0 |         |
|           |                                                                      | Z | 4.62 | 72.38 | 17.84 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.61 | 71.37 | 17.53 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.03 | 72.81 | 18.20 |      | 80.0 |         |
|           |                                                                      | Z | 4.65 | 72.12 | 17.70 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.24 | 75.43 | 19.52 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.04 | 77.79 | 20.47 |      | 80.0 |         |
|           |                                                                      | Z | 5.43 | 76.74 | 20.03 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.65 | 71.24 | 18.06 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.00 | 72.52 | 18.63 |      | 80.0 |         |
|           |                                                                      | Z | 4.65 | 71.88 | 18.28 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.72 | 70.97 | 17.98 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.05 | 72.14 | 18.51 |      | 80.0 |         |
|           |                                                                      | Z | 4.71 | 71.57 | 18.19 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.72 | 75.04 | 19.31 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.46 | 77.10 | 20.12 |      | 80.0 |         |
|           |                                                                      | Z | 5.86 | 76.07 | 19.76 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.00 | 70.86 | 18.16 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.30 | 71.93 | 18.61 |      | 80.0 |         |
|           |                                                                      | Z | 4.96 | 71.29 | 18.35 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.05 | 70.49 | 18.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.32 | 71.47 | 18.47 |      | 80.0  |         |
|           |                                                                     | Z | 5.00 | 70.89 | 18.22 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 5.79 | 73.26 | 18.66 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.30 | 74.77 | 19.26 |      | 80.0  |         |
|           |                                                                     | Z | 5.83 | 73.95 | 18.98 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.44 | 70.40 | 18.06 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.70 | 71.30 | 18.43 |      | 80.0  |         |
|           |                                                                     | Z | 5.37 | 70.70 | 18.20 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.47 | 70.09 | 17.99 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.70 | 70.93 | 18.33 |      | 80.0  |         |
|           |                                                                     | Z | 5.39 | 70.37 | 18.12 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 6.19 | 74.99 | 19.17 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.94 | 76.94 | 19.92 |      | 80.0  |         |
|           |                                                                     | Z | 6.32 | 75.89 | 19.56 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.37 | 70.83 | 18.21 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.66 | 71.83 | 18.62 |      | 80.0  |         |
|           |                                                                     | Z | 5.31 | 71.14 | 18.36 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.34 | 70.33 | 18.07 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.59 | 71.24 | 18.45 |      | 80.0  |         |
|           |                                                                     | Z | 5.27 | 70.61 | 18.21 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.92 | 62.50 | 13.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.97 | 63.73 | 15.04 |      | 150.0 |         |
|           |                                                                     | Z | 0.92 | 62.80 | 14.21 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.48 | 67.10 | 14.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.75 | 75.19 | 19.48 |      | 150.0 |         |
|           |                                                                     | Z | 0.51 | 68.45 | 15.49 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.76 | 63.99 | 14.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.84 | 66.19 | 15.95 |      | 150.0 |         |
|           |                                                                     | Z | 0.76 | 64.44 | 14.58 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.60 | 66.62 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.64 | 66.98 | 16.27 |      | 150.0 |         |
|           |                                                                     | Z | 4.55 | 66.74 | 16.11 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.82 | 66.92 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.86 | 67.27 | 16.41 |      | 150.0 |         |
|           |                                                                     | Z | 4.75 | 67.01 | 16.25 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.67 | 66.88 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.71 | 67.25 | 16.33 |      | 150.0 |         |
|           |                                                                     | Z | 4.60 | 66.96 | 16.16 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.60 | 66.87 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.64 | 67.26 | 16.32 |      | 150.0 |         |
|           |                                                                     | Z | 4.53 | 66.96 | 16.15 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.65 | 66.87 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.69 | 67.24 | 16.36 |      | 150.0 |         |
|           |                                                                     | Z | 4.59 | 67.01 | 16.21 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.52 | 66.75 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.56 | 67.14 | 16.21 |      | 150.0 |         |
|           |                                                            | Z | 4.46 | 66.87 | 16.05 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.60 | 66.82 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.64 | 67.20 | 16.34 |      | 150.0 |         |
|           |                                                            | Z | 4.53 | 66.94 | 16.19 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.56 | 65.84 | 15.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.60 | 66.23 | 15.93 |      | 150.0 |         |
|           |                                                            | Z | 4.51 | 65.97 | 15.77 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.75 | 66.24 | 15.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.80 | 66.63 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 4.69 | 66.35 | 15.92 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.67 | 66.20 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.71 | 66.61 | 16.03 |      | 150.0 |         |
|           |                                                            | Z | 4.61 | 66.31 | 15.86 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.69 | 66.23 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.73 | 66.63 | 16.07 |      | 150.0 |         |
|           |                                                            | Z | 4.62 | 66.33 | 15.90 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.69 | 66.23 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.73 | 66.63 | 16.07 |      | 150.0 |         |
|           |                                                            | Z | 4.62 | 66.33 | 15.90 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.69 | 66.36 | 15.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.74 | 66.78 | 16.09 |      | 150.0 |         |
|           |                                                            | Z | 4.62 | 66.45 | 15.91 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.54 | 66.21 | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.59 | 66.65 | 16.04 |      | 150.0 |         |
|           |                                                            | Z | 4.48 | 66.30 | 15.84 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.70 | 66.25 | 15.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.75 | 66.65 | 16.04 |      | 150.0 |         |
|           |                                                            | Z | 4.63 | 66.37 | 15.88 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.21 | 66.43 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.24 | 66.77 | 16.11 |      | 150.0 |         |
|           |                                                            | Z | 5.16 | 66.50 | 15.98 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.28 | 66.56 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.31 | 66.91 | 16.16 |      | 150.0 |         |
|           |                                                            | Z | 5.22 | 66.66 | 16.05 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.15 | 66.54 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.18 | 66.90 | 16.14 |      | 150.0 |         |
|           |                                                            | Z | 5.09 | 66.61 | 16.01 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.21 | 66.53 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.24 | 66.87 | 16.13 |      | 150.0 |         |
|           |                                                            | Z | 5.15 | 66.59 | 16.00 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.33 | 66.61 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.36 | 66.94 | 16.20 |      | 150.0 |         |
|           |                                                            | Z | 5.25 | 66.64 | 16.07 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.23 | 66.55 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.26 | 66.88 | 16.19 |      | 150.0 |         |
|           |                                                            | Z | 5.17 | 66.62 | 16.07 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.21 | 66.44 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.24 | 66.80 | 16.15 |      | 150.0 |         |
|           |                                                    | Z | 5.14 | 66.49 | 16.00 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.37 | 66.51 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.83 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.30 | 66.57 | 16.06 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.45 | 66.53 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.48 | 66.85 | 16.20 |      | 150.0 |         |
|           |                                                    | Z | 5.39 | 66.62 | 16.10 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.50 | 66.54 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.52 | 66.88 | 16.09 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 66.61 | 15.97 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.72 | 66.99 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.73 | 67.26 | 16.22 |      | 150.0 |         |
|           |                                                    | Z | 5.66 | 67.05 | 16.14 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.59 | 66.83 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.62 | 67.16 | 16.19 |      | 150.0 |         |
|           |                                                    | Z | 5.54 | 66.86 | 16.06 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.68 | 66.90 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.71 | 67.24 | 16.22 |      | 150.0 |         |
|           |                                                    | Z | 5.62 | 66.94 | 16.09 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 6.05 | 68.17 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.97 | 68.18 | 16.66 |      | 150.0 |         |
|           |                                                    | Z | 5.94 | 68.05 | 16.62 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.61 | 66.78 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.64 | 67.11 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.56 | 66.84 | 16.06 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.63 | 66.87 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.65 | 67.20 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.56 | 66.89 | 16.05 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.52 | 66.62 | 15.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.55 | 66.97 | 16.08 |      | 150.0 |         |
|           |                                                    | Z | 5.47 | 66.67 | 15.95 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.62 | 66.68 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.65 | 67.02 | 16.13 |      | 150.0 |         |
|           |                                                    | Z | 5.56 | 66.73 | 16.01 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.90 | 66.94 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 67.25 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.86 | 66.99 | 16.08 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.05 | 67.28 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.07 | 67.58 | 16.32 |      | 150.0 |         |
|           |                                                    | Z | 6.00 | 67.31 | 16.21 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.07 | 67.30 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.08 | 67.59 | 16.32 |      | 150.0 |         |
|           |                                                    | Z | 6.02 | 67.35 | 16.22 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.05 | 67.25 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.06 | 67.56 | 16.33 |      | 150.0 |         |
|           |                                                    | Z | 5.99 | 67.27 | 16.21 |      | 150.0 |         |

|           |                                                                 |   |       |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.11  | 67.46  | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.12  | 67.74  | 16.43 |      | 150.0 |         |
|           |                                                                 | Z | 6.05  | 67.45  | 16.31 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.10  | 67.26  | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.12  | 67.59  | 16.39 |      | 150.0 |         |
|           |                                                                 | Z | 6.04  | 67.28  | 16.26 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 6.01  | 67.23  | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.03  | 67.54  | 16.41 |      | 150.0 |         |
|           |                                                                 | Z | 5.96  | 67.25  | 16.29 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.19  | 67.75  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.18  | 68.00  | 16.64 |      | 150.0 |         |
|           |                                                                 | Z | 6.10  | 67.71  | 16.52 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.54  | 68.34  | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.48  | 68.44  | 16.80 |      | 150.0 |         |
|           |                                                                 | Z | 6.47  | 68.36  | 16.79 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.95  | 66.78  | 16.29 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.98  | 67.12  | 16.46 |      | 150.0 |         |
|           |                                                                 | Z | 4.89  | 66.87  | 16.31 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.21  | 67.26  | 16.62 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.24  | 67.59  | 16.77 |      | 150.0 |         |
|           |                                                                 | Z | 5.13  | 67.34  | 16.63 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 5.04  | 67.13  | 16.44 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.08  | 67.47  | 16.61 |      | 150.0 |         |
|           |                                                                 | Z | 4.97  | 67.19  | 16.45 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.06  | 67.49  | 16.77 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.10  | 67.83  | 16.93 |      | 150.0 |         |
|           |                                                                 | Z | 4.99  | 67.57  | 16.79 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.95  | 66.87  | 16.20 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.99  | 67.23  | 16.38 |      | 150.0 |         |
|           |                                                                 | Z | 4.89  | 66.97  | 16.23 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 5.00  | 67.52  | 16.80 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.04  | 67.85  | 16.94 |      | 150.0 |         |
|           |                                                                 | Z | 4.94  | 67.63  | 16.84 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.05  | 67.37  | 16.74 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.09  | 67.70  | 16.90 |      | 150.0 |         |
|           |                                                                 | Z | 4.98  | 67.49  | 16.78 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.29  | 65.24  | 15.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.38  | 66.75  | 16.61 |      | 130.0 |         |
|           |                                                                 | Z | 1.28  | 65.57  | 15.79 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.31  | 65.82  | 15.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.41  | 67.45  | 17.00 |      | 130.0 |         |
|           |                                                                 | Z | 1.30  | 66.20  | 16.15 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 2.36  | 83.18  | 21.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 13.78 | 112.12 | 30.35 |      | 130.0 |         |
|           |                                                                 | Z | 3.43  | 89.56  | 23.26 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.49  | 71.50  | 18.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.79  | 75.21  | 20.51 |      | 130.0 |         |
|           |                                                                 | Z | 1.53  | 72.59  | 19.09 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.78 | 66.67 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 67.00 | 16.56 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.77 | 16.42 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.80 | 66.82 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.83 | 67.14 | 16.61 |      | 130.0 |         |
|           |                                                                 | Z | 4.74 | 66.92 | 16.48 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 5.03 | 67.15 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.06 | 67.47 | 16.78 |      | 130.0 |         |
|           |                                                                 | Z | 4.95 | 67.23 | 16.66 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.92 | 67.31 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.96 | 67.63 | 16.88 |      | 130.0 |         |
|           |                                                                 | Z | 4.85 | 67.39 | 16.75 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.70 | 66.68 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.74 | 67.05 | 16.28 |      | 130.0 |         |
|           |                                                                 | Z | 4.63 | 66.73 | 16.09 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.75 | 66.66 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.78 | 67.02 | 16.28 |      | 130.0 |         |
|           |                                                                 | Z | 4.67 | 66.74 | 16.10 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.83 | 67.37 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.87 | 67.72 | 16.84 |      | 130.0 |         |
|           |                                                                 | Z | 4.75 | 67.45 | 16.70 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.66 | 66.44 | 15.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.70 | 66.81 | 16.09 |      | 130.0 |         |
|           |                                                                 | Z | 4.57 | 66.49 | 15.89 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.78 | 66.67 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 67.00 | 16.56 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.77 | 16.42 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.80 | 66.82 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.83 | 67.14 | 16.61 |      | 130.0 |         |
|           |                                                                 | Z | 4.74 | 66.92 | 16.48 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 5.03 | 67.15 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.06 | 67.47 | 16.78 |      | 130.0 |         |
|           |                                                                 | Z | 4.95 | 67.23 | 16.66 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.92 | 67.31 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.96 | 67.63 | 16.88 |      | 130.0 |         |
|           |                                                                 | Z | 4.85 | 67.39 | 16.75 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.70 | 66.68 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.74 | 67.05 | 16.28 |      | 130.0 |         |
|           |                                                                 | Z | 4.63 | 66.73 | 16.09 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.75 | 66.66 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.78 | 67.02 | 16.28 |      | 130.0 |         |
|           |                                                                 | Z | 4.67 | 66.74 | 16.10 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.83 | 67.37 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.87 | 67.72 | 16.84 |      | 130.0 |         |
|           |                                                                 | Z | 4.75 | 67.45 | 16.70 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.66 | 66.44 | 15.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.70 | 66.81 | 16.09 |      | 130.0 |         |
|           |                                                                 | Z | 4.57 | 66.49 | 15.89 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.93 | 66.73 | 16.50 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.95 | 67.04 | 16.64 |      | 130.0 |         |
|           |                                                       | Z | 4.86 | 66.82 | 16.52 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.10 | 67.07 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.13 | 67.38 | 16.76 |      | 130.0 |         |
|           |                                                       | Z | 5.02 | 67.16 | 16.65 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 5.03 | 67.02 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.06 | 67.34 | 16.67 |      | 130.0 |         |
|           |                                                       | Z | 4.95 | 67.09 | 16.54 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.08 | 67.17 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.11 | 67.48 | 16.81 |      | 130.0 |         |
|           |                                                       | Z | 5.00 | 67.25 | 16.69 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.05 | 67.13 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.09 | 67.45 | 16.72 |      | 130.0 |         |
|           |                                                       | Z | 4.97 | 67.21 | 16.59 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.99 | 67.13 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.02 | 67.46 | 16.72 |      | 130.0 |         |
|           |                                                       | Z | 4.91 | 67.21 | 16.59 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.94 | 67.06 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.98 | 67.40 | 16.63 |      | 130.0 |         |
|           |                                                       | Z | 4.86 | 67.13 | 16.48 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.92 | 67.30 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.95 | 67.64 | 16.88 |      | 130.0 |         |
|           |                                                       | Z | 4.84 | 67.36 | 16.74 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.61 | 67.38 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.61 | 67.61 | 16.82 |      | 130.0 |         |
|           |                                                       | Z | 5.53 | 67.39 | 16.73 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.82 | 68.04 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.79 | 68.15 | 17.06 |      | 130.0 |         |
|           |                                                       | Z | 5.72 | 67.96 | 16.99 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.66 | 67.64 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.66 | 67.83 | 16.91 |      | 130.0 |         |
|           |                                                       | Z | 5.58 | 67.62 | 16.83 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.75 | 67.63 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.75 | 67.83 | 16.84 |      | 130.0 |         |
|           |                                                       | Z | 5.66 | 67.62 | 16.75 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.83 | 67.92 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.84 | 68.17 | 17.13 |      | 130.0 |         |
|           |                                                       | Z | 5.75 | 67.92 | 17.03 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.61 | 67.34 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.61 | 67.57 | 16.82 |      | 130.0 |         |
|           |                                                       | Z | 5.53 | 67.35 | 16.73 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.72 | 67.66 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.72 | 67.86 | 16.97 |      | 130.0 |         |
|           |                                                       | Z | 5.66 | 67.72 | 16.92 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.48 | 67.08 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.50 | 67.38 | 16.61 |      | 130.0 |         |
|           |                                                       | Z | 5.41 | 67.12 | 16.48 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.75 | 65.99 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.78 | 66.32 | 16.24 |      | 130.0 |         |
|           |                                                   | Z | 4.69 | 66.10 | 16.12 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.96 | 66.41 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.99 | 66.75 | 16.41 |      | 130.0 |         |
|           |                                                   | Z | 4.89 | 66.52 | 16.28 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.85 | 66.28 | 16.10 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.88 | 66.64 | 16.28 |      | 130.0 |         |
|           |                                                   | Z | 4.78 | 66.38 | 16.13 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.90 | 66.44 | 16.26 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.94 | 66.79 | 16.43 |      | 130.0 |         |
|           |                                                   | Z | 4.83 | 66.53 | 16.29 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.82 | 66.27 | 16.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.86 | 66.63 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 4.75 | 66.35 | 16.14 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.84 | 66.42 | 16.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.88 | 66.79 | 16.34 |      | 130.0 |         |
|           |                                                   | Z | 4.76 | 66.51 | 16.19 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.85 | 66.34 | 16.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.89 | 66.72 | 16.25 |      | 130.0 |         |
|           |                                                   | Z | 4.77 | 66.42 | 16.08 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.78 | 66.51 | 16.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.82 | 66.88 | 16.46 |      | 130.0 |         |
|           |                                                   | Z | 4.71 | 66.59 | 16.31 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.82 | 66.09 | 15.91 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.86 | 66.46 | 16.09 |      | 130.0 |         |
|           |                                                   | Z | 4.75 | 66.18 | 15.93 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.41 | 66.58 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.42 | 66.86 | 16.42 |      | 130.0 |         |
|           |                                                   | Z | 5.34 | 66.63 | 16.33 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.46 | 66.67 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.48 | 66.96 | 16.44 |      | 130.0 |         |
|           |                                                   | Z | 5.41 | 66.77 | 16.37 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.36 | 66.74 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.38 | 67.04 | 16.50 |      | 130.0 |         |
|           |                                                   | Z | 5.30 | 66.80 | 16.40 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.38 | 66.57 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.40 | 66.88 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 5.32 | 66.65 | 16.26 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.50 | 66.70 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.52 | 66.98 | 16.46 |      | 130.0 |         |
|           |                                                   | Z | 5.42 | 66.71 | 16.34 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.47 | 66.73 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.49 | 67.03 | 16.59 |      | 130.0 |         |
|           |                                                   | Z | 5.40 | 66.78 | 16.49 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.47 | 66.86 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.49 | 67.13 | 16.63 |      | 130.0 |         |
|           |                                                   | Z | 5.42 | 66.94 | 16.56 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.36 | 66.43 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.76 | 16.34 |      | 130.0 |         |
|           |                                                    | Z | 5.29 | 66.47 | 16.21 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.56 | 66.64 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.57 | 66.89 | 16.47 |      | 130.0 |         |
|           |                                                    | Z | 5.49 | 66.69 | 16.38 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 6.00 | 67.82 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.94 | 67.87 | 17.00 |      | 130.0 |         |
|           |                                                    | Z | 5.92 | 67.84 | 17.00 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.66 | 66.60 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.68 | 66.90 | 16.36 |      | 130.0 |         |
|           |                                                    | Z | 5.62 | 66.67 | 16.27 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.94 | 67.22 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 67.41 | 16.57 |      | 130.0 |         |
|           |                                                    | Z | 5.88 | 67.28 | 16.54 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.74 | 66.79 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.75 | 67.08 | 16.35 |      | 130.0 |         |
|           |                                                    | Z | 5.67 | 66.82 | 16.24 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.82 | 66.86 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.83 | 67.14 | 16.37 |      | 130.0 |         |
|           |                                                    | Z | 5.76 | 66.90 | 16.28 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.47 | 68.95 | 17.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.33 | 68.81 | 17.20 |      | 130.0 |         |
|           |                                                    | Z | 6.32 | 68.74 | 17.19 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.26 | 68.44 | 17.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.22 | 68.55 | 17.25 |      | 130.0 |         |
|           |                                                    | Z | 6.14 | 68.32 | 17.17 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.90 | 67.24 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.90 | 67.49 | 16.74 |      | 130.0 |         |
|           |                                                    | Z | 5.84 | 67.30 | 16.68 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.83 | 67.03 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.84 | 67.32 | 16.49 |      | 130.0 |         |
|           |                                                    | Z | 5.74 | 66.97 | 16.35 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.79 | 66.98 | 16.42 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 67.30 | 16.54 |      | 130.0 |         |
|           |                                                    | Z | 5.72 | 66.98 | 16.41 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.69 | 66.37 | 15.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.71 | 66.69 | 15.99 |      | 130.0 |         |
|           |                                                    | Z | 5.61 | 66.36 | 15.84 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.08 | 67.02 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.08 | 67.28 | 16.45 |      | 130.0 |         |
|           |                                                    | Z | 6.04 | 67.06 | 16.38 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.26 | 67.43 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.25 | 67.66 | 16.62 |      | 130.0 |         |
|           |                                                    | Z | 6.20 | 67.46 | 16.56 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.25 | 67.40 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.25 | 67.63 | 16.58 |      | 130.0 |         |
|           |                                                    | Z | 6.20 | 67.43 | 16.52 |      | 130.0 |         |

|           |                                                        |   |       |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|-------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.25  | 67.40  | 16.56 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.25  | 67.65  | 16.64 |       | 130.0 |         |
|           |                                                        | Z | 6.18  | 67.40  | 16.55 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.29  | 67.50  | 16.55 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.28  | 67.73  | 16.63 |       | 130.0 |         |
|           |                                                        | Z | 6.20  | 67.45  | 16.52 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.27  | 67.22  | 16.43 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.27  | 67.48  | 16.52 |       | 130.0 |         |
|           |                                                        | Z | 6.22  | 67.26  | 16.44 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.33  | 67.53  | 16.75 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.34  | 67.80  | 16.83 |       | 130.0 |         |
|           |                                                        | Z | 6.27  | 67.55  | 16.75 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.17  | 67.23  | 16.50 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.17  | 67.49  | 16.60 |       | 130.0 |         |
|           |                                                        | Z | 6.11  | 67.24  | 16.50 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.41  | 67.97  | 16.90 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.39  | 68.16  | 16.95 |       | 130.0 |         |
|           |                                                        | Z | 6.31  | 67.87  | 16.83 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.80  | 68.63  | 17.17 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.72  | 68.67  | 17.15 |       | 130.0 |         |
|           |                                                        | Z | 6.81  | 68.89  | 17.29 |       | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 24.55 | 106.53 | 35.17 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 31.89 | 112.37 | 36.91 |       | 60.0  |         |
|           |                                                        | Z | 38.26 | 118.51 | 38.91 |       | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 25.24 | 107.93 | 35.72 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 33.80 | 114.50 | 37.67 |       | 60.0  |         |
|           |                                                        | Z | 39.09 | 119.87 | 39.44 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.69  | 62.98  | 10.52 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.80  | 65.16  | 12.22 |       | 150.0 |         |
|           |                                                        | Z | 0.66  | 63.02  | 10.29 |       | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 4.37  | 68.24  | 17.12 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.55  | 69.07  | 17.52 |       | 80.0  |         |
|           |                                                        | Z | 4.32  | 68.59  | 17.21 |       | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 4.86  | 67.62  | 17.24 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 5.00  | 68.27  | 17.53 |       | 80.0  |         |
|           |                                                        | Z | 4.79  | 67.81  | 17.30 |       | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.80  | 67.31  | 17.24 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.92  | 67.94  | 17.52 |       | 80.0  |         |
|           |                                                        | Z | 4.74  | 67.48  | 17.30 |       | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 4.86  | 67.35  | 17.29 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.98  | 67.98  | 17.57 |       | 80.0  |         |
|           |                                                        | Z | 4.79  | 67.48  | 17.34 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 11.78 | 84.57  | 22.80 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 11.52 | 83.95  | 22.54 |       | 50.0  |         |
|           |                                                        | Z | 14.66 | 88.44  | 23.55 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 25.01 | 97.10  | 25.23 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 24.28 | 96.53  | 25.07 |       | 60.0  |         |
|           |                                                        | Z | 74.26 | 111.90 | 28.50 |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 114.64 | 27.52 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 115.23 | 27.86 |      | 80.0  |         |
|           |                             | Z | 100.00 | 113.16 | 26.57 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 113.80 | 25.65 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 116.06 | 26.74 |      | 100.0 |         |
|           |                             | Z | 100.00 | 112.55 | 24.88 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 112.40 | 23.15 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 120.75 | 26.76 |      | 120.0 |         |
|           |                             | Z | 100.00 | 111.39 | 22.56 |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-3837\_Mar18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3837**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v4, QA CAL-23.v5,  
QA CAL-25.v6  
Calibration procedure for dosimetric E-field probes**

SC ✓  
3/2/18

Calibration date: **March 16, 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 ( $22 \pm 3$ )°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 |

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

Issued: March 17, 2018

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



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Accreditation No.: **SCS 0108**

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ 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:

- 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
- 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
- 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
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* 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.
- DCP<sub>x,y,z</sub>**: 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
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: 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  $f \leq 800$  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 NORM<sub>x,y,z</sub> \* 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  $\pm 50$  MHz to  $\pm 100$  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 NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:3837

Manufactured: November 7, 2011  
Calibrated: March 16, 2018

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3837

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.46     | 0.46     | 0.24     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 100.0    | 95.0     | 91.4     |               |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 133.6    | $\pm 2.5 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 132.0    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 134.4    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms} \cdot \text{V}^{-2}$ | T2<br>$\text{ms} \cdot \text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|---------------------------------------|---------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 45.57    | 340.2    | 35.78                       | 10.62                                 | 0.398                                 | 5.043    | 1.258                 | 0.358                 | 1.006 |
| Y | 52.82    | 412.7    | 38.56                       | 10.70                                 | 0.721                                 | 5.066    | 0.000                 | 0.679                 | 1.010 |
| Z | 55.06    | 428.3    | 38.40                       | 7.269                                 | 0.741                                 | 5.034    | 0.000                 | 0.592                 | 1.006 |

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%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> 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:3837

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 30                   | 55.0                               | 0.75                            | 14.25   | 14.25   | 14.25   | 0.00               | 1.00                    | ± 13.3 %  |
| 5250                 | 35.9                               | 4.71                            | 5.50    | 5.50    | 5.50    | 0.35               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.88    | 4.88    | 4.88    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 5.04    | 5.04    | 5.04    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> 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.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) 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 ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> 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:3837

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 5250                 | 48.9                               | 5.36                            | 4.84    | 4.84    | 4.84    | 0.45               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.13    | 4.13    | 4.13    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.43    | 4.43    | 4.43    | 0.50               | 1.90                    | ± 13.1 %  |

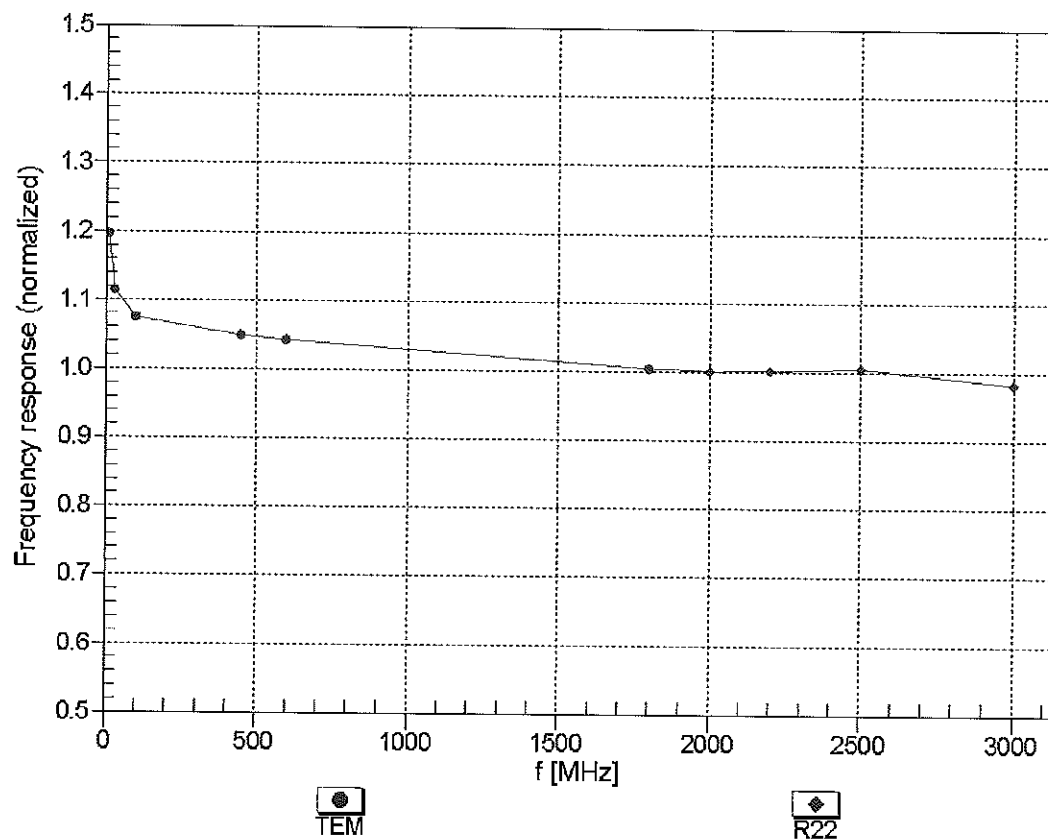
<sup>C</sup> Frequency validity above 300 MHz of  $\pm 100$  MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to  $\pm 50$  MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is  $\pm 10$ , 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  $\pm 110$  MHz.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) can be relaxed to  $\pm 10\%$  if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) is restricted to  $\pm 5\%$ . The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

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

## Frequency Response of E-Field

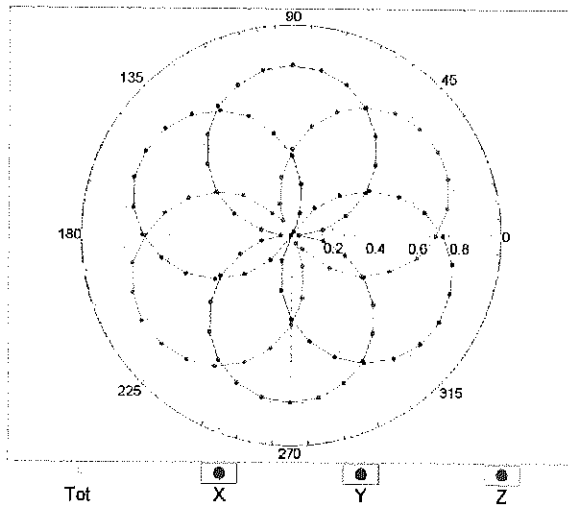
(TEM-Cell:ifi110 EXX, Waveguide: R22)



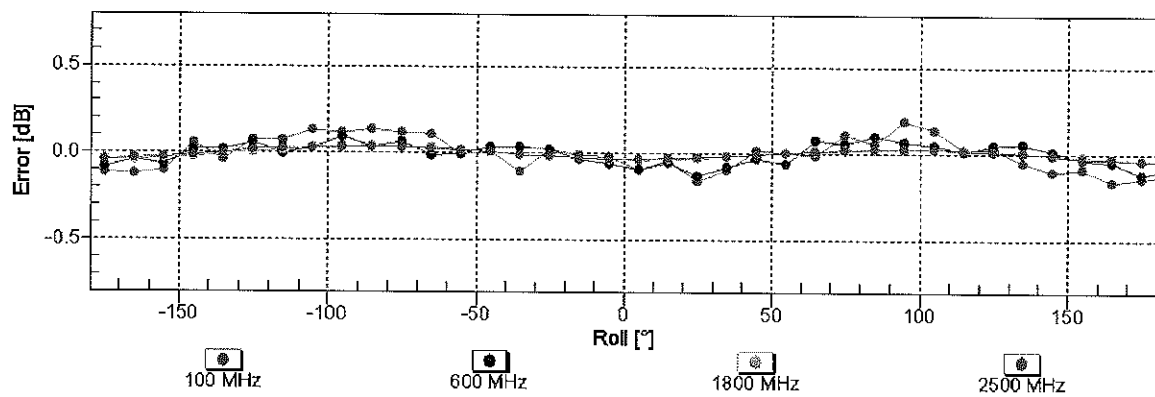
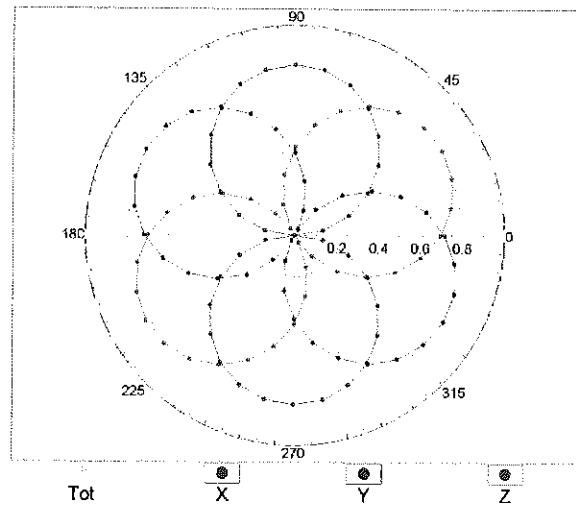
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

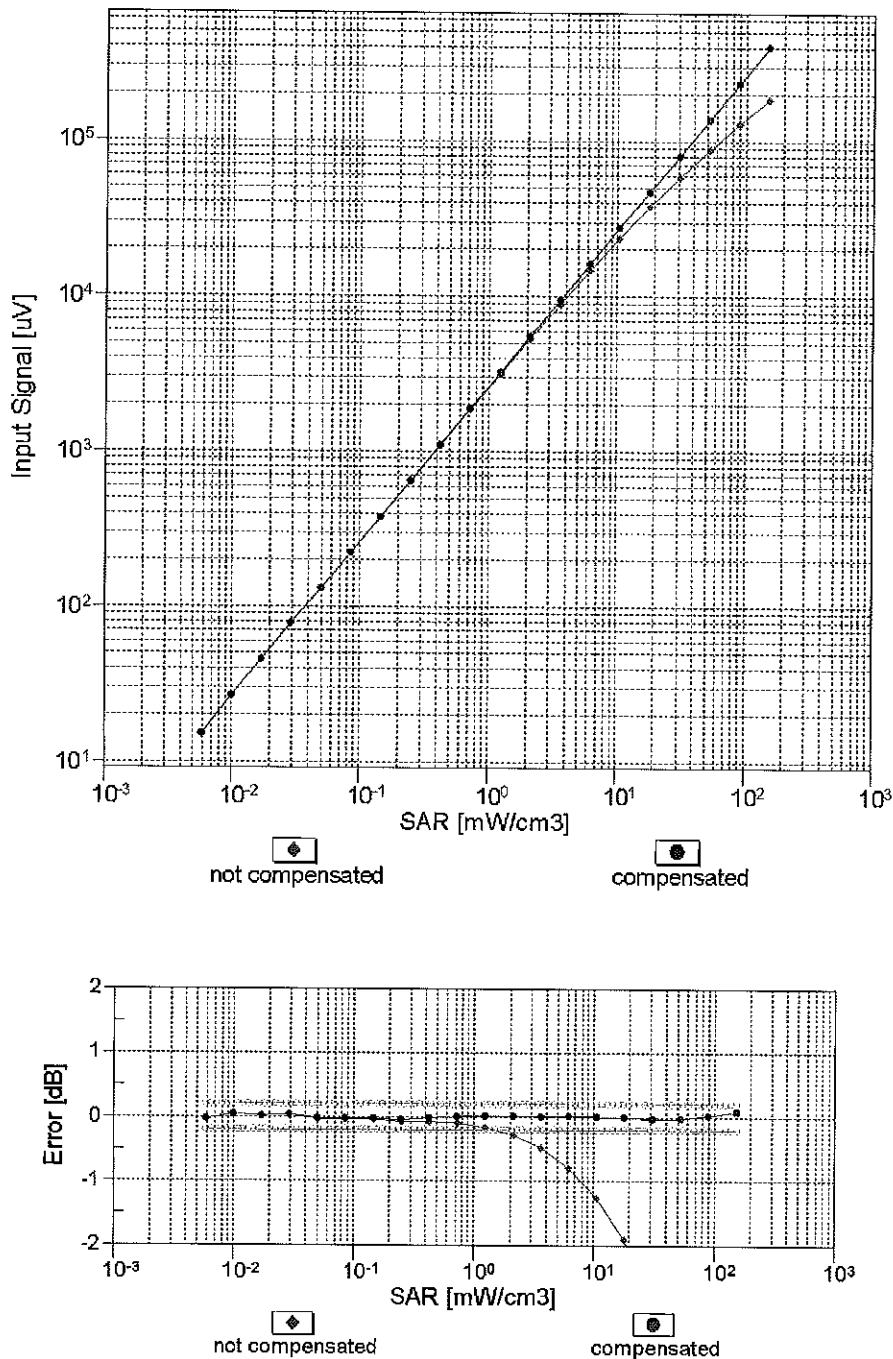


f=1800 MHz,R22



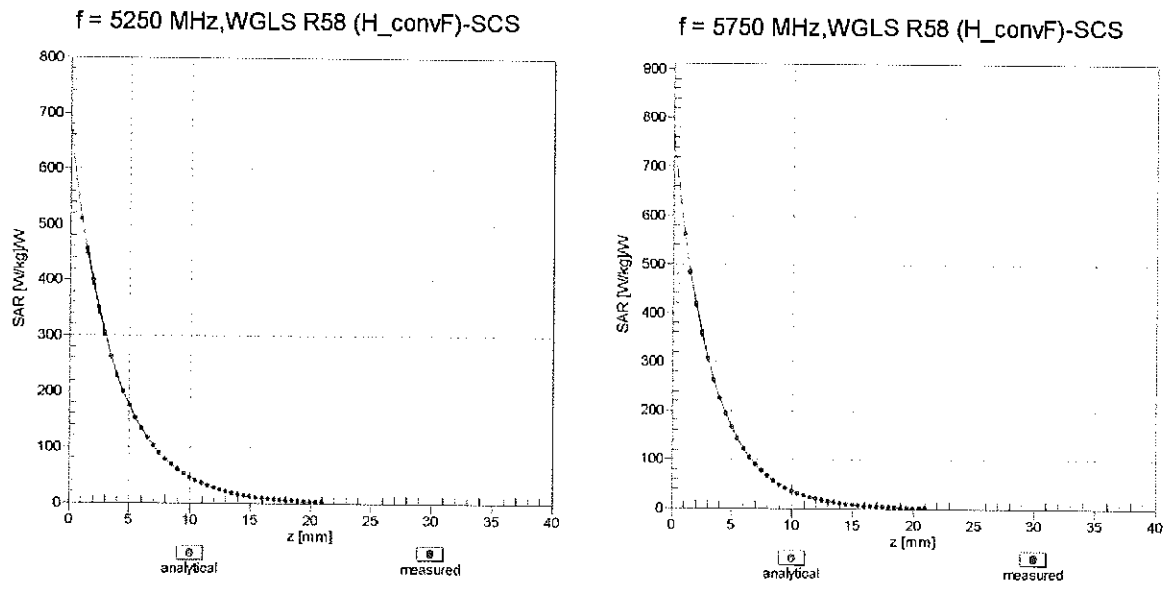
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

Dynamic Range f(SAR<sub>head</sub>)  
(TEM cell , f<sub>eval</sub>= 1900 MHz)



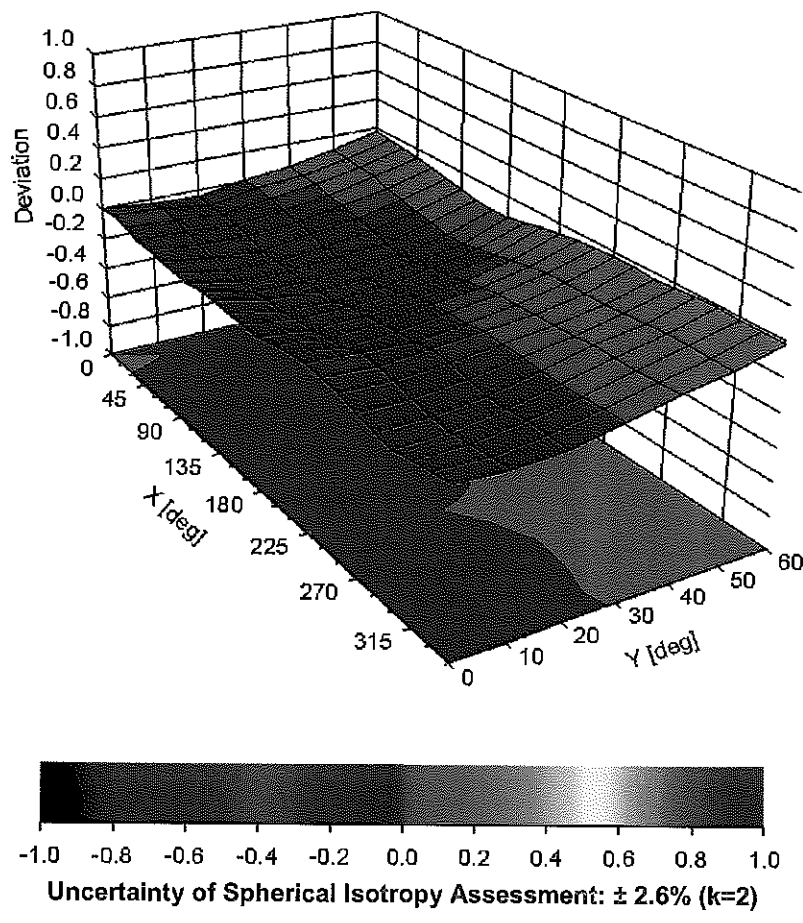
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi$ ,  $\theta$ ),  $f = 900 \text{ MHz}$



## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3837

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 74.7       |
| 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<br>dB | B<br>dB $\sqrt{\mu V}$ | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|------------------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00                   | 1.00  | 0.00    | 133.6    | $\pm 2.5 \%$                     |
|               |                                               | Y | 0.00    | 0.00                   | 1.00  |         | 132.0    |                                  |
|               |                                               | Z | 0.00    | 0.00                   | 1.00  |         | 134.4    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 2.03    | 64.95                  | 9.51  | 10.00   | 20.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.97    | 63.98                  | 9.16  |         | 20.0     |                                  |
|               |                                               | Z | 1.85    | 63.08                  | 8.50  |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.28    | 72.25                  | 18.00 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 0.93    | 66.60                  | 14.42 |         | 150.0    |                                  |
|               |                                               | Z | 1.13    | 70.25                  | 16.68 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.18    | 64.97                  | 16.30 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.06    | 63.26                  | 14.90 |         | 150.0    |                                  |
|               |                                               | Z | 1.09    | 64.06                  | 15.74 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.83    | 66.83                  | 17.25 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 4.84    | 66.39                  | 17.06 |         | 150.0    |                                  |
|               |                                               | Z | 4.85    | 66.45                  | 17.14 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 110.75                 | 25.49 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 111.10                 | 25.91 |         | 50.0     |                                  |
|               |                                               | Z | 48.02   | 100.28                 | 22.67 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 110.33                 | 25.35 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 110.88                 | 25.86 |         | 50.0     |                                  |
|               |                                               | Z | 19.64   | 89.95                  | 19.98 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 110.84                 | 24.47 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 108.80                 | 23.72 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 106.11                 | 22.30 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 5.45    | 80.17                  | 31.75 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 3.93    | 68.30                  | 24.95 |         | 50.0     |                                  |
|               |                                               | Z | 3.54    | 65.29                  | 22.96 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 9.53    | 95.10                  | 34.35 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 8.87    | 91.37                  | 32.43 |         | 60.0     |                                  |
|               |                                               | Z | 7.83    | 88.30                  | 31.08 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 112.83                 | 24.58 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 107.21                 | 22.22 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 104.35                 | 20.69 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 116.67                 | 25.52 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 105.18                 | 20.65 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 102.00                 | 19.00 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 5.56    | 82.09                  | 28.08 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.61    | 81.11                  | 27.31 |         | 80.0     |                                  |
|               |                                               | Z | 5.04    | 78.94                  | 26.34 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 109.70                 | 23.52 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 106.53                 | 22.24 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 103.90                 | 20.83 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 117.25                 | 24.30 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 0.36    | 61.16                  | 5.47  |         | 100.0    |                                  |
|               |                                               | Z | 0.24    | 60.00                  | 4.36  |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 142.46 | 32.89 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 0.19   | 60.00  | 3.50  |       | 100.0 |         |
|           |                                                     | Z | 47.65  | 61.02  | 1.54  |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 75.36  | 125.33 | 33.61 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 17.26  | 101.58 | 27.60 |       | 70.0  |         |
|           |                                                     | Z | 12.23  | 96.92  | 26.29 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 9.06   | 94.35  | 24.05 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.87   | 77.35  | 18.29 |       | 100.0 |         |
|           |                                                     | Z | 3.15   | 79.89  | 19.62 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 4.40   | 85.21  | 20.99 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.80   | 71.96  | 15.84 |       | 100.0 |         |
|           |                                                     | Z | 2.08   | 75.09  | 17.57 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 100.00 | 130.25 | 34.85 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 31.85  | 111.50 | 30.35 |       | 70.0  |         |
|           |                                                     | Z | 21.04  | 105.76 | 28.87 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 7.39   | 91.62  | 23.22 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.68   | 76.50  | 17.93 |       | 100.0 |         |
|           |                                                     | Z | 2.89   | 78.82  | 19.19 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 4.58   | 86.18  | 21.46 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.83   | 72.50  | 16.18 |       | 100.0 |         |
|           |                                                     | Z | 2.15   | 75.86  | 18.00 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 4.21   | 84.26  | 20.24 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.58   | 69.80  | 14.38 |       | 150.0 |         |
|           |                                                     | Z | 2.61   | 77.09  | 17.86 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 107.13 | 23.10 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 106.13 | 22.81 |       | 50.0  |         |
|           |                                                     | Z | 5.57   | 76.12  | 14.29 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.01   | 119.48 | 4.98  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.20   | 127.74 | 0.55  |       | 150.0 |         |
|           |                                                     | Z | 0.17   | 132.08 | 12.71 |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 35.57  | 95.27  | 22.61 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 13.44  | 83.93  | 20.02 |       | 25.0  |         |
|           |                                                     | Z | 6.71   | 73.54  | 16.05 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 100.00 | 109.17 | 25.17 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 18.00  | 89.53  | 20.64 |       | 40.0  |         |
|           |                                                     | Z | 6.88   | 76.63  | 16.02 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 100.00 | 123.08 | 32.78 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 23.83  | 100.47 | 27.19 |       | 50.0  |         |
|           |                                                     | Z | 16.38  | 93.88  | 24.93 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 4.26   | 76.58  | 24.95 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.34   | 76.15  | 24.46 |       | 100.0 |         |
|           |                                                     | Z | 3.96   | 74.54  | 23.77 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.22   | 66.27  | 17.02 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.10   | 64.38  | 15.54 |       | 110.0 |         |
|           |                                                     | Z | 1.11   | 65.15  | 16.35 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 145.56 | 38.66 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 79.31  | 131.95 | 33.33 |       | 110.0 |         |
|           |                                                     | Z | 100.00 | 140.55 | 36.12 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 4.10 | 89.25 | 26.11 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 2.95 | 82.10 | 22.86 |      | 110.0 |         |
|           |                                                | Z | 2.81 | 82.64 | 23.42 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.65 | 66.90 | 16.74 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.65 | 66.39 | 16.48 |      | 100.0 |         |
|           |                                                | Z | 4.69 | 66.55 | 16.65 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.66 | 66.98 | 16.83 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.66 | 66.49 | 16.58 |      | 100.0 |         |
|           |                                                | Z | 4.70 | 66.63 | 16.74 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.94 | 67.22 | 17.03 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.97 | 66.79 | 16.84 |      | 100.0 |         |
|           |                                                | Z | 5.01 | 66.93 | 16.98 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.80 | 67.09 | 17.12 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.83 | 66.69 | 16.93 |      | 100.0 |         |
|           |                                                | Z | 4.86 | 66.80 | 17.05 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.81 | 67.10 | 17.28 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.85 | 66.72 | 17.10 |      | 100.0 |         |
|           |                                                | Z | 4.87 | 66.80 | 17.20 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.09 | 67.23 | 17.69 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.14 | 66.84 | 17.53 |      | 100.0 |         |
|           |                                                | Z | 5.14 | 66.84 | 17.56 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.13 | 67.22 | 17.88 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.20 | 66.96 | 17.79 |      | 100.0 |         |
|           |                                                | Z | 5.20 | 66.96 | 17.81 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.20 | 67.22 | 18.06 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.28 | 66.93 | 17.97 |      | 100.0 |         |
|           |                                                | Z | 5.28 | 66.90 | 17.97 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.91 | 66.88 | 17.53 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.93 | 66.48 | 17.36 |      | 100.0 |         |
|           |                                                | Z | 4.94 | 66.50 | 17.42 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.88 | 67.19 | 17.74 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.92 | 66.83 | 17.59 |      | 100.0 |         |
|           |                                                | Z | 4.92 | 66.83 | 17.62 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.93 | 67.31 | 18.05 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.97 | 66.97 | 17.90 |      | 100.0 |         |
|           |                                                | Z | 4.96 | 66.91 | 17.89 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.91 | 67.18 | 18.17 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.94 | 66.83 | 18.04 |      | 100.0 |         |
|           |                                                | Z | 4.91 | 66.74 | 18.01 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.93 | 67.25 | 18.46 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.98 | 66.98 | 18.37 |      | 90.0  |         |
|           |                                                | Z | 4.95 | 66.88 | 18.32 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.94 | 67.02 | 18.57 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.98 | 66.70 | 18.45 |      | 90.0  |         |
|           |                                                | Z | 4.93 | 66.56 | 18.37 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.96 | 67.08 | 18.66 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.00 | 66.75 | 18.54 |      | 90.0  |         |
|           |                                                | Z | 4.95 | 66.60 | 18.45 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 1.22   | 72.11  | 15.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.71   | 64.23  | 11.07 |      | 150.0 |         |
|           |                                                     | Z | 0.94   | 68.15  | 13.57 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.46   | 58.22  | 3.03  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 2.52   | 64.99  | 5.75  |      | 80.0  |         |
|           |                                                     | Z | 17.73  | 69.69  | 6.27  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 110.88 | 24.51 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 108.92 | 23.80 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 106.22 | 22.37 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 2.03   | 70.22  | 17.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.72   | 66.96  | 15.21 |      | 150.0 |         |
|           |                                                     | Z | 1.88   | 68.77  | 16.45 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.99   | 70.21  | 17.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.68   | 66.91  | 15.17 |      | 150.0 |         |
|           |                                                     | Z | 1.84   | 68.75  | 16.42 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 9.62   | 95.30  | 34.41 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 8.94   | 91.50  | 32.47 |      | 60.0  |         |
|           |                                                     | Z | 7.88   | 88.41  | 31.12 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.39   | 72.22  | 17.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.04   | 69.79  | 16.32 |      | 150.0 |         |
|           |                                                     | Z | 3.32   | 71.43  | 17.27 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.31   | 68.32  | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.18   | 67.17  | 15.74 |      | 150.0 |         |
|           |                                                     | Z | 3.30   | 67.92  | 16.28 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.41   | 68.23  | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.29   | 67.15  | 15.86 |      | 150.0 |         |
|           |                                                     | Z | 3.40   | 67.86  | 16.37 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 6.20   | 76.40  | 20.96 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.84   | 74.64  | 20.13 |      | 65.0  |         |
|           |                                                     | Z | 5.59   | 74.11  | 19.90 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 5.98   | 73.69  | 20.61 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.92   | 72.87  | 20.21 |      | 65.0  |         |
|           |                                                     | Z | 5.64   | 72.17  | 19.91 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 5.57   | 72.09  | 20.19 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.84   | 72.51  | 20.38 |      | 65.0  |         |
|           |                                                     | Z | 5.27   | 70.68  | 19.54 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.95   | 71.50  | 17.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.66   | 69.08  | 16.17 |      | 150.0 |         |
|           |                                                     | Z | 2.91   | 70.73  | 17.16 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.97   | 68.35  | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.84   | 67.00  | 15.64 |      | 150.0 |         |
|           |                                                     | Z | 2.97   | 67.87  | 16.26 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.41   | 70.87  | 17.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.15   | 68.17  | 15.76 |      | 150.0 |         |
|           |                                                     | Z | 2.37   | 69.92  | 16.86 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.76   | 69.84  | 17.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.54   | 67.71  | 15.87 |      | 150.0 |         |
|           |                                                     | Z | 2.72   | 68.98  | 16.76 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.09 | 68.29 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.97 | 66.99 | 15.71 |      | 150.0 |         |
|           |                                                | Z | 3.09 | 67.79 | 16.30 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.91 | 69.90 | 17.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.70 | 67.86 | 16.03 |      | 150.0 |         |
|           |                                                | Z | 2.87 | 69.05 | 16.86 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.12 | 67.46 | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.11 | 66.96 | 16.40 |      | 150.0 |         |
|           |                                                | Z | 5.16 | 67.19 | 16.62 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.39 | 67.52 | 16.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.44 | 67.21 | 16.54 |      | 150.0 |         |
|           |                                                | Z | 5.52 | 67.50 | 16.78 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.21 | 67.64 | 16.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.22 | 67.22 | 16.46 |      | 150.0 |         |
|           |                                                | Z | 5.29 | 67.47 | 16.68 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.08 | 67.30 | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.08 | 66.84 | 16.36 |      | 150.0 |         |
|           |                                                | Z | 5.14 | 67.11 | 16.59 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.47 | 67.73 | 16.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.54 | 67.49 | 16.69 |      | 150.0 |         |
|           |                                                | Z | 5.61 | 67.75 | 16.91 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.20 | 67.59 | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.20 | 67.16 | 16.44 |      | 150.0 |         |
|           |                                                | Z | 5.26 | 67.41 | 16.66 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.44 | 68.23 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.33 | 67.14 | 15.77 |      | 150.0 |         |
|           |                                                | Z | 3.44 | 67.84 | 16.28 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.56 | 68.31 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.45 | 67.25 | 15.95 |      | 150.0 |         |
|           |                                                | Z | 3.57 | 67.91 | 16.44 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.25 | 71.50 | 17.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.91 | 68.03 | 15.35 |      | 150.0 |         |
|           |                                                | Z | 2.16 | 70.17 | 16.69 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.76 | 71.42 | 17.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.39 | 68.25 | 15.48 |      | 150.0 |         |
|           |                                                | Z | 2.64 | 70.08 | 16.68 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.35 | 68.05 | 14.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.18 | 66.04 | 13.91 |      | 150.0 |         |
|           |                                                | Z | 2.34 | 67.23 | 14.80 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.36 | 67.30 | 12.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.12 | 64.08 | 11.11 |      | 150.0 |         |
|           |                                                | Z | 1.36 | 66.73 | 12.92 |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 2.05 | 66.97 | 11.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.09 | 66.87 | 12.31 |      | 150.0 |         |
|           |                                                | Z | 2.14 | 67.42 | 12.70 |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 2.62 | 69.79 | 13.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.51 | 69.23 | 13.56 |      | 150.0 |         |
|           |                                                | Z | 2.66 | 70.25 | 14.16 |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.98 | 68.42 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.85 | 67.06 | 15.68 |      | 150.0 |         |
|           |                                            | Z | 2.98 | 67.94 | 16.32 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.10 | 68.35 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.97 | 67.05 | 15.75 |      | 150.0 |         |
|           |                                            | Z | 3.10 | 67.86 | 16.35 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 6.73 | 79.63 | 22.36 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.22 | 77.38 | 21.36 |      | 65.0  |         |
|           |                                            | Z | 5.82 | 76.46 | 21.00 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 5.54 | 73.78 | 20.36 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.45 | 72.82 | 19.92 |      | 65.0  |         |
|           |                                            | Z | 5.18 | 72.08 | 19.62 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 5.91 | 74.77 | 21.16 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.80 | 73.76 | 20.72 |      | 65.0  |         |
|           |                                            | Z | 5.51 | 72.99 | 20.42 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.48 | 71.44 | 17.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.20 | 68.63 | 16.05 |      | 150.0 |         |
|           |                                            | Z | 2.45 | 70.58 | 17.24 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.77 | 69.86 | 17.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.54 | 67.72 | 15.89 |      | 150.0 |         |
|           |                                            | Z | 2.72 | 68.98 | 16.76 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 2.16 | 72.20 | 17.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.76 | 68.05 | 15.09 |      | 150.0 |         |
|           |                                            | Z | 2.05 | 70.66 | 16.69 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.27 | 69.22 | 15.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.00 | 66.48 | 13.85 |      | 150.0 |         |
|           |                                            | Z | 2.21 | 68.13 | 15.00 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.92 | 69.98 | 17.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.71 | 67.92 | 16.08 |      | 150.0 |         |
|           |                                            | Z | 2.88 | 69.12 | 16.92 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.41 | 69.84 | 15.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.10 | 66.93 | 14.15 |      | 150.0 |         |
|           |                                            | Z | 2.35 | 68.72 | 15.36 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.89 | 70.19 | 17.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.70 | 68.35 | 16.09 |      | 150.0 |         |
|           |                                            | Z | 2.88 | 69.59 | 16.90 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 3.00 | 68.36 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.87 | 66.97 | 15.67 |      | 150.0 |         |
|           |                                            | Z | 2.99 | 67.81 | 16.30 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.11 | 68.50 | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.98 | 67.10 | 15.78 |      | 150.0 |         |
|           |                                            | Z | 3.10 | 67.90 | 16.38 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.72 | 70.89 | 19.86 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.67 | 69.70 | 19.28 |      | 150.0 |         |
|           |                                            | Z | 3.62 | 69.60 | 19.26 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.89 | 74.90 | 20.67 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.56 | 72.45 | 19.62 |      | 150.0 |         |
|           |                                            | Z | 4.46 | 72.29 | 19.59 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.65  | 78.00  | 22.32 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.11  | 74.92  | 21.06 |      | 150.0 |         |
|           |                                            | Z | 5.03  | 74.89  | 21.10 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.21  | 70.99  | 19.94 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.13  | 69.60  | 19.22 |      | 150.0 |         |
|           |                                            | Z | 3.04  | 69.55  | 19.25 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 5.20  | 79.96  | 23.31 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.44  | 75.73  | 21.57 |      | 150.0 |         |
|           |                                            | Z | 4.36  | 76.12  | 21.82 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 3.92  | 73.95  | 19.84 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.57  | 71.07  | 18.57 |      | 150.0 |         |
|           |                                            | Z | 3.42  | 70.98  | 18.56 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 8.65  | 93.75  | 29.69 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.02  | 90.08  | 28.24 |      | 65.0  |         |
|           |                                            | Z | 6.86  | 87.22  | 26.94 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 34.56 | 113.88 | 33.23 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 16.66 | 99.21  | 29.19 |      | 65.0  |         |
|           |                                            | Z | 12.68 | 94.37  | 27.34 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 17.89 | 100.71 | 28.93 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 11.68 | 91.66  | 26.27 |      | 65.0  |         |
|           |                                            | Z | 7.88  | 85.16  | 23.78 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 3.16  | 70.61  | 19.66 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.09  | 69.23  | 18.94 |      | 150.0 |         |
|           |                                            | Z | 2.99  | 69.15  | 18.95 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 5.21  | 80.00  | 23.33 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.45  | 75.76  | 21.59 |      | 150.0 |         |
|           |                                            | Z | 4.36  | 76.14  | 21.83 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.19  | 70.79  | 19.76 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.12  | 69.41  | 19.05 |      | 150.0 |         |
|           |                                            | Z | 3.02  | 69.35  | 19.07 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 5.14  | 79.69  | 23.18 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.39  | 75.47  | 21.44 |      | 150.0 |         |
|           |                                            | Z | 4.29  | 75.79  | 21.66 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 4.49  | 76.75  | 21.41 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.95  | 73.19  | 19.90 |      | 150.0 |         |
|           |                                            | Z | 3.82  | 73.28  | 19.99 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 3.91  | 73.86  | 19.78 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.56  | 70.98  | 18.51 |      | 150.0 |         |
|           |                                            | Z | 3.41  | 70.87  | 18.49 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.18  | 70.77  | 19.75 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.11  | 69.39  | 19.04 |      | 150.0 |         |
|           |                                            | Z | 3.02  | 69.33  | 19.06 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 5.13  | 79.66  | 23.17 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.38  | 75.45  | 21.42 |      | 150.0 |         |
|           |                                            | Z | 4.29  | 75.77  | 21.64 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 3.90  | 73.83  | 19.77 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.55  | 70.96  | 18.50 |      | 150.0 |         |
|           |                                            | Z | 3.40  | 70.85  | 18.48 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.20 | 70.82 | 19.78 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.12 | 69.44 | 19.07 |      | 150.0 |         |
|           |                                               | Z | 3.03 | 69.38 | 19.09 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 5.16 | 79.75 | 23.21 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.40 | 75.52 | 21.47 |      | 150.0 |         |
|           |                                               | Z | 4.31 | 75.85 | 21.69 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 3.92 | 73.91 | 19.81 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.57 | 71.02 | 18.54 |      | 150.0 |         |
|           |                                               | Z | 3.42 | 70.92 | 18.52 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.21 | 70.89 | 19.85 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.13 | 69.49 | 19.13 |      | 150.0 |         |
|           |                                               | Z | 3.04 | 69.42 | 19.15 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 5.40 | 80.72 | 23.69 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.57 | 76.31 | 21.90 |      | 150.0 |         |
|           |                                               | Z | 4.50 | 76.77 | 22.18 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 4.04 | 74.49 | 20.14 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.65 | 71.49 | 18.83 |      | 150.0 |         |
|           |                                               | Z | 3.51 | 71.43 | 18.84 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.52 | 66.93 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.49 | 66.31 | 16.09 |      | 150.0 |         |
|           |                                               | Z | 4.55 | 66.58 | 16.35 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.68 | 67.24 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.67 | 66.65 | 16.21 |      | 150.0 |         |
|           |                                               | Z | 4.74 | 66.93 | 16.47 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.72 | 67.26 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.71 | 66.68 | 16.23 |      | 150.0 |         |
|           |                                               | Z | 4.78 | 66.95 | 16.48 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.52 | 66.99 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.50 | 66.39 | 16.11 |      | 150.0 |         |
|           |                                               | Z | 4.56 | 66.67 | 16.38 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.70 | 67.25 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.68 | 66.67 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.76 | 66.95 | 16.48 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.73 | 67.28 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.72 | 66.70 | 16.24 |      | 150.0 |         |
|           |                                               | Z | 4.79 | 66.97 | 16.49 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.47 | 67.02 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.45 | 66.40 | 16.07 |      | 150.0 |         |
|           |                                               | Z | 4.52 | 66.69 | 16.34 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.69 | 67.22 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.68 | 66.65 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.75 | 66.93 | 16.48 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.73 | 67.20 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.72 | 66.63 | 16.23 |      | 150.0 |         |
|           |                                               | Z | 4.79 | 66.90 | 16.48 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.06 | 67.31 | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.05 | 66.85 | 16.35 |      | 150.0 |         |
|           |                                               | Z | 5.12 | 67.12 | 16.59 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.36  | 67.52  | 16.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.37  | 67.09  | 16.50 |      | 150.0 |         |
|           |                                           | Z | 5.44  | 67.35  | 16.73 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.11  | 67.43  | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.10  | 66.96  | 16.33 |      | 150.0 |         |
|           |                                           | Z | 5.16  | 67.22  | 16.57 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.84  | 66.92  | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.74  | 65.72  | 15.18 |      | 150.0 |         |
|           |                                           | Z | 2.83  | 66.35  | 15.73 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 40.01 | 116.73 | 34.09 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.15 | 100.91 | 29.81 |      | 65.0  |         |
|           |                                           | Z | 13.80 | 96.00  | 27.96 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 33.98 | 111.47 | 31.92 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 16.25 | 97.33  | 28.09 |      | 65.0  |         |
|           |                                           | Z | 12.25 | 92.38  | 26.18 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 12.76 | 101.92 | 32.39 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 11.08 | 97.03  | 30.67 |      | 65.0  |         |
|           |                                           | Z | 8.72  | 92.35  | 28.82 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 34.89 | 114.03 | 33.28 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 16.78 | 99.31  | 29.23 |      | 65.0  |         |
|           |                                           | Z | 12.79 | 94.48  | 27.39 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 29.80 | 109.06 | 31.18 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.07 | 95.92  | 27.58 |      | 65.0  |         |
|           |                                           | Z | 11.39 | 91.05  | 25.67 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 11.93 | 100.43 | 31.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.46 | 95.77  | 30.17 |      | 65.0  |         |
|           |                                           | Z | 8.25  | 91.19  | 28.34 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 34.85 | 114.02 | 33.28 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 16.75 | 99.30  | 29.23 |      | 65.0  |         |
|           |                                           | Z | 12.76 | 94.46  | 27.38 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 29.71 | 109.03 | 31.18 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.04 | 95.90  | 27.57 |      | 65.0  |         |
|           |                                           | Z | 11.37 | 91.03  | 25.66 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 11.28 | 99.11  | 31.30 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 9.96  | 94.62  | 29.67 |      | 65.0  |         |
|           |                                           | Z | 7.88  | 90.12  | 27.85 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 35.01 | 114.12 | 33.31 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 16.79 | 99.35  | 29.25 |      | 65.0  |         |
|           |                                           | Z | 12.78 | 94.51  | 27.39 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 30.34 | 109.34 | 31.25 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.23 | 96.08  | 27.62 |      | 65.0  |         |
|           |                                           | Z | 11.50 | 91.19  | 25.70 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 11.97 | 100.55 | 31.88 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.49 | 95.87  | 30.21 |      | 65.0  |         |
|           |                                           | Z | 8.27  | 91.27  | 28.37 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 34.79 | 114.01 | 33.27 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 16.72 | 99.28  | 29.22 |      | 65.0  |         |
|           |                                           | Z | 12.73 | 94.44  | 27.37 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 29.60 | 108.99 | 31.17 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 15.00 | 95.87  | 27.57 |      | 65.0 |         |
|           |                                            | Z | 11.33 | 91.00  | 25.65 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 11.93 | 100.49 | 31.86 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.45 | 95.81  | 30.19 |      | 65.0 |         |
|           |                                            | Z | 8.24  | 91.21  | 28.35 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 8.35  | 82.82  | 26.15 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.85  | 80.00  | 25.06 |      | 65.0 |         |
|           |                                            | Z | 7.12  | 78.08  | 24.14 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 7.34  | 80.10  | 24.97 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.01  | 77.55  | 23.95 |      | 65.0 |         |
|           |                                            | Z | 6.48  | 76.07  | 23.18 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 5.72  | 75.88  | 24.13 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.69  | 74.41  | 23.47 |      | 65.0 |         |
|           |                                            | Z | 5.34  | 73.16  | 22.77 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 5.95  | 76.49  | 18.56 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.01  | 76.53  | 19.26 |      | 65.0 |         |
|           |                                            | Z | 5.17  | 74.41  | 18.34 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 5.70  | 75.57  | 18.13 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.87  | 75.85  | 18.93 |      | 65.0 |         |
|           |                                            | Z | 5.09  | 73.88  | 18.06 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 6.32  | 81.66  | 21.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.36  | 78.51  | 20.04 |      | 65.0 |         |
|           |                                            | Z | 4.95  | 77.75  | 19.89 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 4.91  | 74.53  | 18.92 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.72  | 73.31  | 18.63 |      | 65.0 |         |
|           |                                            | Z | 4.45  | 72.67  | 18.48 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 4.84  | 73.73  | 18.55 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.73  | 72.75  | 18.36 |      | 65.0 |         |
|           |                                            | Z | 4.48  | 72.15  | 18.22 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 7.86  | 85.71  | 23.56 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.42  | 81.53  | 22.10 |      | 65.0 |         |
|           |                                            | Z | 5.85  | 80.41  | 21.79 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 5.72  | 76.77  | 21.62 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.50  | 75.36  | 21.09 |      | 65.0 |         |
|           |                                            | Z | 5.18  | 74.52  | 20.81 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 5.38  | 74.33  | 20.19 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.26  | 73.19  | 19.77 |      | 65.0 |         |
|           |                                            | Z | 4.98  | 72.41  | 19.49 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 7.31  | 83.67  | 23.90 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.42  | 80.44  | 22.59 |      | 65.0 |         |
|           |                                            | Z | 5.91  | 79.28  | 22.20 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 5.42  | 73.21  | 20.08 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.32  | 72.22  | 19.66 |      | 65.0 |         |
|           |                                            | Z | 5.05  | 71.46  | 19.36 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 5.76  | 74.13  | 20.80 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.65  | 73.11  | 20.38 |      | 65.0 |         |
|           |                                            | Z | 5.37  | 72.34  | 20.09 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 6.31 | 78.67 | 22.21 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.88 | 76.59 | 21.28 |      | 65.0 |         |
|           |                                             | Z | 5.50 | 75.63 | 20.92 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 4.17 | 70.99 | 15.08 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.68 | 72.52 | 16.53 |      | 65.0 |         |
|           |                                             | Z | 4.05 | 70.72 | 15.69 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 3.99 | 70.02 | 14.54 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.53 | 71.65 | 16.05 |      | 65.0 |         |
|           |                                             | Z | 3.98 | 70.06 | 15.30 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 4.17 | 74.74 | 17.34 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.99 | 73.66 | 17.24 |      | 65.0 |         |
|           |                                             | Z | 3.75 | 73.28 | 17.24 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 5.25 | 75.45 | 19.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.04 | 74.09 | 19.53 |      | 65.0 |         |
|           |                                             | Z | 4.75 | 73.36 | 19.32 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 5.25 | 75.04 | 19.76 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.07 | 73.83 | 19.42 |      | 65.0 |         |
|           |                                             | Z | 4.79 | 73.13 | 19.23 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 7.02 | 83.49 | 23.23 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.03 | 80.05 | 21.95 |      | 65.0 |         |
|           |                                             | Z | 5.52 | 78.93 | 21.61 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 5.71 | 76.71 | 21.58 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.49 | 75.31 | 21.04 |      | 65.0 |         |
|           |                                             | Z | 5.17 | 74.48 | 20.77 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 5.37 | 74.30 | 20.18 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.25 | 73.17 | 19.76 |      | 65.0 |         |
|           |                                             | Z | 4.97 | 72.39 | 19.48 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 7.22 | 83.42 | 23.78 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.36 | 80.23 | 22.49 |      | 65.0 |         |
|           |                                             | Z | 5.85 | 79.08 | 22.10 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 5.54 | 73.78 | 20.36 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.45 | 72.82 | 19.93 |      | 65.0 |         |
|           |                                             | Z | 5.18 | 72.08 | 19.62 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 5.91 | 74.76 | 21.15 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.80 | 73.74 | 20.71 |      | 65.0 |         |
|           |                                             | Z | 5.51 | 72.97 | 20.41 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 6.72 | 79.57 | 22.34 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.21 | 77.33 | 21.33 |      | 65.0 |         |
|           |                                             | Z | 5.81 | 76.41 | 20.98 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 6.12 | 73.48 | 20.62 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.06 | 72.68 | 20.24 |      | 65.0 |         |
|           |                                             | Z | 5.79 | 71.98 | 19.95 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 6.09 | 73.02 | 20.46 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.03 | 72.24 | 20.11 |      | 65.0 |         |
|           |                                             | Z | 5.76 | 71.54 | 19.81 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 6.34 | 76.06 | 21.04 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.08 | 74.61 | 20.35 |      | 65.0 |         |
|           |                                             | Z | 5.76 | 73.86 | 20.04 |      | 65.0 |         |

|           |                                                                    |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.66   | 67.57  | 15.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.50   | 65.96  | 14.99 |      | 150.0 |         |
|           |                                                                    | Z | 2.60   | 66.71  | 15.61 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.84   | 70.99  | 17.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.51   | 67.19  | 14.97 |      | 150.0 |         |
|           |                                                                    | Z | 1.71   | 69.51  | 16.45 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.87   | 60.83  | 6.38  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.14   | 61.49  | 7.23  |      | 50.0  |         |
|           |                                                                    | Z | 2.09   | 61.24  | 7.00  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 4.51   | 72.29  | 15.08 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.92   | 73.27  | 16.01 |      | 50.0  |         |
|           |                                                                    | Z | 4.51   | 71.94  | 15.29 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 4.67   | 72.70  | 15.31 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.09   | 73.65  | 16.22 |      | 50.0  |         |
|           |                                                                    | Z | 4.68   | 72.33  | 15.51 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 2.16   | 74.98  | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.28   | 66.95  | 12.79 |      | 150.0 |         |
|           |                                                                    | Z | 1.74   | 71.36  | 15.26 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 1.17   | 71.53  | 15.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.69   | 64.03  | 10.95 |      | 150.0 |         |
|           |                                                                    | Z | 0.91   | 67.77  | 13.37 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 4.42   | 90.78  | 22.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.85   | 67.35  | 12.97 |      | 150.0 |         |
|           |                                                                    | Z | 1.67   | 76.97  | 17.67 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 100.00 | 136.59 | 34.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.33   | 73.34  | 16.12 |      | 150.0 |         |
|           |                                                                    | Z | 8.78   | 100.96 | 25.89 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 11.43  | 89.42  | 25.13 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.12   | 84.99  | 23.86 |      | 50.0  |         |
|           |                                                                    | Z | 8.14   | 82.83  | 22.95 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.97   | 71.63  | 17.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.68   | 69.19  | 16.24 |      | 150.0 |         |
|           |                                                                    | Z | 2.93   | 70.87  | 17.24 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.89   | 71.32  | 15.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.46   | 66.65  | 13.41 |      | 150.0 |         |
|           |                                                                    | Z | 1.78   | 69.74  | 15.31 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 3.28   | 72.61  | 15.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.80   | 70.26  | 14.85 |      | 150.0 |         |
|           |                                                                    | Z | 2.86   | 70.82  | 15.21 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 2.02   | 65.69  | 11.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.07   | 65.40  | 11.81 |      | 150.0 |         |
|           |                                                                    | Z | 2.07   | 65.58  | 12.00 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.72   | 65.85  | 17.74 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.78   | 65.42  | 17.53 |      | 50.0  |         |
|           |                                                                    | Z | 4.74   | 65.16  | 17.51 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.13   | 66.14  | 18.27 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.22   | 65.77  | 18.07 |      | 50.0  |         |
|           |                                                                    | Z | 5.18   | 65.64  | 18.13 |      | 50.0  |         |

|           |                                                                     |   |      |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.87 | 65.75 | 18.09 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.97 | 65.43 | 17.92 |       | 50.0  |         |
|           |                                                                     | Z | 4.93 | 65.28 | 17.98 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.70 | 65.69 | 17.62 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.76 | 65.25 | 17.39 |       | 50.0  |         |
|           |                                                                     | Z | 4.74 | 65.17 | 17.49 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.27 | 67.35 | 19.54 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.46 | 67.57 | 19.71 |       | 35.0  |         |
|           |                                                                     | Z | 4.33 | 66.90 | 19.56 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.60 | 66.41 | 19.14 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.75 | 66.45 | 19.22 |       | 35.0  |         |
|           |                                                                     | Z | 4.67 | 65.98 | 19.11 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.49 | 66.55 | 19.10 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.66 | 66.69 | 19.22 |       | 35.0  |         |
|           |                                                                     | Z | 4.58 | 66.22 | 19.12 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.47 | 66.75 | 19.25 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.63 | 66.87 | 19.34 |       | 35.0  |         |
|           |                                                                     | Z | 4.54 | 66.36 | 19.23 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.65 | 66.61 | 19.28 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.82 | 66.71 | 19.38 |       | 35.0  |         |
|           |                                                                     | Z | 4.74 | 66.25 | 19.28 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.54 | 66.47 | 19.12 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.70 | 66.52 | 19.20 |       | 35.0  |         |
|           |                                                                     | Z | 4.62 | 66.04 | 19.09 |       | 35.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.35 | 70.71 | 17.27 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.03 | 68.44 | 15.91 |       | 150.0 |         |
|           |                                                                     | Z | 3.29 | 69.99 | 16.82 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 4.14 | 76.66 | 17.56 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 2.85 | 70.75 | 14.87 |       | 70.0  |         |
|           |                                                                     | Z | 2.37 | 69.11 | 14.12 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 8.58 | 90.79 | 25.43 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 4.78 | 79.72 | 21.17 |       | 30.0  |         |
|           |                                                                     | Z | 4.55 | 79.07 | 20.77 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.10 | 65.06 | 16.35 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.98 | 63.13 | 14.77 |       | 150.0 |         |
|           |                                                                     | Z | 1.01 | 64.16 | 15.80 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.56 | 66.93 | 16.52 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.55 | 66.38 | 16.23 |       | 150.0 |         |
|           |                                                                     | Z | 4.60 | 66.58 | 16.44 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.56 | 66.93 | 16.52 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.55 | 66.38 | 16.23 |       | 150.0 |         |
|           |                                                                     | Z | 4.60 | 66.58 | 16.44 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.67 | 67.29 | 16.53 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.67 | 66.71 | 16.20 |       | 150.0 |         |
|           |                                                                     | Z | 4.74 | 66.99 | 16.46 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.37 | 67.39 | 16.65 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.39 | 66.99 | 16.43 |       | 150.0 |         |
|           |                                                                     | Z | 5.43 | 67.15 | 16.60 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.62   | 67.65  | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.63   | 67.27  | 16.42 |      | 150.0 |         |
|           |                                                                                 | Z | 5.70   | 67.53  | 16.64 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 2.16   | 74.98  | 16.58 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.28   | 66.95  | 12.79 |      | 115.0 |         |
|           |                                                                                 | Z | 1.74   | 71.36  | 15.26 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 2.16   | 74.98  | 16.58 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.28   | 66.95  | 12.79 |      | 115.0 |         |
|           |                                                                                 | Z | 1.74   | 71.36  | 15.26 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 119.17 | 29.16 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 47.04  | 112.86 | 29.01 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 124.79 | 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 | 123.22 | 30.54 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 123.25 | 30.93 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 121.48 | 29.86 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.03   | 64.28  | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.91   | 62.36  | 14.20 |      | 150.0 |         |
|           |                                                                                 | Z | 0.95   | 63.47  | 15.29 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.52   | 66.97  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.49   | 66.36  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.56   | 66.63  | 16.41 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.52   | 66.97  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.49   | 66.36  | 16.15 |      | 150.0 |         |
|           |                                                                                 | Z | 4.56   | 66.63  | 16.41 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.51   | 67.16  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.48   | 66.50  | 16.16 |      | 150.0 |         |
|           |                                                                                 | Z | 4.55   | 66.78  | 16.42 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.53   | 67.09  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.50   | 66.46  | 16.17 |      | 150.0 |         |
|           |                                                                                 | Z | 4.57   | 66.73  | 16.43 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.64   | 67.06  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.63   | 66.47  | 16.19 |      | 150.0 |         |
|           |                                                                                 | Z | 4.69   | 66.73  | 16.44 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.80   | 67.37  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.80   | 66.81  | 16.31 |      | 150.0 |         |
|           |                                                                                 | Z | 4.87   | 67.08  | 16.56 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.73   | 67.33  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.72   | 66.75  | 16.28 |      | 150.0 |         |
|           |                                                                                 | Z | 4.79   | 67.03  | 16.53 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.32   | 67.53  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.35   | 67.19  | 16.53 |      | 150.0 |         |
|           |                                                                                 | Z | 5.41   | 67.42  | 16.74 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.34   | 67.60  | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.35   | 67.21  | 16.53 |      | 150.0 |         |
|           |                                                                                 | Z | 5.42   | 67.44  | 16.74 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.34   | 67.55  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.36   | 67.16  | 16.50 |      | 150.0 |         |
|           |                                                                | Z | 5.42   | 67.39  | 16.71 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.45   | 72.34  | 18.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.23   | 70.61  | 18.19 |      | 150.0 |         |
|           |                                                                | Z | 4.46   | 71.63  | 18.92 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.21   | 67.67  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.18   | 66.90  | 16.13 |      | 150.0 |         |
|           |                                                                | Z | 4.27   | 67.27  | 16.47 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.50   | 67.44  | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.48   | 66.79  | 16.22 |      | 150.0 |         |
|           |                                                                | Z | 4.56   | 67.10  | 16.50 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.74   | 67.37  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.73   | 66.79  | 16.30 |      | 150.0 |         |
|           |                                                                | Z | 4.81   | 67.07  | 16.56 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.67   | 73.61  | 19.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.33   | 71.42  | 18.13 |      | 150.0 |         |
|           |                                                                | Z | 4.63   | 72.69  | 18.98 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 122.96 | 30.42 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 123.03 | 30.82 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 121.24 | 29.74 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.53   | 67.93  | 15.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.46   | 66.82  | 15.40 |      | 150.0 |         |
|           |                                                                | Z | 3.58   | 67.41  | 15.91 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.05   | 67.46  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.01   | 66.66  | 15.98 |      | 150.0 |         |
|           |                                                                | Z | 4.10   | 67.04  | 16.33 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.32   | 67.29  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.29   | 66.60  | 16.11 |      | 150.0 |         |
|           |                                                                | Z | 4.36   | 66.93  | 16.41 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.51   | 67.16  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.48   | 66.53  | 16.14 |      | 150.0 |         |
|           |                                                                | Z | 4.55   | 66.83  | 16.41 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.43   | 68.17  | 15.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.35   | 66.96  | 14.99 |      | 150.0 |         |
|           |                                                                | Z | 3.50   | 67.67  | 15.58 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.19   | 68.04  | 16.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.21   | 67.72  | 16.67 |      | 150.0 |         |
|           |                                                                | Z | 6.27   | 67.93  | 16.85 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.78   | 65.60  | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.73   | 64.97  | 15.86 |      | 150.0 |         |
|           |                                                                | Z | 3.77   | 65.24  | 16.13 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 4.28   | 72.82  | 18.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.93   | 70.47  | 17.43 |      | 150.0 |         |
|           |                                                                | Z | 4.19   | 71.65  | 18.27 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 5.16   | 69.26  | 18.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.12   | 68.34  | 18.30 |      | 150.0 |         |
|           |                                                                | Z | 5.26   | 68.82  | 18.73 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.22   | 75.04  | 19.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.79   | 67.36  | 15.18 |      | 150.0 |         |
|           |                                                                   | Z | 1.04   | 72.67  | 18.32 |      | 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 | 129.47 | 33.43 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 127.28 | 32.86 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 125.03 | 31.59 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.27   | 72.28  | 13.39 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 4.56   | 75.48  | 15.26 |      | 80.0  |         |
|           |                                                                   | Z | 1.47   | 64.20  | 10.41 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.15   | 62.24  | 8.85  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.75   | 65.10  | 10.83 |      | 80.0  |         |
|           |                                                                   | Z | 1.05   | 60.61  | 8.20  |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.26 | 31.77 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.34 | 31.34 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.62 | 29.86 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.21   | 68.61  | 12.00 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 3.08   | 71.39  | 13.77 |      | 80.0  |         |
|           |                                                                   | Z | 1.32   | 63.14  | 9.86  |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.07   | 61.51  | 8.46  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.57   | 63.98  | 10.28 |      | 80.0  |         |
|           |                                                                   | Z | 1.00   | 60.20  | 7.94  |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 126.63 | 31.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.65 | 31.47 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.95 | 30.00 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.42   | 69.48  | 12.34 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 3.36   | 72.31  | 14.12 |      | 80.0  |         |
|           |                                                                   | Z | 1.35   | 63.38  | 9.99  |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.07   | 61.53  | 8.46  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.57   | 64.00  | 10.29 |      | 80.0  |         |
|           |                                                                   | Z | 1.00   | 60.20  | 7.94  |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.66 | 31.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.68 | 31.48 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.97 | 30.00 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 2.38   | 69.29  | 12.26 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 3.31   | 72.16  | 14.05 |      | 80.0  |         |
|           |                                                                   | Z | 1.34   | 63.31  | 9.94  |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.06   | 61.47  | 8.42  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.55   | 63.94  | 10.24 |      | 80.0  |         |
|           |                                                                   | Z | 0.99   | 60.16  | 7.90  |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 126.62 | 31.92 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.64 | 31.46 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 121.92 | 29.98 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 2.35   | 69.21  | 12.23 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 3.28   | 72.07  | 14.02 |      | 80.0  |         |
|           |                                                                   | Z | 1.33   | 63.28  | 9.92  |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.05   | 61.45  | 8.41  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.55   | 63.91  | 10.23 |      | 80.0  |         |
|           |                                                                   | Z | 0.99   | 60.15  | 7.90  |      | 80.0  |         |

|           |                                                                     |   |       |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 2.18  | 68.48  | 11.93 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.05  | 71.31  | 13.72 |      | 80.0 |         |
|           |                                                                     | Z | 1.30  | 63.05  | 9.80  |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 1.05  | 61.39  | 8.37  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.54  | 63.84  | 10.19 |      | 80.0 |         |
|           |                                                                     | Z | 0.99  | 60.11  | 7.87  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 22.66 | 104.04 | 28.31 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 10.52 | 91.75  | 25.16 |      | 80.0 |         |
|           |                                                                     | Z | 7.12  | 85.84  | 23.15 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 18.76 | 93.01  | 22.77 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.38  | 84.15  | 20.83 |      | 80.0 |         |
|           |                                                                     | Z | 6.29  | 78.88  | 18.94 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 10.50 | 84.61  | 19.86 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.10  | 79.67  | 18.96 |      | 80.0 |         |
|           |                                                                     | Z | 4.94  | 75.07  | 17.20 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.07  | 77.55  | 18.95 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.75  | 71.25  | 16.55 |      | 80.0 |         |
|           |                                                                     | Z | 2.95  | 72.71  | 17.37 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.36  | 76.63  | 17.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.22  | 76.19  | 18.27 |      | 80.0 |         |
|           |                                                                     | Z | 4.21  | 73.47  | 17.21 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.71  | 74.71  | 17.09 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.77  | 74.70  | 17.72 |      | 80.0 |         |
|           |                                                                     | Z | 3.96  | 72.36  | 16.79 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.16  | 78.26  | 20.41 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.12  | 72.88  | 18.19 |      | 80.0 |         |
|           |                                                                     | Z | 3.23  | 73.87  | 18.78 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.46  | 71.60  | 17.12 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.98  | 68.63  | 15.94 |      | 80.0 |         |
|           |                                                                     | Z | 3.03  | 69.17  | 16.37 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.40  | 70.94  | 16.82 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.98  | 68.26  | 15.77 |      | 80.0 |         |
|           |                                                                     | Z | 3.03  | 68.76  | 16.19 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.89  | 75.14  | 20.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.40  | 72.05  | 18.54 |      | 80.0 |         |
|           |                                                                     | Z | 3.45  | 72.57  | 18.88 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.51  | 70.20  | 17.93 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.28  | 68.37  | 17.06 |      | 80.0 |         |
|           |                                                                     | Z | 3.27  | 68.52  | 17.26 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.58  | 69.92  | 17.81 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.38  | 68.21  | 17.01 |      | 80.0 |         |
|           |                                                                     | Z | 3.36  | 68.32  | 17.19 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.92  | 72.56  | 19.10 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.62  | 70.46  | 18.01 |      | 80.0 |         |
|           |                                                                     | Z | 3.62  | 70.74  | 18.23 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.77  | 68.93  | 17.69 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.64  | 67.67  | 17.05 |      | 80.0 |         |
|           |                                                                     | Z | 3.60  | 67.70  | 17.16 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.82 | 68.75 | 17.61 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.71 | 67.55 | 17.01 |      | 80.0 |         |
|           |                                                                      | Z | 3.67 | 67.56 | 17.12 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.37 | 74.54 | 19.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.94 | 72.05 | 18.49 |      | 80.0 |         |
|           |                                                                      | Z | 3.99 | 72.51 | 18.77 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.81 | 69.34 | 17.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.67 | 68.08 | 17.25 |      | 80.0 |         |
|           |                                                                      | Z | 3.64 | 68.16 | 17.38 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.87 | 68.98 | 17.78 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.75 | 67.81 | 17.17 |      | 80.0 |         |
|           |                                                                      | Z | 3.72 | 67.85 | 17.28 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 2.51 | 70.53 | 15.01 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.89 | 66.41 | 13.46 |      | 80.0 |         |
|           |                                                                      | Z | 2.04 | 67.84 | 14.35 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.46 | 61.52 | 9.68  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.55 | 61.46 | 10.01 |      | 80.0 |         |
|           |                                                                      | Z | 1.62 | 62.12 | 10.57 |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.40 | 60.84 | 9.17  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.52 | 61.02 | 9.63  |      | 80.0 |         |
|           |                                                                      | Z | 1.59 | 61.62 | 10.17 |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.90 | 76.38 | 20.05 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.17 | 72.17 | 18.21 |      | 80.0 |         |
|           |                                                                      | Z | 3.23 | 72.85 | 18.65 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.50 | 71.10 | 17.46 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.12 | 68.58 | 16.40 |      | 80.0 |         |
|           |                                                                      | Z | 3.14 | 68.92 | 16.72 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.54 | 70.86 | 17.28 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.18 | 68.44 | 16.28 |      | 80.0 |         |
|           |                                                                      | Z | 3.20 | 68.76 | 16.60 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.83 | 74.89 | 19.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.36 | 71.83 | 18.43 |      | 80.0 |         |
|           |                                                                      | Z | 3.40 | 72.34 | 18.77 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.49 | 70.09 | 17.87 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.27 | 68.27 | 17.00 |      | 80.0 |         |
|           |                                                                      | Z | 3.25 | 68.42 | 17.20 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.56 | 69.81 | 17.75 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.36 | 68.11 | 16.95 |      | 80.0 |         |
|           |                                                                      | Z | 3.34 | 68.22 | 17.13 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.33 | 74.37 | 19.66 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.91 | 71.89 | 18.41 |      | 80.0 |         |
|           |                                                                      | Z | 3.95 | 72.35 | 18.69 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.79 | 69.27 | 17.87 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.66 | 68.02 | 17.21 |      | 80.0 |         |
|           |                                                                      | Z | 3.63 | 68.09 | 17.34 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.86 | 68.91 | 17.74 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.74 | 67.74 | 17.13 |      | 80.0  |         |
|           |                                                                     | Z | 3.71 | 67.78 | 17.24 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.53 | 72.39 | 18.83 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.22 | 70.56 | 17.87 |      | 80.0  |         |
|           |                                                                     | Z | 4.23 | 70.82 | 18.05 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.24 | 68.74 | 17.72 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.14 | 67.79 | 17.20 |      | 80.0  |         |
|           |                                                                     | Z | 4.11 | 67.81 | 17.28 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.28 | 68.44 | 17.62 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.19 | 67.53 | 17.14 |      | 80.0  |         |
|           |                                                                     | Z | 4.15 | 67.52 | 17.20 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.88 | 74.48 | 19.52 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.42 | 72.17 | 18.36 |      | 80.0  |         |
|           |                                                                     | Z | 4.47 | 72.62 | 18.62 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.13 | 69.07 | 17.87 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.03 | 68.07 | 17.31 |      | 80.0  |         |
|           |                                                                     | Z | 4.00 | 68.14 | 17.42 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.14 | 68.57 | 17.70 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.05 | 67.64 | 17.19 |      | 80.0  |         |
|           |                                                                     | Z | 4.01 | 67.67 | 17.27 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.99 | 64.60 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.87 | 62.53 | 14.23 |      | 150.0 |         |
|           |                                                                     | Z | 0.91 | 63.76 | 15.41 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 1.57 | 90.52 | 26.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.52 | 70.36 | 15.95 |      | 150.0 |         |
|           |                                                                     | Z | 1.41 | 88.12 | 24.00 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.90 | 68.15 | 17.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.72 | 64.40 | 14.65 |      | 150.0 |         |
|           |                                                                     | Z | 0.81 | 67.00 | 16.64 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.51 | 67.06 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.49 | 66.43 | 16.13 |      | 150.0 |         |
|           |                                                                     | Z | 4.55 | 66.71 | 16.39 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.69 | 67.26 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.68 | 66.69 | 16.26 |      | 150.0 |         |
|           |                                                                     | Z | 4.75 | 66.97 | 16.52 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.54 | 67.24 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.53 | 66.65 | 16.17 |      | 150.0 |         |
|           |                                                                     | Z | 4.61 | 66.95 | 16.45 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.48 | 67.24 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.46 | 66.64 | 16.15 |      | 150.0 |         |
|           |                                                                     | Z | 4.54 | 66.96 | 16.44 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.54 | 67.36 | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.52 | 66.71 | 16.23 |      | 150.0 |         |
|           |                                                                     | Z | 4.59 | 67.00 | 16.50 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.43 | 67.25 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.40 | 66.56 | 16.07 |      | 150.0 |         |
|           |                                                            | Z | 4.47 | 66.87 | 16.35 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.48 | 67.27 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.47 | 66.64 | 16.20 |      | 150.0 |         |
|           |                                                            | Z | 4.54 | 66.94 | 16.48 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.48 | 66.34 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.45 | 65.66 | 15.79 |      | 150.0 |         |
|           |                                                            | Z | 4.52 | 65.96 | 16.07 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.64 | 66.69 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.62 | 66.04 | 15.94 |      | 150.0 |         |
|           |                                                            | Z | 4.70 | 66.36 | 16.21 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.57 | 66.67 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.54 | 66.00 | 15.88 |      | 150.0 |         |
|           |                                                            | Z | 4.62 | 66.33 | 16.16 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.58 | 66.68 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.56 | 66.02 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 4.64 | 66.35 | 16.19 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.58 | 66.68 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.56 | 66.02 | 15.91 |      | 150.0 |         |
|           |                                                            | Z | 4.64 | 66.35 | 16.19 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.57 | 66.78 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.55 | 66.14 | 15.93 |      | 150.0 |         |
|           |                                                            | Z | 4.64 | 66.48 | 16.22 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.44 | 66.64 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.41 | 65.98 | 15.86 |      | 150.0 |         |
|           |                                                            | Z | 4.49 | 66.34 | 16.16 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.60 | 66.74 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.57 | 66.06 | 15.90 |      | 150.0 |         |
|           |                                                            | Z | 4.65 | 66.38 | 16.18 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.11 | 66.67 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.10 | 66.18 | 16.00 |      | 150.0 |         |
|           |                                                            | Z | 5.17 | 66.45 | 16.24 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.18 | 66.86 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.17 | 66.36 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 5.24 | 66.62 | 16.31 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.05 | 66.83 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.03 | 66.29 | 16.03 |      | 150.0 |         |
|           |                                                            | Z | 5.11 | 66.58 | 16.28 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.11 | 66.78 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.10 | 66.27 | 16.02 |      | 150.0 |         |
|           |                                                            | Z | 5.17 | 66.56 | 16.26 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.19 | 66.77 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.19 | 66.31 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 5.27 | 66.59 | 16.32 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.12 | 66.79 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.12 | 66.32 | 16.10 |      | 150.0 |         |
|           |                                                            | Z | 5.19 | 66.59 | 16.34 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.10 | 66.67 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.09 | 66.17 | 16.02 |      | 150.0 |         |
|           |                                                    | Z | 5.16 | 66.44 | 16.26 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.25 | 66.73 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.25 | 66.25 | 16.08 |      | 150.0 |         |
|           |                                                    | Z | 5.32 | 66.51 | 16.31 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.32 | 66.74 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.33 | 66.31 | 16.13 |      | 150.0 |         |
|           |                                                    | Z | 5.40 | 66.56 | 16.35 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.43 | 66.75 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.27 | 15.99 |      | 150.0 |         |
|           |                                                    | Z | 5.46 | 66.52 | 16.21 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.62 | 67.17 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.62 | 66.75 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.69 | 67.01 | 16.39 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.49 | 66.94 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.48 | 66.52 | 16.08 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 66.80 | 16.30 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.56 | 66.99 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.56 | 66.58 | 16.10 |      | 150.0 |         |
|           |                                                    | Z | 5.64 | 66.88 | 16.33 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.78 | 67.85 | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 67.82 | 16.68 |      | 150.0 |         |
|           |                                                    | Z | 6.02 | 68.18 | 16.94 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.52 | 66.99 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.51 | 66.53 | 16.09 |      | 150.0 |         |
|           |                                                    | Z | 5.57 | 66.78 | 16.30 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.52 | 67.01 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.51 | 66.55 | 16.06 |      | 150.0 |         |
|           |                                                    | Z | 5.58 | 66.82 | 16.28 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.44 | 66.84 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.41 | 66.33 | 15.96 |      | 150.0 |         |
|           |                                                    | Z | 5.48 | 66.58 | 16.18 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.52 | 66.84 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.50 | 66.37 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.57 | 66.63 | 16.23 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.84 | 67.09 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 66.65 | 16.09 |      | 150.0 |         |
|           |                                                    | Z | 5.88 | 66.90 | 16.29 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.96 | 67.38 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.96 | 66.99 | 16.23 |      | 150.0 |         |
|           |                                                    | Z | 6.02 | 67.24 | 16.44 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.99 | 67.44 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.98 | 67.02 | 16.24 |      | 150.0 |         |
|           |                                                    | Z | 6.04 | 67.27 | 16.45 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.95 | 67.33 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.94 | 66.93 | 16.22 |      | 150.0 |         |
|           |                                                    | Z | 6.01 | 67.18 | 16.43 |      | 150.0 |         |

|           |                                                                 |   |       |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 5.99  | 67.49  | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.00  | 67.11  | 16.32 |      | 150.0 |         |
|           |                                                                 | Z | 6.07  | 67.38  | 16.54 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 5.99  | 67.33  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.98  | 66.93  | 16.27 |      | 150.0 |         |
|           |                                                                 | Z | 6.05  | 67.18  | 16.48 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.91  | 67.31  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.91  | 66.92  | 16.30 |      | 150.0 |         |
|           |                                                                 | Z | 5.97  | 67.17  | 16.51 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.02  | 67.64  | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.06  | 67.37  | 16.53 |      | 150.0 |         |
|           |                                                                 | Z | 6.14  | 67.67  | 16.76 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.14  | 67.63  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.40  | 67.99  | 16.79 |      | 150.0 |         |
|           |                                                                 | Z | 6.54  | 68.40  | 17.07 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.83  | 67.06  | 16.58 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81  | 66.51  | 16.28 |      | 150.0 |         |
|           |                                                                 | Z | 4.87  | 66.74  | 16.51 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.05  | 67.50  | 16.90 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.06  | 66.99  | 16.63 |      | 150.0 |         |
|           |                                                                 | Z | 5.12  | 67.24  | 16.86 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.88  | 67.35  | 16.72 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.89  | 66.83  | 16.44 |      | 150.0 |         |
|           |                                                                 | Z | 4.95  | 67.08  | 16.66 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.92  | 67.77  | 17.10 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.91  | 67.24  | 16.80 |      | 150.0 |         |
|           |                                                                 | Z | 4.99  | 67.52  | 17.05 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.79  | 67.12  | 16.48 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.79  | 66.58  | 16.18 |      | 150.0 |         |
|           |                                                                 | Z | 4.85  | 66.80  | 16.39 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.89  | 67.91  | 17.19 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86  | 67.30  | 16.85 |      | 150.0 |         |
|           |                                                                 | Z | 4.93  | 67.58  | 17.10 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.91  | 67.72  | 17.09 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.90  | 67.16  | 16.79 |      | 150.0 |         |
|           |                                                                 | Z | 4.97  | 67.43  | 17.03 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.16  | 65.48  | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.04  | 63.66  | 15.10 |      | 130.0 |         |
|           |                                                                 | Z | 1.06  | 64.46  | 15.94 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.18  | 66.21  | 17.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.05  | 64.22  | 15.46 |      | 130.0 |         |
|           |                                                                 | Z | 1.08  | 65.16  | 16.38 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 43.96 | 143.35 | 39.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 2.00  | 86.04  | 22.34 |      | 130.0 |         |
|           |                                                                 | Z | 20.42 | 126.57 | 34.62 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.46  | 74.85  | 21.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.15  | 70.20  | 18.44 |      | 130.0 |         |
|           |                                                                 | Z | 1.31  | 73.62  | 20.61 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.60 | 66.82 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.60 | 66.29 | 16.34 |      | 130.0 |         |
|           |                                                                 | Z | 4.64 | 66.48 | 16.53 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.63 | 67.01 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.46 | 16.40 |      | 130.0 |         |
|           |                                                                 | Z | 4.67 | 66.66 | 16.60 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.82 | 67.28 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.84 | 66.79 | 16.59 |      | 130.0 |         |
|           |                                                                 | Z | 4.89 | 66.99 | 16.79 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.73 | 67.46 | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.73 | 66.94 | 16.69 |      | 130.0 |         |
|           |                                                                 | Z | 4.79 | 67.18 | 16.91 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.48 | 66.68 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.49 | 66.20 | 15.97 |      | 130.0 |         |
|           |                                                                 | Z | 4.54 | 66.39 | 16.16 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.52 | 66.73 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.54 | 66.23 | 15.99 |      | 130.0 |         |
|           |                                                                 | Z | 4.59 | 66.40 | 16.17 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.63 | 67.52 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.97 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.68 | 67.20 | 16.84 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.42 | 66.43 | 16.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.44 | 65.96 | 15.76 |      | 130.0 |         |
|           |                                                                 | Z | 4.49 | 66.14 | 15.94 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.60 | 66.82 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.60 | 66.29 | 16.34 |      | 130.0 |         |
|           |                                                                 | Z | 4.64 | 66.48 | 16.53 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.63 | 67.01 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.46 | 16.40 |      | 130.0 |         |
|           |                                                                 | Z | 4.67 | 66.66 | 16.60 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.82 | 67.28 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.84 | 66.79 | 16.59 |      | 130.0 |         |
|           |                                                                 | Z | 4.89 | 66.99 | 16.79 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.73 | 67.46 | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.73 | 66.94 | 16.69 |      | 130.0 |         |
|           |                                                                 | Z | 4.79 | 67.18 | 16.91 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.48 | 66.68 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.49 | 66.20 | 15.97 |      | 130.0 |         |
|           |                                                                 | Z | 4.54 | 66.39 | 16.16 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.52 | 66.73 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.54 | 66.23 | 15.99 |      | 130.0 |         |
|           |                                                                 | Z | 4.59 | 66.40 | 16.17 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.63 | 67.52 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.97 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.68 | 67.20 | 16.84 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.42 | 66.43 | 16.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.44 | 65.96 | 15.76 |      | 130.0 |         |
|           |                                                                 | Z | 4.49 | 66.14 | 15.94 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.75 | 66.87 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.75 | 66.37 | 16.45 |      | 130.0 |         |
|           |                                                       | Z | 4.80 | 66.55 | 16.63 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.90 | 67.21 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.91 | 66.71 | 16.58 |      | 130.0 |         |
|           |                                                       | Z | 4.96 | 66.91 | 16.77 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.82 | 67.11 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.83 | 66.62 | 16.46 |      | 130.0 |         |
|           |                                                       | Z | 4.88 | 66.82 | 16.65 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.87 | 67.28 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.88 | 66.79 | 16.62 |      | 130.0 |         |
|           |                                                       | Z | 4.94 | 66.99 | 16.81 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.84 | 67.24 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.85 | 66.74 | 16.51 |      | 130.0 |         |
|           |                                                       | Z | 4.91 | 66.94 | 16.70 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.78 | 67.24 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.79 | 66.73 | 16.51 |      | 130.0 |         |
|           |                                                       | Z | 4.84 | 66.94 | 16.70 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.73 | 67.13 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.74 | 66.64 | 16.39 |      | 130.0 |         |
|           |                                                       | Z | 4.79 | 66.85 | 16.59 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.71 | 67.38 | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.72 | 66.89 | 16.66 |      | 130.0 |         |
|           |                                                       | Z | 4.78 | 67.13 | 16.88 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.41 | 67.32 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.44 | 66.98 | 16.69 |      | 130.0 |         |
|           |                                                       | Z | 5.48 | 67.15 | 16.85 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.54 | 67.74 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.63 | 67.59 | 16.97 |      | 130.0 |         |
|           |                                                       | Z | 5.69 | 67.81 | 17.15 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.43 | 67.51 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.49 | 67.23 | 16.80 |      | 130.0 |         |
|           |                                                       | Z | 5.54 | 67.42 | 16.97 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.55 | 67.59 | 16.91 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.58 | 67.24 | 16.72 |      | 130.0 |         |
|           |                                                       | Z | 5.62 | 67.39 | 16.87 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.61 | 67.86 | 17.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.65 | 67.53 | 17.00 |      | 130.0 |         |
|           |                                                       | Z | 5.71 | 67.72 | 17.17 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.46 | 67.45 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.44 | 66.94 | 16.69 |      | 130.0 |         |
|           |                                                       | Z | 5.48 | 67.11 | 16.85 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.54 | 67.66 | 17.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.58 | 67.37 | 16.91 |      | 130.0 |         |
|           |                                                       | Z | 5.62 | 67.51 | 17.04 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.27 | 66.94 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.32 | 66.69 | 16.42 |      | 130.0 |         |
|           |                                                       | Z | 5.35 | 66.82 | 16.56 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.60 | 66.25 | 16.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.59 | 65.67 | 16.06 |      | 130.0 |         |
|           |                                                   | Z | 4.64 | 65.88 | 16.27 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.78 | 66.65 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.78 | 66.09 | 16.23 |      | 130.0 |         |
|           |                                                   | Z | 4.84 | 66.31 | 16.44 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.67 | 66.49 | 16.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.67 | 65.93 | 16.06 |      | 130.0 |         |
|           |                                                   | Z | 4.73 | 66.16 | 16.27 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.72 | 66.66 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.72 | 66.09 | 16.23 |      | 130.0 |         |
|           |                                                   | Z | 4.78 | 66.33 | 16.45 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.64 | 66.46 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.63 | 65.90 | 16.07 |      | 130.0 |         |
|           |                                                   | Z | 4.69 | 66.13 | 16.29 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.64 | 66.62 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.64 | 66.05 | 16.11 |      | 130.0 |         |
|           |                                                   | Z | 4.71 | 66.29 | 16.33 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.64 | 66.47 | 16.29 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.65 | 65.94 | 16.00 |      | 130.0 |         |
|           |                                                   | Z | 4.71 | 66.18 | 16.21 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.60 | 66.69 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.59 | 66.13 | 16.24 |      | 130.0 |         |
|           |                                                   | Z | 4.65 | 66.40 | 16.47 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.63 | 66.28 | 16.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.63 | 65.71 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.69 | 65.92 | 16.04 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.25 | 66.64 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.26 | 66.22 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 5.31 | 66.43 | 16.47 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.32 | 66.83 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.33 | 66.41 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 5.38 | 66.58 | 16.52 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.21 | 66.86 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.21 | 66.40 | 16.37 |      | 130.0 |         |
|           |                                                   | Z | 5.26 | 66.62 | 16.56 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.21 | 66.63 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.24 | 66.25 | 16.22 |      | 130.0 |         |
|           |                                                   | Z | 5.29 | 66.44 | 16.40 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.30 | 66.65 | 16.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.33 | 66.28 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 5.39 | 66.50 | 16.48 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.31 | 66.81 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.31 | 66.38 | 16.46 |      | 130.0 |         |
|           |                                                   | Z | 5.37 | 66.59 | 16.65 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.32 | 66.98 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.34 | 66.58 | 16.56 |      | 130.0 |         |
|           |                                                   | Z | 5.39 | 66.79 | 16.74 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.20 | 66.48 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.20 | 66.06 | 16.17 |      | 130.0 |         |
|           |                                                    | Z | 5.25 | 66.25 | 16.34 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.38 | 66.68 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.41 | 66.29 | 16.35 |      | 130.0 |         |
|           |                                                    | Z | 5.46 | 66.49 | 16.52 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.69 | 67.49 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.85 | 67.51 | 17.01 |      | 130.0 |         |
|           |                                                    | Z | 5.93 | 67.77 | 17.20 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.55 | 66.68 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.54 | 66.26 | 16.24 |      | 130.0 |         |
|           |                                                    | Z | 5.58 | 66.45 | 16.40 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.79 | 67.25 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 66.93 | 16.53 |      | 130.0 |         |
|           |                                                    | Z | 5.87 | 67.12 | 16.69 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.57 | 66.73 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.59 | 66.40 | 16.20 |      | 130.0 |         |
|           |                                                    | Z | 5.64 | 66.59 | 16.36 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.65 | 66.79 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 66.52 | 16.25 |      | 130.0 |         |
|           |                                                    | Z | 5.73 | 66.67 | 16.39 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.03 | 68.15 | 17.08 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.29 | 68.49 | 17.22 |      | 130.0 |         |
|           |                                                    | Z | 6.38 | 68.79 | 17.43 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 5.96 | 68.05 | 17.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.06 | 67.94 | 17.16 |      | 130.0 |         |
|           |                                                    | Z | 6.15 | 68.25 | 17.38 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.76 | 67.33 | 16.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.78 | 66.97 | 16.69 |      | 130.0 |         |
|           |                                                    | Z | 5.83 | 67.17 | 16.87 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.64 | 66.92 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.65 | 66.54 | 16.30 |      | 130.0 |         |
|           |                                                    | Z | 5.71 | 66.76 | 16.48 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.62 | 66.95 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.56 | 16.37 |      | 130.0 |         |
|           |                                                    | Z | 5.69 | 66.78 | 16.55 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.49 | 66.24 | 15.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.52 | 65.90 | 15.77 |      | 130.0 |         |
|           |                                                    | Z | 5.56 | 66.07 | 15.92 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.97 | 67.02 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.97 | 66.67 | 16.35 |      | 130.0 |         |
|           |                                                    | Z | 6.01 | 66.85 | 16.50 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.12 | 67.41 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.14 | 67.11 | 16.55 |      | 130.0 |         |
|           |                                                    | Z | 6.19 | 67.29 | 16.70 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.12 | 67.38 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.14 | 67.07 | 16.51 |      | 130.0 |         |
|           |                                                    | Z | 6.19 | 67.25 | 16.66 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.09   | 67.31  | 16.68 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.11   | 67.00  | 16.52 |       | 130.0 |         |
|           |                                                        | Z | 6.16   | 67.20  | 16.68 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.09   | 67.31  | 16.62 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.13   | 67.04  | 16.47 |       | 130.0 |         |
|           |                                                        | Z | 6.18   | 67.25  | 16.64 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.15   | 67.24  | 16.60 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.15   | 66.89  | 16.42 |       | 130.0 |         |
|           |                                                        | Z | 6.19   | 67.04  | 16.56 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.18   | 67.49  | 16.89 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.20   | 67.16  | 16.73 |       | 130.0 |         |
|           |                                                        | Z | 6.25   | 67.36  | 16.89 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.02   | 67.17  | 16.63 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.04   | 66.85  | 16.47 |       | 130.0 |         |
|           |                                                        | Z | 6.08   | 67.03  | 16.62 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.16   | 67.59  | 16.86 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.24   | 67.46  | 16.79 |       | 130.0 |         |
|           |                                                        | Z | 6.31   | 67.70  | 16.97 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.33   | 67.74  | 16.89 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.77   | 68.58  | 17.30 |       | 130.0 |         |
|           |                                                        | Z | 6.86   | 68.86  | 17.49 |       | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 21.37  | 115.44 | 39.45 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 16.57  | 106.59 | 36.30 |       | 60.0  |         |
|           |                                                        | Z | 12.85  | 100.08 | 33.69 |       | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 17.53  | 111.56 | 38.45 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 14.74  | 104.61 | 35.82 |       | 60.0  |         |
|           |                                                        | Z | 11.56  | 98.37  | 33.26 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.76   | 65.85  | 11.89 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.58   | 62.15  | 9.36  |       | 150.0 |         |
|           |                                                        | Z | 0.68   | 64.26  | 11.01 |       | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 3.58   | 67.43  | 16.93 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.45   | 66.17  | 16.33 |       | 80.0  |         |
|           |                                                        | Z | 3.45   | 66.30  | 16.52 |       | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 4.06   | 66.44  | 16.92 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.99   | 65.63  | 16.51 |       | 80.0  |         |
|           |                                                        | Z | 3.96   | 65.65  | 16.63 |       | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.03   | 66.03  | 16.90 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.96   | 65.29  | 16.52 |       | 80.0  |         |
|           |                                                        | Z | 3.93   | 65.30  | 16.62 |       | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 4.09   | 65.98  | 16.92 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.02   | 65.29  | 16.56 |       | 80.0  |         |
|           |                                                        | Z | 3.99   | 65.31  | 16.66 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 29.16  | 94.14  | 21.13 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 9.47   | 81.27  | 17.74 |       | 50.0  |         |
|           |                                                        | Z | 5.06   | 73.00  | 14.38 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 106.49 | 22.76 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 105.92 | 22.67 |       | 60.0  |         |
|           |                                                        | Z | 6.66   | 77.90  | 14.77 |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 106.89 | 21.67 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 101.15 | 19.24 |      | 80.0  |         |
|           |                             | Z | 100.00 | 98.11  | 17.66 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 109.97 | 21.79 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 1.04   | 66.37  | 7.97  |      | 100.0 |         |
|           |                             | Z | 0.32   | 60.00  | 4.70  |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 122.28 | 24.82 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 46.02  | 217.52 | 18.45 |      | 120.0 |         |
|           |                             | Z | 88.16  | 61.15  | 1.49  |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



Accredited by the Swiss Accreditation Service (SAS)

Accreditation No.: **SCS 0108**

The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Client **PC Test**

Certificate No: **EX3-7416\_Jul18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7416**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6**  
**Calibration procedure for dosimetric E-field probes**

Calibration date: **July 20, 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 ( $22 \pm 3$ )°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-18 (No. 217-02672/02673)   | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103244       | 04-Apr-18 (No. 217-02672)         | Apr-19                 |
| Power sensor NRP-Z91       | SN: 103245       | 04-Apr-18 (No. 217-02673)         | Apr-19                 |
| Reference 20 dB Attenuator | SN: S5277 (20x)  | 04-Apr-18 (No. 217-02682)         | Apr-19                 |
| 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-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: MY41498087   | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A        | SN: 000110210    | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C      | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A    | SN: US41080477   | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |

|                                                                                                                 |                              |                                          |                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------|
| Calibrated by:                                                                                                  | Name<br><b>Michael Weber</b> | Function<br><b>Laboratory Technician</b> | Signature<br> |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b> | Function<br><b>Technical Manager</b>     |               |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                              |                                          | Issued: July 21, 2018                                                                              |



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Accreditation No.: **SCS 0108**

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 Multilateral Agreement for the recognition of calibration certificates

### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\varphi$   | $\varphi$ rotation around probe axis                                                                                                                    |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ 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:

- 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
- 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
- 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
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM( $f$ )<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* 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.
- DCP<sub>x,y,z</sub>**: 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
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: 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  $f \leq 800$  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 NORM<sub>x,y,z</sub> \* 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  $\pm 50$  MHz to  $\pm 100$  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 NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:7416

Manufactured: March 10, 2016  
Calibrated: July 20, 2018

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7416

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.59     | 0.52     | 0.53     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 97.2     | 93.5     | 96.5     |               |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 149.4    | $\pm 3.3 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 140.2    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 147.9    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms} \cdot \text{V}^{-2}$ | T2<br>$\text{ms} \cdot \text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|---------------------------------------|---------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 29.94    | 230.8    | 37.81                       | 8.573                                 | 0.020                                 | 5.100    | 0.000                 | 0.329                 | 1.005 |
| Y | 35.08    | 270.5    | 37.53                       | 5.275                                 | 0.109                                 | 5.067    | 0.000                 | 0.317                 | 1.010 |
| Z | 37.25    | 278.1    | 35.59                       | 8.445                                 | 0.000                                 | 5.071    | 1.581                 | 0.146                 | 1.007 |

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%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter; uncertainty not required.

<sup>E</sup> 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:7416

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 9.95    | 9.95    | 9.95    | 0.38               | 1.03                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 9.45    | 9.45    | 9.45    | 0.35               | 0.96                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.37    | 8.37    | 8.37    | 0.40               | 0.84                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.04    | 8.04    | 8.04    | 0.42               | 0.90                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 7.70    | 7.70    | 7.70    | 0.41               | 0.84                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.25    | 7.25    | 7.25    | 0.45               | 0.81                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.04    | 7.04    | 7.04    | 0.43               | 0.84                    | ± 12.0 %  |
| 5250                 | 35.9                               | 4.71                            | 5.21    | 5.21    | 5.21    | 0.40               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.75    | 4.75    | 4.75    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 4.98    | 4.98    | 4.98    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> 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.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) 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 ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> 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:7416

### Calibration Parameter Determined in Body Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 9.60    | 9.60    | 9.60    | 0.47               | 0.80                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.40    | 9.40    | 9.40    | 0.46               | 0.85                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 7.99    | 7.99    | 7.99    | 0.41               | 0.85                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.69    | 7.69    | 7.69    | 0.40               | 0.84                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.49    | 7.49    | 7.49    | 0.39               | 0.84                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.31    | 7.31    | 7.31    | 0.32               | 0.96                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.23    | 7.23    | 7.23    | 0.32               | 0.97                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.61    | 4.61    | 4.61    | 0.50               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.02    | 4.02    | 4.02    | 0.50               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.21    | 4.21    | 4.21    | 0.50               | 1.90                    | ± 13.1 %  |

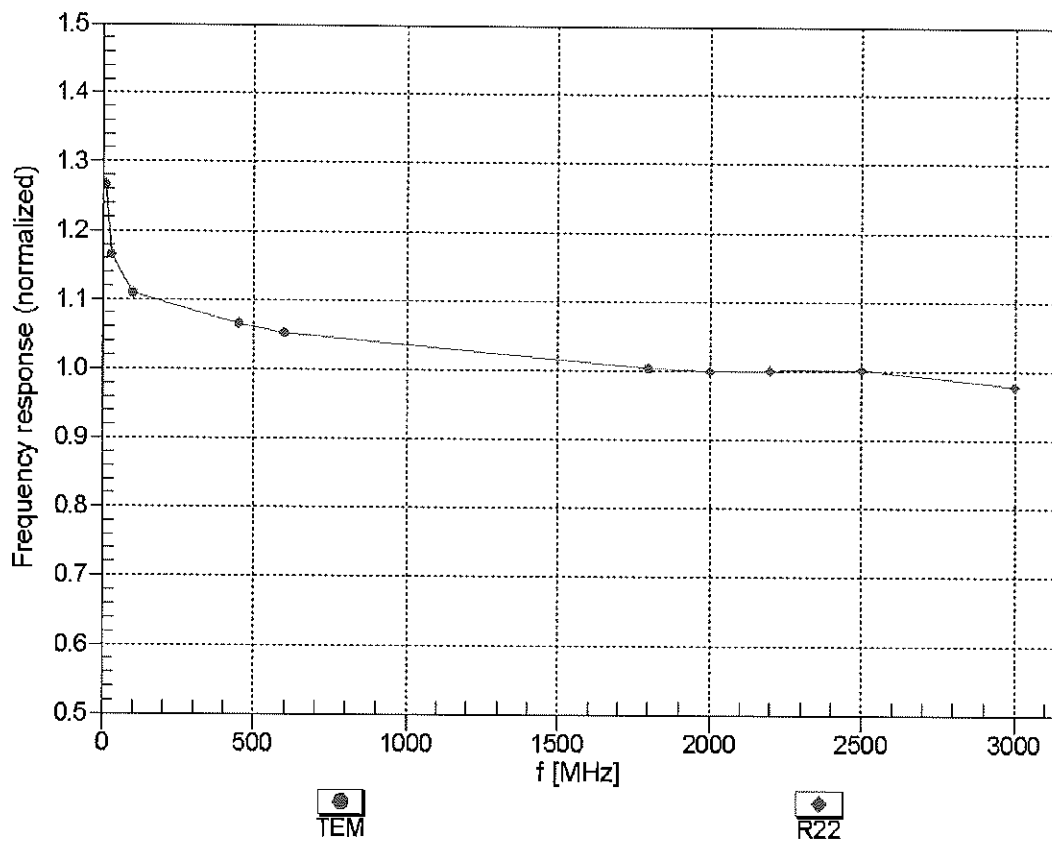
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 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.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) 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 ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> 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

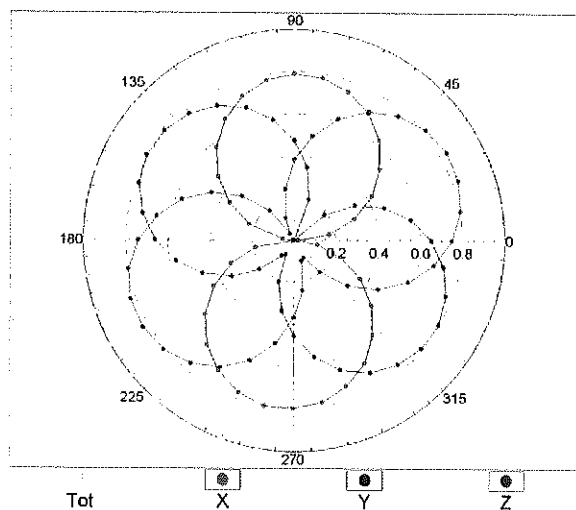
(TEM-Cell:ifi110 EXX, Waveguide: R22)



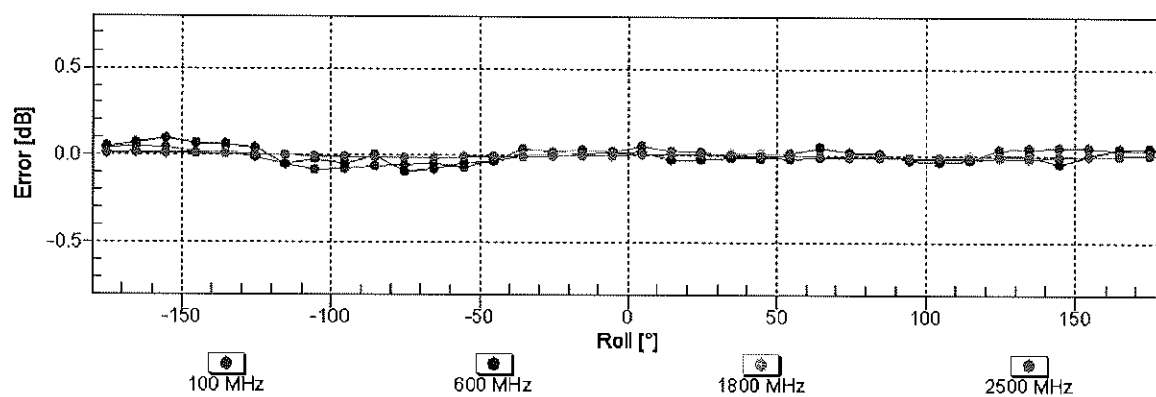
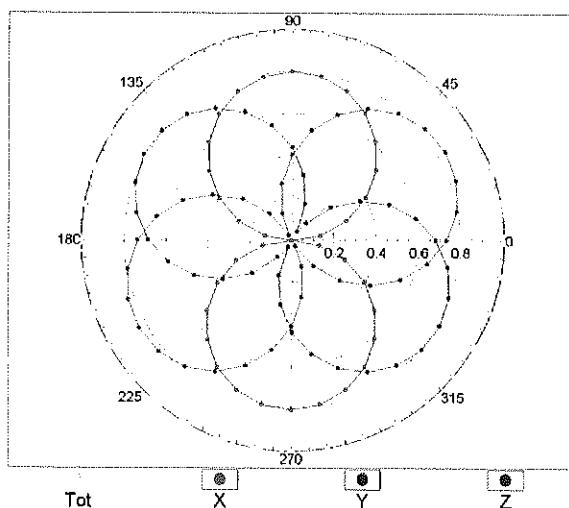
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

f=600 MHz,TEM

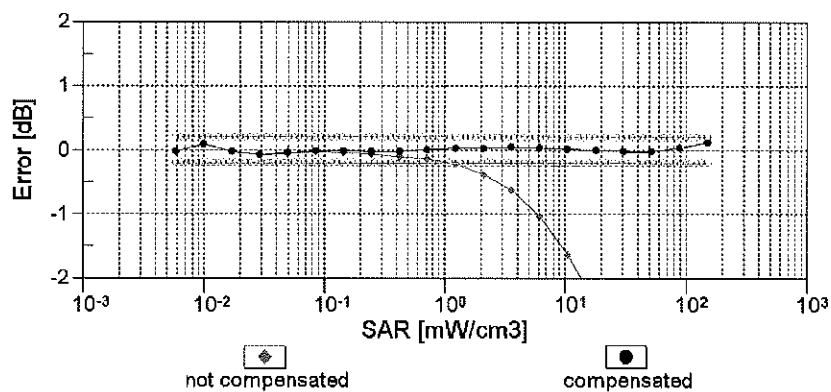
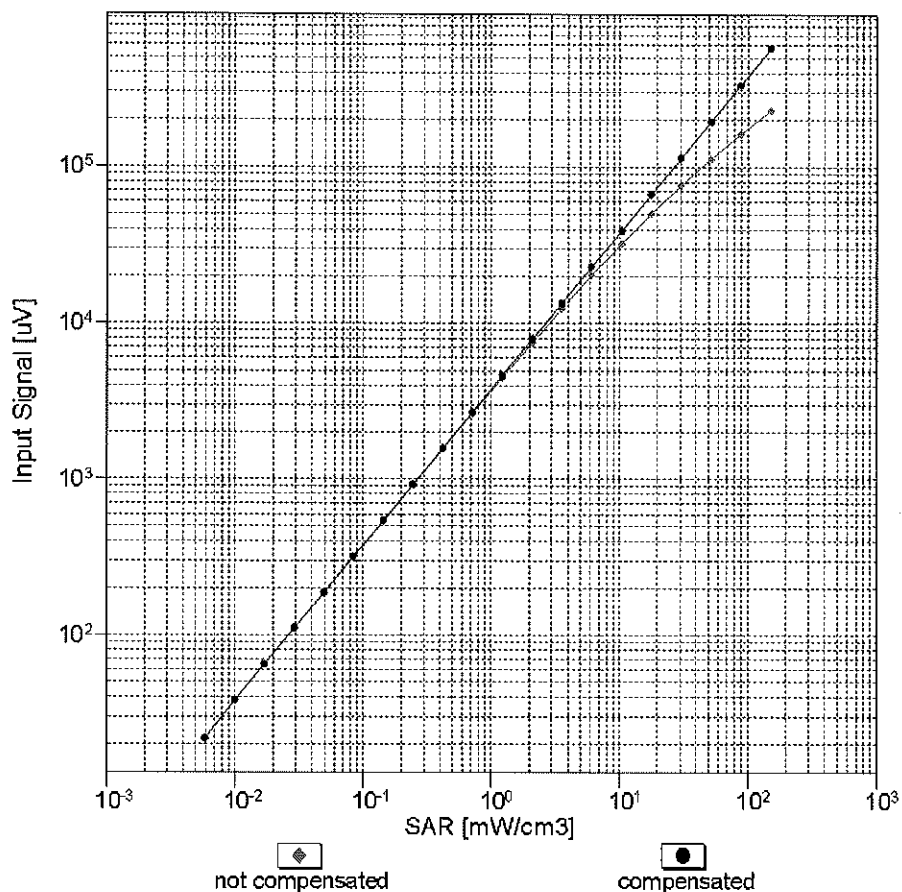


f=1800 MHz,R22



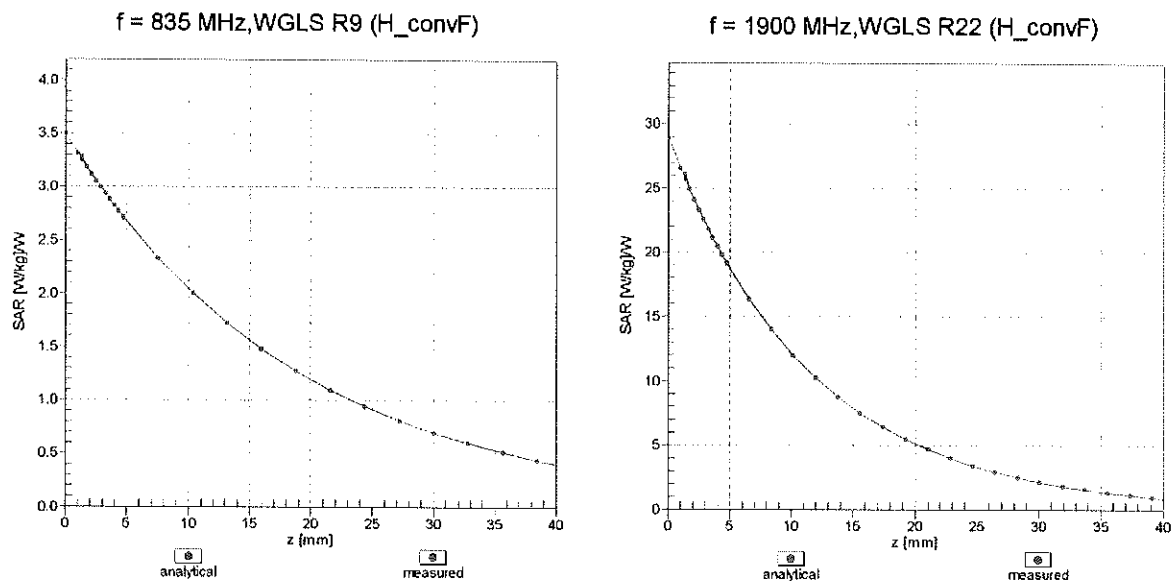
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

# Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



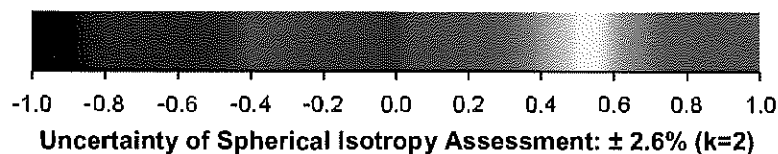
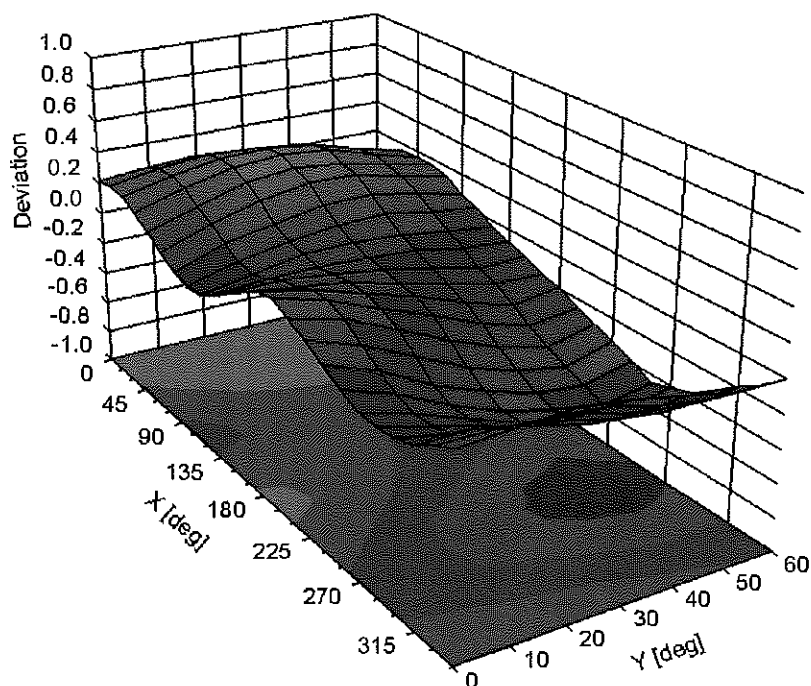
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

Error ( $\phi, \theta$ ),  $f = 900 \text{ MHz}$



## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7416

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | -25.3      |
| 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<br>dB | B<br>dB/μV | C     | D<br>dB | VR<br>mV | Max<br>Unc <sup>E</sup><br>(k=2) |
|---------------|-----------------------------------------------|---|---------|------------|-------|---------|----------|----------------------------------|
| 0             | CW                                            | X | 0.00    | 0.00       | 1.00  | 0.00    | 149.4    | ± 3.3 %                          |
|               |                                               | Y | 0.00    | 0.00       | 1.00  |         | 140.2    |                                  |
|               |                                               | Z | 0.00    | 0.00       | 1.00  |         | 147.9    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 1.77    | 64.87      | 9.11  | 10.00   | 20.0     | ± 9.6 %                          |
|               |                                               | Y | 1.63    | 63.41      | 8.37  |         | 20.0     |                                  |
|               |                                               | Z | 1.76    | 64.55      | 8.94  |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.21    | 72.37      | 17.53 | 0.00    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 0.82    | 64.46      | 12.98 |         | 150.0    |                                  |
|               |                                               | Z | 0.96    | 66.91      | 14.78 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.14    | 65.01      | 16.27 | 0.41    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 1.05    | 62.41      | 14.04 |         | 150.0    |                                  |
|               |                                               | Z | 1.12    | 63.56      | 15.01 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.63    | 67.24      | 17.52 | 1.46    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 4.63    | 66.45      | 16.87 |         | 150.0    |                                  |
|               |                                               | Z | 4.71    | 66.75      | 17.07 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 114.11     | 26.55 | 9.39    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 109.62     | 24.58 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 111.08     | 25.19 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 112.70     | 25.96 | 9.57    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 108.79     | 24.27 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 110.19     | 24.84 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 120.02     | 28.01 | 6.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 111.41     | 24.12 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 114.41     | 25.59 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 8.40    | 100.18     | 43.08 | 12.57   | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 3.56    | 67.47      | 25.23 |         | 50.0     |                                  |
|               |                                               | Z | 6.34    | 88.37      | 36.90 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 6.98    | 91.66      | 34.92 | 9.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 5.10    | 80.82      | 29.16 |         | 60.0     |                                  |
|               |                                               | Z | 6.93    | 89.58      | 33.16 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 130.74     | 31.67 | 4.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 114.42     | 24.52 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 119.79     | 27.11 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 148.32     | 37.98 | 3.55    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 117.49     | 25.01 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 127.11     | 29.41 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 4.35    | 78.88      | 28.05 | 7.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 3.59    | 72.82      | 24.31 |         | 80.0     |                                  |
|               |                                               | Z | 4.33    | 77.60      | 26.71 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 119.14     | 27.08 | 5.30    | 70.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 109.23     | 22.63 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 113.47     | 24.71 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 161.91     | 40.82 | 1.88    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 96.93      | 15.49 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 123.29     | 26.32 |         | 100.0    |                                  |

|           |                                                     |   |         |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|---------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00  | 280.92 | 82.03 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 0.12    | 60.00  | 4.04  |       | 100.0 |         |
|           |                                                     | Z | 100.00  | 135.50 | 29.96 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 100.00  | 128.03 | 33.18 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 7.89    | 90.52  | 23.51 |       | 70.0  |         |
|           |                                                     | Z | 61.16   | 122.77 | 32.75 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 100.00  | 117.76 | 27.00 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.49    | 69.12  | 13.56 |       | 100.0 |         |
|           |                                                     | Z | 3.50    | 80.40  | 18.67 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 6.88    | 86.78  | 18.70 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.08    | 66.04  | 11.73 |       | 100.0 |         |
|           |                                                     | Z | 1.93    | 73.40  | 15.69 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 100.00  | 128.79 | 33.51 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 12.46   | 97.66  | 25.74 |       | 70.0  |         |
|           |                                                     | Z | 100.00  | 130.93 | 34.74 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 62.76   | 112.55 | 25.87 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.37    | 68.27  | 13.18 |       | 100.0 |         |
|           |                                                     | Z | 2.98    | 78.43  | 17.97 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 8.30    | 89.45  | 19.68 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.08    | 66.20  | 11.94 |       | 100.0 |         |
|           |                                                     | Z | 1.95    | 73.76  | 15.98 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 0.88    | 65.39  | 10.07 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.87    | 63.82  | 9.91  |       | 150.0 |         |
|           |                                                     | Z | 1.31    | 68.61  | 13.02 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00  | 110.34 | 24.10 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 105.89 | 22.09 |       | 50.0  |         |
|           |                                                     | Z | 100.00  | 108.02 | 23.10 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.01    | 123.11 | 1.52  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.01    | 119.53 | 3.43  |       | 150.0 |         |
|           |                                                     | Z | 0.00    | 101.85 | 5.28  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 100.00  | 106.52 | 24.67 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 32.57   | 91.78  | 20.89 |       | 25.0  |         |
|           |                                                     | Z | 100.00  | 105.11 | 24.06 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 1149.99 | 136.06 | 30.09 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 85.21   | 104.98 | 23.36 |       | 40.0  |         |
|           |                                                     | Z | 420.34  | 123.09 | 27.26 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 100.00  | 123.43 | 32.32 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 121.65 | 31.62 |       | 50.0  |         |
|           |                                                     | Z | 100.00  | 123.95 | 32.75 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 3.53    | 74.19  | 24.94 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.03    | 69.69  | 21.96 |       | 100.0 |         |
|           |                                                     | Z | 3.51    | 73.08  | 23.72 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.18    | 66.36  | 17.11 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.05    | 63.01  | 14.46 |       | 110.0 |         |
|           |                                                     | Z | 1.13    | 64.45  | 15.58 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00  | 153.23 | 41.70 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.65    | 79.63  | 20.25 |       | 110.0 |         |
|           |                                                     | Z | 14.24   | 114.10 | 31.29 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 4.44 | 94.01 | 28.61 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 1.48 | 71.54 | 18.86 |      | 110.0 |         |
|           |                                                | Z | 2.17 | 78.36 | 22.10 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.41 | 67.11 | 16.83 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.42 | 66.37 | 16.23 |      | 100.0 |         |
|           |                                                | Z | 4.51 | 66.70 | 16.45 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.44 | 67.26 | 16.97 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.44 | 66.46 | 16.33 |      | 100.0 |         |
|           |                                                | Z | 4.52 | 66.80 | 16.56 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.66 | 67.43 | 17.15 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.68 | 66.69 | 16.56 |      | 100.0 |         |
|           |                                                | Z | 4.77 | 67.02 | 16.77 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.54 | 67.28 | 17.27 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.55 | 66.53 | 16.64 |      | 100.0 |         |
|           |                                                | Z | 4.64 | 66.88 | 16.86 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.54 | 67.27 | 17.43 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.56 | 66.53 | 16.81 |      | 100.0 |         |
|           |                                                | Z | 4.65 | 66.89 | 17.03 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 4.83 | 67.58 | 17.95 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.85 | 66.84 | 17.32 |      | 100.0 |         |
|           |                                                | Z | 4.94 | 67.15 | 17.53 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 4.87 | 67.55 | 18.17 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.87 | 66.73 | 17.49 |      | 100.0 |         |
|           |                                                | Z | 4.96 | 67.06 | 17.70 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 4.92 | 67.54 | 18.34 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.94 | 66.78 | 17.69 |      | 100.0 |         |
|           |                                                | Z | 5.03 | 67.10 | 17.91 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.73 | 67.33 | 17.85 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.72 | 66.52 | 17.18 |      | 100.0 |         |
|           |                                                | Z | 4.80 | 66.81 | 17.37 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.68 | 67.58 | 18.08 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.66 | 66.72 | 17.36 |      | 100.0 |         |
|           |                                                | Z | 4.75 | 67.06 | 17.58 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.75 | 67.85 | 18.49 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.71 | 66.88 | 17.70 |      | 100.0 |         |
|           |                                                | Z | 4.80 | 67.22 | 17.92 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.77 | 67.84 | 18.69 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.71 | 66.81 | 17.86 |      | 100.0 |         |
|           |                                                | Z | 4.79 | 67.13 | 18.08 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.79 | 67.83 | 18.96 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.72 | 66.78 | 18.11 |      | 90.0  |         |
|           |                                                | Z | 4.80 | 67.13 | 18.34 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.82 | 67.68 | 19.13 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.76 | 66.65 | 18.28 |      | 90.0  |         |
|           |                                                | Z | 4.83 | 66.97 | 18.50 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.86 | 67.80 | 19.27 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.78 | 66.73 | 18.39 |      | 90.0  |         |
|           |                                                | Z | 4.86 | 67.05 | 18.61 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.44   | 61.65  | 7.56  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.49   | 61.12  | 7.86  |      | 150.0 |         |
|           |                                                     | Z | 0.64   | 63.85  | 10.26 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.89   | 61.48  | 3.95  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 0.59   | 60.00  | 2.93  |      | 80.0  |         |
|           |                                                     | Z | 0.55   | 60.00  | 3.58  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 120.10 | 28.07 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 111.49 | 24.17 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 114.44 | 25.62 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 2.01   | 71.24  | 16.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.59   | 66.13  | 14.13 |      | 150.0 |         |
|           |                                                     | Z | 1.77   | 67.84  | 15.37 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.98   | 71.24  | 16.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.56   | 66.06  | 14.09 |      | 150.0 |         |
|           |                                                     | Z | 1.73   | 67.79  | 15.34 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 7.05   | 91.92  | 35.02 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 5.13   | 80.96  | 29.22 |      | 60.0  |         |
|           |                                                     | Z | 7.00   | 89.81  | 33.25 |      | 60.0  |         |
| 10100-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.04   | 71.26  | 17.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.71   | 68.34  | 15.65 |      | 150.0 |         |
|           |                                                     | Z | 2.94   | 69.85  | 16.50 |      | 150.0 |         |
| 10101-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.07   | 67.87  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.97   | 66.45  | 15.26 |      | 150.0 |         |
|           |                                                     | Z | 3.10   | 67.26  | 15.77 |      | 150.0 |         |
| 10102-CAE | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.17   | 67.84  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.08   | 66.51  | 15.39 |      | 150.0 |         |
|           |                                                     | Z | 3.20   | 67.26  | 15.86 |      | 150.0 |         |
| 10103-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 5.93   | 77.85  | 22.25 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.91   | 73.42  | 19.90 |      | 65.0  |         |
|           |                                                     | Z | 5.48   | 75.26  | 20.69 |      | 65.0  |         |
| 10104-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 5.36   | 73.42  | 20.98 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.85   | 70.69  | 19.33 |      | 65.0  |         |
|           |                                                     | Z | 5.38   | 72.53  | 20.20 |      | 65.0  |         |
| 10105-CAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 5.20   | 72.50  | 20.84 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 4.80   | 70.17  | 19.39 |      | 65.0  |         |
|           |                                                     | Z | 5.06   | 71.08  | 19.82 |      | 65.0  |         |
| 10108-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.62   | 70.93  | 17.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.33   | 67.66  | 15.42 |      | 150.0 |         |
|           |                                                     | Z | 2.54   | 69.16  | 16.32 |      | 150.0 |         |
| 10109-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.72   | 68.12  | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.60   | 66.27  | 15.00 |      | 150.0 |         |
|           |                                                     | Z | 2.74   | 67.17  | 15.61 |      | 150.0 |         |
| 10110-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.13   | 70.69  | 17.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.84   | 66.69  | 14.71 |      | 150.0 |         |
|           |                                                     | Z | 2.04   | 68.34  | 15.81 |      | 150.0 |         |
| 10111-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.53   | 70.01  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.27   | 66.91  | 14.87 |      | 150.0 |         |
|           |                                                     | Z | 2.46   | 68.17  | 15.78 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAF | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 2.85 | 68.17 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.73 | 66.39 | 15.11 |      | 150.0 |         |
|           |                                                | Z | 2.87 | 67.23 | 15.69 |      | 150.0 |         |
| 10113-CAF | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.66 | 70.08 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.41 | 67.16 | 15.06 |      | 150.0 |         |
|           |                                                | Z | 2.61 | 68.36 | 15.92 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 4.89 | 67.34 | 16.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.90 | 66.78 | 16.20 |      | 150.0 |         |
|           |                                                | Z | 4.96 | 67.07 | 16.36 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.12 | 67.41 | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.15 | 66.88 | 16.26 |      | 150.0 |         |
|           |                                                | Z | 5.21 | 67.15 | 16.40 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 4.96 | 67.51 | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.98 | 66.95 | 16.22 |      | 150.0 |         |
|           |                                                | Z | 5.04 | 67.27 | 16.38 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 4.85 | 67.18 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.89 | 66.71 | 16.19 |      | 150.0 |         |
|           |                                                | Z | 4.95 | 67.03 | 16.35 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.21 | 67.66 | 16.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.23 | 67.11 | 16.39 |      | 150.0 |         |
|           |                                                | Z | 5.28 | 67.32 | 16.50 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 4.97 | 67.54 | 16.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.98 | 66.97 | 16.24 |      | 150.0 |         |
|           |                                                | Z | 5.04 | 67.25 | 16.39 |      | 150.0 |         |
| 10140-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.18 | 67.90 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.10 | 66.53 | 15.31 |      | 150.0 |         |
|           |                                                | Z | 3.22 | 67.28 | 15.78 |      | 150.0 |         |
| 10141-CAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.31 | 68.06 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.23 | 66.72 | 15.52 |      | 150.0 |         |
|           |                                                | Z | 3.35 | 67.43 | 15.97 |      | 150.0 |         |
| 10142-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.90 | 70.81 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.56 | 66.13 | 13.71 |      | 150.0 |         |
|           |                                                | Z | 1.79 | 68.21 | 15.15 |      | 150.0 |         |
| 10143-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.27 | 69.87 | 15.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.97 | 66.56 | 13.59 |      | 150.0 |         |
|           |                                                | Z | 2.26 | 68.57 | 15.01 |      | 150.0 |         |
| 10144-CAE | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 1.77 | 65.70 | 12.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.77 | 64.41 | 11.96 |      | 150.0 |         |
|           |                                                | Z | 1.97 | 65.88 | 13.14 |      | 150.0 |         |
| 10145-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 0.57 | 60.00 | 6.01  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.69 | 60.18 | 6.93  |      | 150.0 |         |
|           |                                                | Z | 0.84 | 61.95 | 8.70  |      | 150.0 |         |
| 10146-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 0.77 | 60.00 | 5.45  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.96 | 60.51 | 6.88  |      | 150.0 |         |
|           |                                                | Z | 1.21 | 61.91 | 7.88  |      | 150.0 |         |
| 10147-CAF | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 0.78 | 60.00 | 5.51  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.01 | 60.88 | 7.17  |      | 150.0 |         |
|           |                                                | Z | 1.29 | 62.52 | 8.30  |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.73 | 68.20 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.61 | 66.33 | 15.05 |      | 150.0 |         |
|           |                                            | Z | 2.75 | 67.23 | 15.66 |      | 150.0 |         |
| 10150-CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 2.86 | 68.24 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.74 | 66.44 | 15.16 |      | 150.0 |         |
|           |                                            | Z | 2.87 | 67.28 | 15.73 |      | 150.0 |         |
| 10151-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 6.63 | 82.27 | 24.05 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.86 | 75.26 | 20.73 |      | 65.0  |         |
|           |                                            | Z | 5.85 | 78.40 | 22.06 |      | 65.0  |         |
| 10152-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 4.98 | 73.89 | 20.68 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.38 | 70.57 | 18.85 |      | 65.0  |         |
|           |                                            | Z | 4.92 | 72.60 | 19.86 |      | 65.0  |         |
| 10153-CAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 5.37 | 75.09 | 21.57 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.71 | 71.64 | 19.72 |      | 65.0  |         |
|           |                                            | Z | 5.27 | 73.62 | 20.68 |      | 65.0  |         |
| 10154-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.18 | 71.12 | 17.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.86 | 66.97 | 14.90 |      | 150.0 |         |
|           |                                            | Z | 2.07 | 68.69 | 16.03 |      | 150.0 |         |
| 10155-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.54 | 70.08 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.28 | 66.95 | 14.90 |      | 150.0 |         |
|           |                                            | Z | 2.46 | 68.21 | 15.81 |      | 150.0 |         |
| 10156-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.67 | 70.04 | 15.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.35 | 65.50 | 12.88 |      | 150.0 |         |
|           |                                            | Z | 1.61 | 67.93 | 14.60 |      | 150.0 |         |
| 10157-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 1.52 | 65.24 | 11.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.54 | 64.16 | 11.37 |      | 150.0 |         |
|           |                                            | Z | 1.78 | 66.05 | 12.85 |      | 150.0 |         |
| 10158-CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.68 | 70.20 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.42 | 67.23 | 15.11 |      | 150.0 |         |
|           |                                            | Z | 2.61 | 68.43 | 15.98 |      | 150.0 |         |
| 10159-CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 1.57 | 65.38 | 11.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.59 | 64.37 | 11.51 |      | 150.0 |         |
|           |                                            | Z | 1.86 | 66.39 | 13.06 |      | 150.0 |         |
| 10160-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.66 | 70.27 | 17.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.43 | 67.39 | 15.40 |      | 150.0 |         |
|           |                                            | Z | 2.59 | 68.51 | 16.14 |      | 150.0 |         |
| 10161-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.74 | 68.27 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.62 | 66.35 | 14.98 |      | 150.0 |         |
|           |                                            | Z | 2.76 | 67.24 | 15.61 |      | 150.0 |         |
| 10162-CAE | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 2.85 | 68.52 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.73 | 66.59 | 15.14 |      | 150.0 |         |
|           |                                            | Z | 2.87 | 67.46 | 15.76 |      | 150.0 |         |
| 10166-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 2.92 | 68.58 | 19.12 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.05 | 68.19 | 18.71 |      | 150.0 |         |
|           |                                            | Z | 3.38 | 69.92 | 19.37 |      | 150.0 |         |
| 10167-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 3.31 | 71.11 | 19.43 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.43 | 70.35 | 18.91 |      | 150.0 |         |
|           |                                            | Z | 4.27 | 73.87 | 20.20 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAF | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 3.69  | 73.59  | 20.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.83  | 72.88  | 20.47 |      | 150.0 |         |
|           |                                            | Z | 4.91  | 76.88  | 21.85 |      | 150.0 |         |
| 10169-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 2.36  | 66.51  | 18.14 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.07  | 17.76 |      | 150.0 |         |
|           |                                            | Z | 2.80  | 69.10  | 19.04 |      | 150.0 |         |
| 10170-CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 2.79  | 70.74  | 19.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.81  | 70.18  | 19.64 |      | 150.0 |         |
|           |                                            | Z | 4.13  | 77.05  | 22.20 |      | 150.0 |         |
| 10171-AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 2.40  | 67.71  | 17.55 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.93  | 17.03 |      | 150.0 |         |
|           |                                            | Z | 3.24  | 71.98  | 19.00 |      | 150.0 |         |
| 10172-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 4.00  | 83.17  | 27.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 3.32  | 77.43  | 24.67 |      | 65.0  |         |
|           |                                            | Z | 4.82  | 85.38  | 27.66 |      | 65.0  |         |
| 10173-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 7.95  | 95.13  | 29.81 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.14  | 85.14  | 25.95 |      | 65.0  |         |
|           |                                            | Z | 22.01 | 111.28 | 33.56 |      | 65.0  |         |
| 10174-CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 6.44  | 90.03  | 27.42 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 4.72  | 82.84  | 24.49 |      | 65.0  |         |
|           |                                            | Z | 11.40 | 97.81  | 28.98 |      | 65.0  |         |
| 10175-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 2.34  | 66.31  | 17.94 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.38  | 65.84  | 17.53 |      | 150.0 |         |
|           |                                            | Z | 2.77  | 68.80  | 18.79 |      | 150.0 |         |
| 10176-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 2.79  | 70.75  | 20.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.81  | 70.20  | 19.65 |      | 150.0 |         |
|           |                                            | Z | 4.14  | 77.08  | 22.21 |      | 150.0 |         |
| 10177-CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 2.35  | 66.39  | 17.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.39  | 65.94  | 17.60 |      | 150.0 |         |
|           |                                            | Z | 2.79  | 68.93  | 18.87 |      | 150.0 |         |
| 10178-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 2.78  | 70.67  | 19.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.80  | 70.08  | 19.57 |      | 150.0 |         |
|           |                                            | Z | 4.10  | 76.88  | 22.11 |      | 150.0 |         |
| 10179-CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 2.58  | 69.20  | 18.68 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.58  | 68.48  | 18.22 |      | 150.0 |         |
|           |                                            | Z | 3.64  | 74.38  | 20.46 |      | 150.0 |         |
| 10180-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 2.40  | 67.70  | 17.53 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.90  | 17.01 |      | 150.0 |         |
|           |                                            | Z | 3.24  | 71.93  | 18.96 |      | 150.0 |         |
| 10181-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 2.35  | 66.38  | 17.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.39  | 65.93  | 17.60 |      | 150.0 |         |
|           |                                            | Z | 2.78  | 68.92  | 18.87 |      | 150.0 |         |
| 10182-CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 2.78  | 70.65  | 19.94 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.80  | 70.06  | 19.56 |      | 150.0 |         |
|           |                                            | Z | 4.09  | 76.85  | 22.10 |      | 150.0 |         |
| 10183-AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 2.40  | 67.68  | 17.52 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.40  | 66.89  | 16.99 |      | 150.0 |         |
|           |                                            | Z | 3.23  | 71.90  | 18.95 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 2.36 | 66.41 | 18.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.40 | 65.96 | 17.62 |      | 150.0 |         |
|           |                                               | Z | 2.79 | 68.96 | 18.89 |      | 150.0 |         |
| 10185-CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 2.79 | 70.71 | 19.97 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.81 | 70.12 | 19.59 |      | 150.0 |         |
|           |                                               | Z | 4.12 | 76.94 | 22.14 |      | 150.0 |         |
| 10186-AAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 2.41 | 67.73 | 17.55 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.41 | 66.94 | 17.03 |      | 150.0 |         |
|           |                                               | Z | 3.25 | 71.97 | 18.99 |      | 150.0 |         |
| 10187-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 2.37 | 66.48 | 18.09 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.40 | 66.03 | 17.69 |      | 150.0 |         |
|           |                                               | Z | 2.80 | 69.04 | 18.97 |      | 150.0 |         |
| 10188-CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 2.84 | 71.12 | 20.25 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.87 | 70.60 | 19.92 |      | 150.0 |         |
|           |                                               | Z | 4.27 | 77.69 | 22.54 |      | 150.0 |         |
| 10189-AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 2.45 | 68.02 | 17.78 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.44 | 67.25 | 17.27 |      | 150.0 |         |
|           |                                               | Z | 3.33 | 72.45 | 19.29 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.28 | 67.12 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.28 | 66.34 | 15.82 |      | 150.0 |         |
|           |                                               | Z | 4.37 | 66.69 | 16.05 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.40 | 67.30 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.42 | 66.58 | 15.96 |      | 150.0 |         |
|           |                                               | Z | 4.51 | 66.94 | 16.19 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.43 | 67.29 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.46 | 66.60 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.55 | 66.96 | 16.21 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.25 | 67.08 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.27 | 66.33 | 15.80 |      | 150.0 |         |
|           |                                               | Z | 4.36 | 66.69 | 16.05 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.41 | 67.30 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.43 | 66.58 | 15.97 |      | 150.0 |         |
|           |                                               | Z | 4.52 | 66.95 | 16.20 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.42 | 67.28 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.45 | 66.60 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.54 | 66.96 | 16.21 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.21 | 67.15 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.22 | 66.36 | 15.77 |      | 150.0 |         |
|           |                                               | Z | 4.31 | 66.72 | 16.02 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.40 | 67.25 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.42 | 66.55 | 15.96 |      | 150.0 |         |
|           |                                               | Z | 4.51 | 66.91 | 16.18 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.44 | 67.23 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.47 | 66.55 | 15.98 |      | 150.0 |         |
|           |                                               | Z | 4.56 | 66.90 | 16.20 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 4.84 | 67.21 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.86 | 66.70 | 16.17 |      | 150.0 |         |
|           |                                               | Z | 4.92 | 67.00 | 16.33 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.05  | 67.28  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.13  | 66.92  | 16.30 |      | 150.0 |         |
|           |                                           | Z | 5.19  | 67.21  | 16.45 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 4.88  | 67.36  | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 4.89  | 66.80  | 16.15 |      | 150.0 |         |
|           |                                           | Z | 4.96  | 67.11  | 16.31 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.56  | 66.77  | 14.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.51  | 65.29  | 14.20 |      | 150.0 |         |
|           |                                           | Z | 2.64  | 66.08  | 14.88 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 8.58  | 96.74  | 30.43 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.44  | 86.30  | 26.47 |      | 65.0  |         |
|           |                                           | Z | 25.25 | 114.07 | 34.44 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 8.97  | 96.28  | 29.51 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.82  | 86.62  | 25.89 |      | 65.0  |         |
|           |                                           | Z | 26.62 | 112.59 | 33.14 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 4.46  | 85.84  | 28.72 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.52  | 78.94  | 25.38 |      | 65.0  |         |
|           |                                           | Z | 6.28  | 91.07  | 29.77 |      | 65.0  |         |
| 10229-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 8.00  | 95.21  | 29.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.18  | 85.25  | 25.99 |      | 65.0  |         |
|           |                                           | Z | 22.25 | 111.44 | 33.61 |      | 65.0  |         |
| 10230-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 8.20  | 94.53  | 28.89 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.45  | 85.38  | 25.38 |      | 65.0  |         |
|           |                                           | Z | 22.92 | 109.78 | 32.30 |      | 65.0  |         |
| 10231-CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 4.29  | 84.95  | 28.30 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.42  | 78.29  | 25.03 |      | 65.0  |         |
|           |                                           | Z | 6.00  | 90.04  | 29.32 |      | 65.0  |         |
| 10232-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 7.99  | 95.19  | 29.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.17  | 85.23  | 25.98 |      | 65.0  |         |
|           |                                           | Z | 22.20 | 111.42 | 33.61 |      | 65.0  |         |
| 10233-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 8.17  | 94.46  | 28.87 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.43  | 85.32  | 25.36 |      | 65.0  |         |
|           |                                           | Z | 22.79 | 109.69 | 32.28 |      | 65.0  |         |
| 10234-CAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 4.20  | 84.39  | 27.96 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.35  | 77.81  | 24.72 |      | 65.0  |         |
|           |                                           | Z | 5.81  | 89.24  | 28.92 |      | 65.0  |         |
| 10235-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 8.00  | 95.25  | 29.86 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.17  | 85.25  | 25.99 |      | 65.0  |         |
|           |                                           | Z | 22.28 | 111.52 | 33.64 |      | 65.0  |         |
| 10236-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 8.32  | 94.76  | 28.95 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.50  | 85.52  | 25.42 |      | 65.0  |         |
|           |                                           | Z | 23.43 | 110.13 | 32.39 |      | 65.0  |         |
| 10237-CAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 4.29  | 84.99  | 28.32 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 3.42  | 78.29  | 25.04 |      | 65.0  |         |
|           |                                           | Z | 6.00  | 90.09  | 29.35 |      | 65.0  |         |
| 10238-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 7.97  | 95.17  | 29.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.16  | 85.19  | 25.97 |      | 65.0  |         |
|           |                                           | Z | 22.13 | 111.39 | 33.60 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 8.13  | 94.40  | 28.85 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.41  | 85.27  | 25.34 |      | 65.0 |         |
|           |                                            | Z | 22.65 | 109.61 | 32.26 |      | 65.0 |         |
| 10240-CAE | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 4.29  | 84.98  | 28.32 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.41  | 78.27  | 25.03 |      | 65.0 |         |
|           |                                            | Z | 5.99  | 90.06  | 29.34 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 6.78  | 83.01  | 27.19 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.79  | 77.77  | 24.62 |      | 65.0 |         |
|           |                                            | Z | 7.46  | 82.96  | 26.61 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 6.48  | 82.12  | 26.76 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.59  | 77.10  | 24.26 |      | 65.0 |         |
|           |                                            | Z | 6.60  | 80.40  | 25.51 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 5.17  | 77.50  | 25.78 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.73  | 73.67  | 23.57 |      | 65.0 |         |
|           |                                            | Z | 5.15  | 75.48  | 24.33 |      | 65.0 |         |
| 10244-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 3.16  | 68.74  | 13.63 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.46  | 70.01  | 15.08 |      | 65.0 |         |
|           |                                            | Z | 4.53  | 73.34  | 16.60 |      | 65.0 |         |
| 10245-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 3.03  | 67.91  | 13.16 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.34  | 69.23  | 14.64 |      | 65.0 |         |
|           |                                            | Z | 4.31  | 72.35  | 16.12 |      | 65.0 |         |
| 10246-CAC | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 4.58  | 77.82  | 18.26 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 2.94  | 71.18  | 15.91 |      | 65.0 |         |
|           |                                            | Z | 4.43  | 77.10  | 18.78 |      | 65.0 |         |
| 10247-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 3.93  | 72.44  | 16.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.31  | 69.30  | 15.75 |      | 65.0 |         |
|           |                                            | Z | 4.04  | 72.29  | 17.45 |      | 65.0 |         |
| 10248-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 3.71  | 71.10  | 16.24 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 3.28  | 68.68  | 15.43 |      | 65.0 |         |
|           |                                            | Z | 3.97  | 71.47  | 17.06 |      | 65.0 |         |
| 10249-CAE | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 8.97  | 89.85  | 24.39 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.14  | 76.51  | 19.58 |      | 65.0 |         |
|           |                                            | Z | 6.04  | 82.54  | 22.20 |      | 65.0 |         |
| 10250-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 5.29  | 77.58  | 21.84 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.28  | 72.75  | 19.64 |      | 65.0 |         |
|           |                                            | Z | 4.96  | 75.21  | 20.85 |      | 65.0 |         |
| 10251-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 4.75  | 74.27  | 19.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.08  | 70.67  | 18.23 |      | 65.0 |         |
|           |                                            | Z | 4.69  | 72.94  | 19.43 |      | 65.0 |         |
| 10252-CAE | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 8.00  | 88.54  | 26.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.67  | 77.36  | 21.42 |      | 65.0 |         |
|           |                                            | Z | 6.06  | 81.76  | 23.28 |      | 65.0 |         |
| 10253-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 4.92  | 73.55  | 20.33 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.33  | 70.27  | 18.60 |      | 65.0 |         |
|           |                                            | Z | 4.85  | 72.20  | 19.59 |      | 65.0 |         |
| 10254-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 5.24  | 74.52  | 21.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.62  | 71.19  | 19.34 |      | 65.0 |         |
|           |                                            | Z | 5.16  | 73.09  | 20.30 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 6.21 | 81.24 | 23.74 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.64 | 74.55 | 20.56 |      | 65.0 |         |
|           |                                             | Z | 5.52 | 77.51 | 21.87 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 2.00 | 63.20 | 9.38  | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.33 | 64.83 | 11.17 |      | 65.0 |         |
|           |                                             | Z | 2.92 | 67.15 | 12.48 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 1.96 | 62.72 | 8.99  | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 2.28 | 64.22 | 10.72 |      | 65.0 |         |
|           |                                             | Z | 2.80 | 66.30 | 11.94 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 2.08 | 66.35 | 11.80 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 1.98 | 65.50 | 11.93 |      | 65.0 |         |
|           |                                             | Z | 2.75 | 69.63 | 14.40 |      | 65.0 |         |
| 10259-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 4.58 | 74.93 | 18.91 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.71 | 70.81 | 17.27 |      | 65.0 |         |
|           |                                             | Z | 4.44 | 73.61 | 18.79 |      | 65.0 |         |
| 10260-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 4.52 | 74.29 | 18.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.74 | 70.54 | 17.12 |      | 65.0 |         |
|           |                                             | Z | 4.45 | 73.22 | 18.60 |      | 65.0 |         |
| 10261-CAC | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 7.88 | 87.94 | 24.55 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.19 | 76.19 | 20.04 |      | 65.0 |         |
|           |                                             | Z | 5.68 | 81.15 | 22.23 |      | 65.0 |         |
| 10262-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 5.27 | 77.47 | 21.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.26 | 72.68 | 19.58 |      | 65.0 |         |
|           |                                             | Z | 4.94 | 75.14 | 20.80 |      | 65.0 |         |
| 10263-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 4.75 | 74.24 | 19.92 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.08 | 70.65 | 18.22 |      | 65.0 |         |
|           |                                             | Z | 4.68 | 72.91 | 19.42 |      | 65.0 |         |
| 10264-CAE | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 7.86 | 88.17 | 25.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.62 | 77.15 | 21.31 |      | 65.0 |         |
|           |                                             | Z | 5.99 | 81.52 | 23.16 |      | 65.0 |         |
| 10265-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 4.98 | 73.90 | 20.68 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.38 | 70.57 | 18.86 |      | 65.0 |         |
|           |                                             | Z | 4.92 | 72.60 | 19.87 |      | 65.0 |         |
| 10266-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 5.37 | 75.08 | 21.56 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.71 | 71.63 | 19.71 |      | 65.0 |         |
|           |                                             | Z | 5.27 | 73.60 | 20.67 |      | 65.0 |         |
| 10267-CAE | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 6.61 | 82.19 | 24.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.85 | 75.21 | 20.70 |      | 65.0 |         |
|           |                                             | Z | 5.84 | 78.34 | 22.04 |      | 65.0 |         |
| 10268-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 5.53 | 73.44 | 21.03 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.03 | 70.75 | 19.43 |      | 65.0 |         |
|           |                                             | Z | 5.54 | 72.47 | 20.25 |      | 65.0 |         |
| 10269-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 5.54 | 73.02 | 20.85 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.06 | 70.44 | 19.31 |      | 65.0 |         |
|           |                                             | Z | 5.54 | 72.08 | 20.10 |      | 65.0 |         |
| 10270-CAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 5.98 | 77.31 | 22.21 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.00 | 72.98 | 19.88 |      | 65.0 |         |
|           |                                             | Z | 5.69 | 75.16 | 20.83 |      | 65.0 |         |

|           |                                                                    |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.47   | 67.82  | 15.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.33   | 65.69  | 14.15 |      | 150.0 |         |
|           |                                                                    | Z | 2.48   | 66.63  | 14.91 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.71   | 71.16  | 16.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.33   | 65.66  | 13.76 |      | 150.0 |         |
|           |                                                                    | Z | 1.51   | 67.66  | 15.15 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.23   | 59.02  | 4.21  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 1.36   | 59.15  | 4.53  |      | 50.0  |         |
|           |                                                                    | Z | 1.40   | 59.60  | 4.92  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 2.49   | 65.17  | 10.30 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.68   | 65.81  | 11.00 |      | 50.0  |         |
|           |                                                                    | Z | 3.26   | 68.70  | 12.71 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 2.55   | 65.39  | 10.49 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.76   | 66.08  | 11.22 |      | 50.0  |         |
|           |                                                                    | Z | 3.39   | 69.09  | 12.97 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 0.66   | 62.54  | 8.32  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.76   | 62.40  | 8.87  |      | 150.0 |         |
|           |                                                                    | Z | 1.02   | 65.60  | 11.30 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.43   | 61.50  | 7.46  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.48   | 61.03  | 7.79  |      | 150.0 |         |
|           |                                                                    | Z | 0.63   | 63.68  | 10.15 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 0.68   | 66.33  | 10.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.54   | 62.59  | 8.99  |      | 150.0 |         |
|           |                                                                    | Z | 0.84   | 67.69  | 12.53 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 100.00 | 115.49 | 24.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.69   | 65.22  | 10.79 |      | 150.0 |         |
|           |                                                                    | Z | 1.61   | 75.87  | 16.40 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 100.00 | 119.39 | 31.37 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 30.54  | 103.12 | 27.89 |      | 50.0  |         |
|           |                                                                    | Z | 25.86  | 103.05 | 28.71 |      | 50.0  |         |
| 10297-AAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.64   | 71.06  | 17.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.34   | 67.75  | 15.49 |      | 150.0 |         |
|           |                                                                    | Z | 2.55   | 69.26  | 16.39 |      | 150.0 |         |
| 10298-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 0.90   | 63.34  | 9.68  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.97   | 62.80  | 9.90  |      | 150.0 |         |
|           |                                                                    | Z | 1.20   | 65.31  | 11.89 |      | 150.0 |         |
| 10299-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 1.04   | 61.35  | 7.67  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.45   | 63.85  | 10.09 |      | 150.0 |         |
|           |                                                                    | Z | 1.91   | 66.23  | 11.37 |      | 150.0 |         |
| 10300-AAD | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 0.88   | 59.77  | 6.06  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.18   | 61.29  | 7.96  |      | 150.0 |         |
|           |                                                                    | Z | 1.43   | 62.58  | 8.80  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.48   | 66.53  | 17.71 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.32   | 64.81  | 16.78 |      | 50.0  |         |
|           |                                                                    | Z | 4.53   | 65.70  | 17.38 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 4.90   | 66.77  | 18.24 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.79   | 65.40  | 17.49 |      | 50.0  |         |
|           |                                                                    | Z | 4.93   | 65.95  | 17.91 |      | 50.0  |         |

|           |                                                                     |   |       |        |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.67  | 66.48  | 18.03 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.54  | 65.00  | 17.25 |       | 50.0  |         |
|           |                                                                     | Z | 4.68  | 65.54  | 17.69 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.50  | 66.44  | 17.58 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.37  | 64.94  | 16.79 |       | 50.0  |         |
|           |                                                                     | Z | 4.51  | 65.50  | 17.22 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.12  | 68.45  | 18.95 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 3.86  | 66.02  | 17.96 |       | 35.0  |         |
|           |                                                                     | Z | 3.97  | 66.57  | 18.59 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.42  | 67.53  | 18.97 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.25  | 65.60  | 18.06 |       | 35.0  |         |
|           |                                                                     | Z | 4.36  | 66.03  | 18.53 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.30  | 67.51  | 18.83 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.12  | 65.54  | 17.91 |       | 35.0  |         |
|           |                                                                     | Z | 4.23  | 66.00  | 18.40 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.29  | 67.78  | 19.02 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.09  | 65.70  | 18.03 |       | 35.0  |         |
|           |                                                                     | Z | 4.20  | 66.19  | 18.54 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.43  | 67.59  | 19.06 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.27  | 65.68  | 18.15 |       | 35.0  |         |
|           |                                                                     | Z | 4.39  | 66.15  | 18.64 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.38  | 67.63  | 18.98 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.20  | 65.62  | 18.03 |       | 35.0  |         |
|           |                                                                     | Z | 4.31  | 66.06  | 18.50 |       | 35.0  |         |
| 10311-AAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 2.99  | 69.90  | 17.05 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 2.69  | 67.10  | 15.26 |       | 150.0 |         |
|           |                                                                     | Z | 2.91  | 68.52  | 16.06 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 8.87  | 90.94  | 23.28 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 2.18  | 70.62  | 15.55 |       | 70.0  |         |
|           |                                                                     | Z | 3.65  | 77.10  | 18.17 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 23.31 | 113.29 | 33.24 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 4.07  | 81.07  | 22.63 |       | 30.0  |         |
|           |                                                                     | Z | 6.41  | 89.12  | 25.62 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.06  | 65.07  | 16.25 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.98  | 62.35  | 13.91 |       | 150.0 |         |
|           |                                                                     | Z | 1.04  | 63.52  | 14.91 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.31  | 67.08  | 16.57 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.32  | 66.32  | 15.96 |       | 150.0 |         |
|           |                                                                     | Z | 4.41  | 66.68  | 16.20 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.31  | 67.08  | 16.57 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.32  | 66.32  | 15.96 |       | 150.0 |         |
|           |                                                                     | Z | 4.41  | 66.68  | 16.20 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.34  | 67.26  | 16.50 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.38  | 66.57  | 15.93 |       | 150.0 |         |
|           |                                                                     | Z | 4.48  | 66.96  | 16.18 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.02  | 66.93  | 16.50 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.07  | 66.49  | 16.04 |       | 150.0 |         |
|           |                                                                     | Z | 5.15  | 66.85  | 16.24 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.40   | 67.50  | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.42   | 67.05  | 16.22 |      | 150.0 |         |
|           |                                                                                 | Z | 5.48   | 67.35  | 16.37 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 0.66   | 62.54  | 8.32  | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.76   | 62.40  | 8.87  |      | 115.0 |         |
|           |                                                                                 | Z | 1.02   | 65.60  | 11.30 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 0.66   | 62.54  | 8.32  | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.76   | 62.40  | 8.87  |      | 115.0 |         |
|           |                                                                                 | Z | 1.02   | 65.60  | 11.30 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 120.66 | 28.47 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 124.32 | 30.49 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 114.36 | 26.36 |      | 100.0 |         |
| 10410-AAE | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | X | 100.00 | 137.18 | 35.87 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 89.20  | 133.87 | 34.99 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 128.26 | 32.27 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.00   | 64.27  | 15.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.93   | 61.90  | 13.47 |      | 150.0 |         |
|           |                                                                                 | Z | 0.99   | 62.92  | 14.41 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.26   | 67.05  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.28   | 66.33  | 15.89 |      | 150.0 |         |
|           |                                                                                 | Z | 4.36   | 66.69  | 16.13 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.26   | 67.05  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.28   | 66.33  | 15.89 |      | 150.0 |         |
|           |                                                                                 | Z | 4.36   | 66.69  | 16.13 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.26   | 67.30  | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.27   | 66.52  | 15.94 |      | 150.0 |         |
|           |                                                                                 | Z | 4.36   | 66.88  | 16.18 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.27   | 67.21  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.29   | 66.46  | 15.93 |      | 150.0 |         |
|           |                                                                                 | Z | 4.38   | 66.82  | 16.17 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.37   | 67.16  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.40   | 66.45  | 15.96 |      | 150.0 |         |
|           |                                                                                 | Z | 4.48   | 66.80  | 16.18 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.48   | 67.40  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.52   | 66.70  | 16.04 |      | 150.0 |         |
|           |                                                                                 | Z | 4.61   | 67.06  | 16.27 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.42   | 67.34  | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.45   | 66.65  | 16.02 |      | 150.0 |         |
|           |                                                                                 | Z | 4.54   | 67.01  | 16.25 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.06   | 67.40  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.10   | 66.94  | 16.29 |      | 150.0 |         |
|           |                                                                                 | Z | 5.16   | 67.23  | 16.44 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.11   | 67.63  | 16.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.13   | 67.07  | 16.35 |      | 150.0 |         |
|           |                                                                                 | Z | 5.18   | 67.30  | 16.47 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.05   | 67.32  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.08   | 66.82  | 16.22 |      | 150.0 |         |
|           |                                                                | Z | 5.15   | 67.12  | 16.38 |      | 150.0 |         |
| 10430-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.23   | 73.22  | 18.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.93   | 70.77  | 17.45 |      | 150.0 |         |
|           |                                                                | Z | 4.10   | 71.37  | 17.95 |      | 150.0 |         |
| 10431-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 3.86   | 67.78  | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.86   | 66.76  | 15.64 |      | 150.0 |         |
|           |                                                                | Z | 3.98   | 67.24  | 16.01 |      | 150.0 |         |
| 10432-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.18   | 67.53  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.20   | 66.69  | 15.89 |      | 150.0 |         |
|           |                                                                | Z | 4.31   | 67.10  | 16.17 |      | 150.0 |         |
| 10433-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.44   | 67.38  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.47   | 66.68  | 16.04 |      | 150.0 |         |
|           |                                                                | Z | 4.56   | 67.05  | 16.27 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.26   | 73.70  | 17.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.90   | 71.13  | 16.99 |      | 150.0 |         |
|           |                                                                | Z | 4.17   | 72.14  | 17.74 |      | 150.0 |         |
| 10435-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 136.85 | 35.71 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 73.85  | 130.75 | 34.24 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 127.97 | 32.14 |      | 80.0  |         |
| 10447-AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.04   | 67.36  | 14.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.04   | 66.19  | 14.22 |      | 150.0 |         |
|           |                                                                | Z | 3.23   | 67.03  | 14.92 |      | 150.0 |         |
| 10448-AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 3.74   | 67.60  | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.73   | 66.55  | 15.51 |      | 150.0 |         |
|           |                                                                | Z | 3.85   | 67.04  | 15.88 |      | 150.0 |         |
| 10449-AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.04   | 67.36  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.04   | 66.51  | 15.78 |      | 150.0 |         |
|           |                                                                | Z | 4.14   | 66.92  | 16.07 |      | 150.0 |         |
| 10450-AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.25   | 67.17  | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.27   | 66.44  | 15.88 |      | 150.0 |         |
|           |                                                                | Z | 4.35   | 66.83  | 16.12 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 2.75   | 66.59  | 13.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 2.81   | 65.78  | 13.36 |      | 150.0 |         |
|           |                                                                | Z | 3.04   | 66.85  | 14.23 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.15   | 68.30  | 17.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.05   | 67.54  | 16.50 |      | 150.0 |         |
|           |                                                                | Z | 6.09   | 67.83  | 16.64 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.66   | 65.89  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.65   | 65.10  | 15.61 |      | 150.0 |         |
|           |                                                                | Z | 3.71   | 65.42  | 15.85 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.20   | 69.58  | 15.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.29   | 69.02  | 15.37 |      | 150.0 |         |
|           |                                                                | Z | 3.67   | 70.71  | 16.58 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.50   | 68.59  | 17.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.66   | 68.32  | 17.33 |      | 150.0 |         |
|           |                                                                | Z | 4.81   | 68.67  | 17.71 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.26   | 76.31  | 19.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.71   | 64.73  | 13.42 |      | 150.0 |         |
|           |                                                                   | Z | 0.85   | 67.74  | 15.61 |      | 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 | 143.66 | 38.88 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 34.56  | 122.60 | 33.52 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 134.99 | 35.38 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.61   | 76.64  | 14.82 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.01   | 64.66  | 10.84 |      | 80.0  |         |
|           |                                                                   | Z | 1.31   | 65.68  | 10.55 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.60   | 60.00  | 7.56  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.83  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.29  |      | 80.0  |         |
| 10464-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 140.29 | 37.09 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 41.01  | 122.69 | 32.58 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 131.53 | 33.60 |      | 80.0  |         |
| 10465-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.51   | 68.56  | 12.04 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.85   | 62.97  | 9.99  |      | 80.0  |         |
|           |                                                                   | Z | 1.06   | 63.78  | 9.68  |      | 80.0  |         |
| 10466-AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.61   | 60.00  | 7.50  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.64   | 60.00  | 7.76  |      | 80.0  |         |
|           |                                                                   | Z | 0.71   | 60.00  | 7.23  |      | 80.0  |         |
| 10467-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 140.88 | 37.35 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 59.18  | 128.48 | 33.95 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 131.99 | 33.80 |      | 80.0  |         |
| 10468-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.90   | 70.77  | 12.88 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.89   | 63.46  | 10.25 |      | 80.0  |         |
|           |                                                                   | Z | 1.12   | 64.32  | 9.94  |      | 80.0  |         |
| 10469-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.60   | 60.00  | 7.50  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.77  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.23  |      | 80.0  |         |
| 10470-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 140.97 | 37.38 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 62.06  | 129.24 | 34.12 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 132.05 | 33.81 |      | 80.0  |         |
| 10471-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.84   | 70.47  | 12.75 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.88   | 63.38  | 10.20 |      | 80.0  |         |
|           |                                                                   | Z | 1.11   | 64.20  | 9.87  |      | 80.0  |         |
| 10472-AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.60   | 60.00  | 7.48  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.75  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.21  |      | 80.0  |         |
| 10473-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 140.94 | 37.36 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 61.16  | 128.99 | 34.05 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 132.00 | 33.79 |      | 80.0  |         |
| 10474-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.81   | 70.32  | 12.70 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.88   | 63.33  | 10.17 |      | 80.0  |         |
|           |                                                                   | Z | 1.10   | 64.15  | 9.85  |      | 80.0  |         |
| 10475-AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.60   | 60.00  | 7.48  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.63   | 60.00  | 7.75  |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.21  |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 1.53   | 68.71  | 12.08 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.84   | 62.95  | 9.96  |      | 80.0 |         |
|           |                                                                     | Z | 1.05   | 63.70  | 9.62  |      | 80.0 |         |
| 10478-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.60   | 60.00  | 7.47  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.63   | 60.00  | 7.74  |      | 80.0 |         |
|           |                                                                     | Z | 0.70   | 60.00  | 7.20  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 131.86 | 35.15 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 12.94  | 98.67  | 26.98 |      | 80.0 |         |
|           |                                                                     | Z | 22.21  | 105.39 | 28.53 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 113.57 | 26.62 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.74   | 85.47  | 20.23 |      | 80.0 |         |
|           |                                                                     | Z | 17.38  | 92.40  | 21.93 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 18.06  | 91.55  | 20.55 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.37   | 76.08  | 16.65 |      | 80.0 |         |
|           |                                                                     | Z | 7.35   | 80.99  | 18.05 |      | 80.0 |         |
| 10482-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.29   | 74.82  | 16.10 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.38   | 63.83  | 11.93 |      | 80.0 |         |
|           |                                                                     | Z | 2.24   | 69.89  | 15.23 |      | 80.0 |         |
| 10483-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.50   | 62.45  | 9.85  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.04   | 65.44  | 12.22 |      | 80.0 |         |
|           |                                                                     | Z | 2.87   | 69.16  | 14.04 |      | 80.0 |         |
| 10484-AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.43   | 61.71  | 9.45  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.92   | 64.48  | 11.76 |      | 80.0 |         |
|           |                                                                     | Z | 2.62   | 67.82  | 13.47 |      | 80.0 |         |
| 10485-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.78   | 86.86  | 22.48 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.98   | 67.95  | 15.36 |      | 80.0 |         |
|           |                                                                     | Z | 2.84   | 73.18  | 18.01 |      | 80.0 |         |
| 10486-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.84   | 70.05  | 15.08 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.97   | 64.49  | 12.85 |      | 80.0 |         |
|           |                                                                     | Z | 2.60   | 68.12  | 14.98 |      | 80.0 |         |
| 10487-AAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.67   | 68.87  | 14.53 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.98   | 64.19  | 12.66 |      | 80.0 |         |
|           |                                                                     | Z | 2.57   | 67.61  | 14.72 |      | 80.0 |         |
| 10488-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.07   | 78.46  | 21.52 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.46   | 68.67  | 16.96 |      | 80.0 |         |
|           |                                                                     | Z | 3.04   | 71.93  | 18.60 |      | 80.0 |         |
| 10489-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.48   | 71.99  | 18.44 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.66   | 66.56  | 15.77 |      | 80.0 |         |
|           |                                                                     | Z | 3.05   | 68.58  | 16.94 |      | 80.0 |         |
| 10490-AAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.50   | 71.49  | 18.20 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.75   | 66.49  | 15.73 |      | 80.0 |         |
|           |                                                                     | Z | 3.12   | 68.41  | 16.86 |      | 80.0 |         |
| 10491-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.72   | 73.90  | 20.02 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.82   | 67.95  | 16.90 |      | 80.0 |         |
|           |                                                                     | Z | 3.28   | 70.32  | 18.09 |      | 80.0 |         |
| 10492-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.56   | 69.77  | 18.10 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.07   | 66.24  | 16.14 |      | 80.0 |         |
|           |                                                                     | Z | 3.38   | 67.73  | 16.98 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.59 | 69.52 | 17.96 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.13 | 66.17 | 16.10 |      | 80.0 |         |
|           |                                                                      | Z | 3.43 | 67.60 | 16.92 |      | 80.0 |         |
| 10494-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.13 | 75.78 | 20.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.97 | 68.99 | 17.27 |      | 80.0 |         |
|           |                                                                      | Z | 3.53 | 71.74 | 18.59 |      | 80.0 |         |
| 10495-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.57 | 69.95 | 18.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.08 | 66.44 | 16.34 |      | 80.0 |         |
|           |                                                                      | Z | 3.39 | 67.98 | 17.18 |      | 80.0 |         |
| 10496-AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.63 | 69.58 | 18.20 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.18 | 66.32 | 16.31 |      | 80.0 |         |
|           |                                                                      | Z | 3.48 | 67.76 | 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 | 0.86 | 60.00 | 7.83  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 0.94 | 60.00 | 8.43  |      | 80.0 |         |
|           |                                                                      | Z | 1.26 | 62.86 | 10.60 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.06 | 60.00 | 6.32  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.11 | 60.00 | 7.15  |      | 80.0 |         |
|           |                                                                      | Z | 1.15 | 60.00 | 7.79  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.09 | 60.00 | 6.13  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.13 | 60.00 | 6.98  |      | 80.0 |         |
|           |                                                                      | Z | 1.16 | 60.00 | 7.62  |      | 80.0 |         |
| 10500-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.11 | 82.69 | 21.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.18 | 68.30 | 16.03 |      | 80.0 |         |
|           |                                                                      | Z | 2.89 | 72.51 | 18.19 |      | 80.0 |         |
| 10501-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.38 | 72.12 | 16.89 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.30 | 65.71 | 14.16 |      | 80.0 |         |
|           |                                                                      | Z | 2.84 | 68.67 | 15.89 |      | 80.0 |         |
| 10502-AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.32 | 71.47 | 16.50 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.34 | 65.56 | 14.00 |      | 80.0 |         |
|           |                                                                      | Z | 2.88 | 68.46 | 15.71 |      | 80.0 |         |
| 10503-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.00 | 78.15 | 21.38 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.43 | 68.50 | 16.86 |      | 80.0 |         |
|           |                                                                      | Z | 3.00 | 71.73 | 18.50 |      | 80.0 |         |
| 10504-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.45 | 71.84 | 18.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.65 | 66.46 | 15.71 |      | 80.0 |         |
|           |                                                                      | Z | 3.03 | 68.49 | 16.88 |      | 80.0 |         |
| 10505-AAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.47 | 71.37 | 18.13 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.73 | 66.40 | 15.67 |      | 80.0 |         |
|           |                                                                      | Z | 3.11 | 68.32 | 16.80 |      | 80.0 |         |
| 10506-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.09 | 75.59 | 20.65 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.95 | 68.87 | 17.20 |      | 80.0 |         |
|           |                                                                      | Z | 3.51 | 71.60 | 18.52 |      | 80.0 |         |
| 10507-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.56 | 69.88 | 18.32 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.07 | 66.39 | 16.30 |      | 80.0 |         |
|           |                                                                      | Z | 3.38 | 67.92 | 17.15 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.61 | 69.50 | 18.15 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.17 | 66.26 | 16.27 |      | 80.0  |         |
|           |                                                                     | Z | 3.46 | 67.69 | 17.06 |      | 80.0  |         |
| 10509-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.20 | 72.86 | 19.53 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.42 | 68.34 | 17.01 |      | 80.0  |         |
|           |                                                                     | Z | 3.88 | 70.43 | 18.01 |      | 80.0  |         |
| 10510-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.92 | 68.81 | 18.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.56 | 66.32 | 16.47 |      | 80.0  |         |
|           |                                                                     | Z | 3.85 | 67.60 | 17.14 |      | 80.0  |         |
| 10511-AAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.98 | 68.57 | 17.95 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.64 | 66.21 | 16.45 |      | 80.0  |         |
|           |                                                                     | Z | 3.92 | 67.41 | 17.08 |      | 80.0  |         |
| 10512-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.48 | 74.72 | 20.17 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.43 | 69.26 | 17.28 |      | 80.0  |         |
|           |                                                                     | Z | 4.02 | 71.84 | 18.48 |      | 80.0  |         |
| 10513-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.82 | 68.98 | 18.16 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.45 | 66.38 | 16.51 |      | 80.0  |         |
|           |                                                                     | Z | 3.74 | 67.76 | 17.23 |      | 80.0  |         |
| 10514-AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.85 | 68.52 | 17.99 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.51 | 66.13 | 16.44 |      | 80.0  |         |
|           |                                                                     | Z | 3.78 | 67.40 | 17.11 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.96 | 64.60 | 15.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.89 | 61.99 | 13.45 |      | 150.0 |         |
|           |                                                                     | Z | 0.95 | 63.08 | 14.46 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 2.33 | 97.00 | 27.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.43 | 64.91 | 13.28 |      | 150.0 |         |
|           |                                                                     | Z | 0.56 | 69.50 | 16.60 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.86 | 68.07 | 17.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.71 | 62.96 | 13.44 |      | 150.0 |         |
|           |                                                                     | Z | 0.79 | 64.75 | 14.96 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.25 | 67.19 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.27 | 66.42 | 15.88 |      | 150.0 |         |
|           |                                                                     | Z | 4.35 | 66.78 | 16.12 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.38 | 67.33 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.41 | 66.60 | 15.98 |      | 150.0 |         |
|           |                                                                     | Z | 4.50 | 66.96 | 16.21 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.25 | 67.26 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.27 | 66.51 | 15.88 |      | 150.0 |         |
|           |                                                                     | Z | 4.36 | 66.89 | 16.12 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.18 | 67.20 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.20 | 66.46 | 15.85 |      | 150.0 |         |
|           |                                                                     | Z | 4.29 | 66.86 | 16.10 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.21 | 67.26 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.24 | 66.58 | 15.94 |      | 150.0 |         |
|           |                                                                     | Z | 4.35 | 66.98 | 16.20 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.18 | 67.45 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.18 | 66.58 | 15.86 |      | 150.0 |         |
|           |                                                            | Z | 4.27 | 66.96 | 16.11 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.18 | 67.33 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.20 | 66.55 | 15.94 |      | 150.0 |         |
|           |                                                            | Z | 4.30 | 66.94 | 16.19 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.24 | 66.47 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.23 | 65.66 | 15.56 |      | 150.0 |         |
|           |                                                            | Z | 4.32 | 66.04 | 15.81 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.34 | 66.70 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.35 | 65.92 | 15.67 |      | 150.0 |         |
|           |                                                            | Z | 4.45 | 66.33 | 15.93 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.28 | 66.69 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.28 | 65.87 | 15.61 |      | 150.0 |         |
|           |                                                            | Z | 4.38 | 66.29 | 15.86 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.29 | 66.70 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.89 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.39 | 66.31 | 15.90 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.29 | 66.70 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.89 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.39 | 66.31 | 15.90 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.24 | 66.68 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.25 | 65.90 | 15.61 |      | 150.0 |         |
|           |                                                            | Z | 4.36 | 66.34 | 15.88 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.14 | 66.55 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.14 | 65.75 | 15.53 |      | 150.0 |         |
|           |                                                            | Z | 4.24 | 66.20 | 15.81 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.29 | 66.80 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.97 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.40 | 66.39 | 15.90 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 4.86 | 66.53 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.88 | 65.98 | 15.79 |      | 150.0 |         |
|           |                                                            | Z | 4.95 | 66.32 | 15.97 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 4.89 | 66.65 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.91 | 66.10 | 15.85 |      | 150.0 |         |
|           |                                                            | Z | 5.00 | 66.46 | 16.03 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 4.79 | 66.64 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.80 | 66.08 | 15.81 |      | 150.0 |         |
|           |                                                            | Z | 4.89 | 66.46 | 16.01 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 4.88 | 66.74 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.88 | 66.12 | 15.83 |      | 150.0 |         |
|           |                                                            | Z | 4.95 | 66.44 | 16.00 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 4.91 | 66.59 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.94 | 66.07 | 15.85 |      | 150.0 |         |
|           |                                                            | Z | 5.01 | 66.41 | 16.03 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 4.85 | 66.55 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.86 | 66.01 | 15.84 |      | 150.0 |         |
|           |                                                            | Z | 4.94 | 66.38 | 16.03 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 4.84 | 66.50 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 4.85 | 65.93 | 15.78 |      | 150.0 |         |
|           |                                                    | Z | 4.93 | 66.29 | 15.97 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 4.98 | 66.58 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.01 | 66.06 | 15.86 |      | 150.0 |         |
|           |                                                    | Z | 5.08 | 66.39 | 16.04 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.07 | 66.72 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.09 | 66.19 | 15.96 |      | 150.0 |         |
|           |                                                    | Z | 5.15 | 66.45 | 16.09 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.23 | 66.52 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.23 | 66.08 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.29 | 66.42 | 15.97 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.42 | 67.07 | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.42 | 66.57 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.47 | 66.84 | 16.14 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.25 | 66.63 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.26 | 66.19 | 15.83 |      | 150.0 |         |
|           |                                                    | Z | 5.33 | 66.54 | 16.00 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.40 | 66.98 | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.36 | 66.37 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.40 | 66.64 | 16.04 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.46 | 67.37 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 66.97 | 16.19 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 67.26 | 16.33 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.39 | 67.12 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.34 | 66.47 | 15.98 |      | 150.0 |         |
|           |                                                    | Z | 5.38 | 66.70 | 16.09 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.22 | 66.55 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.25 | 66.14 | 15.78 |      | 150.0 |         |
|           |                                                    | Z | 5.32 | 66.52 | 15.96 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.23 | 66.67 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.24 | 66.18 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.30 | 66.53 | 15.97 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.27 | 66.57 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.29 | 66.14 | 15.81 |      | 150.0 |         |
|           |                                                    | Z | 5.36 | 66.48 | 15.98 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.67 | 66.83 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.66 | 66.44 | 15.91 |      | 150.0 |         |
|           |                                                    | Z | 5.71 | 66.75 | 16.05 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.75 | 67.04 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.76 | 66.67 | 16.01 |      | 150.0 |         |
|           |                                                    | Z | 5.81 | 66.99 | 16.15 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.82 | 67.26 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.80 | 66.81 | 16.07 |      | 150.0 |         |
|           |                                                    | Z | 5.84 | 67.08 | 16.19 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.74 | 67.02 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 66.64 | 16.00 |      | 150.0 |         |
|           |                                                    | Z | 5.80 | 66.96 | 16.15 |      | 150.0 |         |

|           |                                                                 |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 5.72   | 66.97  | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.74   | 66.66  | 16.03 |      | 150.0 |         |
|           |                                                                 | Z | 5.82   | 67.04  | 16.20 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 5.75   | 66.95  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.77   | 66.62  | 16.04 |      | 150.0 |         |
|           |                                                                 | Z | 5.83   | 66.96  | 16.20 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.69   | 66.96  | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.71   | 66.62  | 16.07 |      | 150.0 |         |
|           |                                                                 | Z | 5.76   | 66.94  | 16.22 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 5.73   | 67.07  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.75   | 66.74  | 16.14 |      | 150.0 |         |
|           |                                                                 | Z | 5.82   | 67.12  | 16.31 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 5.85   | 67.14  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.87   | 66.79  | 16.13 |      | 150.0 |         |
|           |                                                                 | Z | 5.91   | 67.06  | 16.25 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.57   | 67.17  | 16.61 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.59   | 66.49  | 16.05 |      | 150.0 |         |
|           |                                                                 | Z | 4.67   | 66.83  | 16.27 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.74   | 67.55  | 16.90 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.78   | 66.90  | 16.38 |      | 150.0 |         |
|           |                                                                 | Z | 4.87   | 67.23  | 16.58 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.59   | 67.37  | 16.72 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62   | 66.70  | 16.17 |      | 150.0 |         |
|           |                                                                 | Z | 4.71   | 67.05  | 16.39 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.62   | 67.76  | 17.09 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65   | 67.09  | 16.54 |      | 150.0 |         |
|           |                                                                 | Z | 4.74   | 67.43  | 16.75 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.46   | 67.03  | 16.42 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.51   | 66.42  | 15.90 |      | 150.0 |         |
|           |                                                                 | Z | 4.61   | 66.81  | 16.14 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.63   | 68.10  | 17.29 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.63   | 67.31  | 16.68 |      | 150.0 |         |
|           |                                                                 | Z | 4.72   | 67.64  | 16.87 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.60   | 67.79  | 17.13 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.64   | 67.10  | 16.57 |      | 150.0 |         |
|           |                                                                 | Z | 4.73   | 67.44  | 16.77 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.13   | 65.55  | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.02   | 62.57  | 14.13 |      | 130.0 |         |
|           |                                                                 | Z | 1.09   | 63.87  | 15.18 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.14   | 66.28  | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.02   | 62.97  | 14.40 |      | 130.0 |         |
|           |                                                                 | Z | 1.10   | 64.37  | 15.52 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 100.00 | 160.36 | 43.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.72   | 69.89  | 16.37 |      | 130.0 |         |
|           |                                                                 | Z | 1.32   | 80.40  | 21.60 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.39   | 74.93  | 21.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 0.97   | 66.41  | 16.28 |      | 130.0 |         |
|           |                                                                 | Z | 1.14   | 69.27  | 18.15 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.35 | 66.98 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.25 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.45 | 66.60 | 16.31 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.39 | 67.23 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.40 | 66.45 | 16.16 |      | 130.0 |         |
|           |                                                                 | Z | 4.48 | 66.79 | 16.39 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.53 | 67.43 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.55 | 66.69 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.65 | 67.03 | 16.53 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.44 | 67.57 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.46 | 66.81 | 16.41 |      | 130.0 |         |
|           |                                                                 | Z | 4.55 | 67.16 | 16.63 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.19 | 66.71 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.21 | 65.98 | 15.64 |      | 130.0 |         |
|           |                                                                 | Z | 4.31 | 66.39 | 15.91 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.21 | 66.71 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.24 | 66.03 | 15.66 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 66.45 | 15.94 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.37 | 67.75 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.88 | 16.38 |      | 130.0 |         |
|           |                                                                 | Z | 4.46 | 67.24 | 16.60 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.11 | 66.49 | 16.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.14 | 65.75 | 15.42 |      | 130.0 |         |
|           |                                                                 | Z | 4.24 | 66.16 | 15.70 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.35 | 66.98 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.25 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.45 | 66.60 | 16.31 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.39 | 67.23 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.40 | 66.45 | 16.16 |      | 130.0 |         |
|           |                                                                 | Z | 4.48 | 66.79 | 16.39 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.53 | 67.43 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.55 | 66.69 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.65 | 67.03 | 16.53 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.44 | 67.57 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.46 | 66.81 | 16.41 |      | 130.0 |         |
|           |                                                                 | Z | 4.55 | 67.16 | 16.63 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.19 | 66.71 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.21 | 65.98 | 15.64 |      | 130.0 |         |
|           |                                                                 | Z | 4.31 | 66.39 | 15.91 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.21 | 66.71 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.24 | 66.03 | 15.66 |      | 130.0 |         |
|           |                                                                 | Z | 4.35 | 66.45 | 15.94 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.37 | 67.75 | 17.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.37 | 66.88 | 16.38 |      | 130.0 |         |
|           |                                                                 | Z | 4.46 | 67.24 | 16.60 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.11 | 66.49 | 16.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.14 | 65.75 | 15.42 |      | 130.0 |         |
|           |                                                                 | Z | 4.24 | 66.16 | 15.70 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.51 | 67.07 | 16.79 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.53 | 66.37 | 16.22 |      | 130.0 |         |
|           |                                                       | Z | 4.61 | 66.68 | 16.43 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.61 | 67.33 | 16.91 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.64 | 66.64 | 16.34 |      | 130.0 |         |
|           |                                                       | Z | 4.73 | 66.98 | 16.55 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.53 | 67.22 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.56 | 66.51 | 16.19 |      | 130.0 |         |
|           |                                                       | Z | 4.65 | 66.86 | 16.41 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.59 | 67.39 | 16.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.61 | 66.69 | 16.36 |      | 130.0 |         |
|           |                                                       | Z | 4.70 | 67.03 | 16.57 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.55 | 67.39 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.58 | 66.66 | 16.27 |      | 130.0 |         |
|           |                                                       | Z | 4.67 | 67.01 | 16.48 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.48 | 67.33 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.51 | 66.61 | 16.25 |      | 130.0 |         |
|           |                                                       | Z | 4.60 | 66.98 | 16.48 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.44 | 67.19 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.46 | 66.47 | 16.09 |      | 130.0 |         |
|           |                                                       | Z | 4.55 | 66.85 | 16.33 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.44 | 67.44 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.45 | 66.70 | 16.36 |      | 130.0 |         |
|           |                                                       | Z | 4.54 | 67.07 | 16.59 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.25 | 67.58 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.24 | 66.95 | 16.56 |      | 130.0 |         |
|           |                                                       | Z | 5.29 | 67.14 | 16.66 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.34 | 67.95 | 17.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.36 | 67.36 | 16.74 |      | 130.0 |         |
|           |                                                       | Z | 5.38 | 67.49 | 16.81 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.27 | 67.81 | 17.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.25 | 67.09 | 16.62 |      | 130.0 |         |
|           |                                                       | Z | 5.29 | 67.28 | 16.72 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.32 | 67.68 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.35 | 67.17 | 16.58 |      | 130.0 |         |
|           |                                                       | Z | 5.40 | 67.38 | 16.69 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.33 | 67.78 | 17.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.40 | 67.40 | 16.84 |      | 130.0 |         |
|           |                                                       | Z | 5.46 | 67.65 | 16.96 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.20 | 67.32 | 17.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.27 | 66.98 | 16.60 |      | 130.0 |         |
|           |                                                       | Z | 5.35 | 67.32 | 16.78 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.29 | 67.63 | 17.19 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.33 | 67.16 | 16.69 |      | 130.0 |         |
|           |                                                       | Z | 5.38 | 67.39 | 16.82 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.14 | 67.30 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.12 | 66.62 | 16.27 |      | 130.0 |         |
|           |                                                       | Z | 5.16 | 66.82 | 16.38 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.38 | 66.48 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.37 | 65.68 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.46 | 66.03 | 16.07 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.49 | 66.76 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.50 | 65.99 | 15.98 |      | 130.0 |         |
|           |                                                   | Z | 4.60 | 66.37 | 16.22 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.40 | 66.61 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.40 | 65.81 | 15.80 |      | 130.0 |         |
|           |                                                   | Z | 4.50 | 66.21 | 16.04 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.45 | 66.79 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.45 | 65.98 | 15.97 |      | 130.0 |         |
|           |                                                   | Z | 4.55 | 66.37 | 16.21 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.36 | 66.56 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.36 | 65.77 | 15.81 |      | 130.0 |         |
|           |                                                   | Z | 4.46 | 66.17 | 16.06 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.33 | 66.68 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.35 | 65.88 | 15.84 |      | 130.0 |         |
|           |                                                   | Z | 4.45 | 66.30 | 16.10 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.33 | 66.47 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.34 | 65.70 | 15.68 |      | 130.0 |         |
|           |                                                   | Z | 4.45 | 66.12 | 15.94 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.31 | 66.72 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.31 | 65.92 | 15.93 |      | 130.0 |         |
|           |                                                   | Z | 4.41 | 66.33 | 16.19 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.35 | 66.43 | 16.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.35 | 65.61 | 15.57 |      | 130.0 |         |
|           |                                                   | Z | 4.46 | 66.02 | 15.84 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.02 | 66.60 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.03 | 66.05 | 16.09 |      | 130.0 |         |
|           |                                                   | Z | 5.10 | 66.36 | 16.25 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.05 | 66.72 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.07 | 66.17 | 16.13 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.50 | 16.30 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 4.96 | 66.75 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.97 | 66.21 | 16.16 |      | 130.0 |         |
|           |                                                   | Z | 5.05 | 66.56 | 16.35 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.03 | 66.77 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.01 | 66.10 | 16.04 |      | 130.0 |         |
|           |                                                   | Z | 5.07 | 66.37 | 16.19 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.04 | 66.57 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.07 | 66.08 | 16.08 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.38 | 16.24 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.05 | 66.67 | 16.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.07 | 66.16 | 16.24 |      | 130.0 |         |
|           |                                                   | Z | 5.15 | 66.49 | 16.41 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.05 | 66.78 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.06 | 66.25 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 5.14 | 66.58 | 16.45 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 4.96 | 66.41 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 4.96 | 65.81 | 15.92 |      | 130.0 |         |
|           |                                                    | Z | 5.03 | 66.14 | 16.10 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.14 | 66.62 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.16 | 66.09 | 16.13 |      | 130.0 |         |
|           |                                                    | Z | 5.23 | 66.40 | 16.29 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.23 | 66.81 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.24 | 66.23 | 16.27 |      | 130.0 |         |
|           |                                                    | Z | 5.33 | 66.59 | 16.45 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.37 | 66.54 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.37 | 66.08 | 16.06 |      | 130.0 |         |
|           |                                                    | Z | 5.43 | 66.40 | 16.21 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.62 | 67.27 | 16.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.62 | 66.78 | 16.39 |      | 130.0 |         |
|           |                                                    | Z | 5.65 | 66.98 | 16.48 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.36 | 66.51 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.36 | 66.07 | 15.95 |      | 130.0 |         |
|           |                                                    | Z | 5.42 | 66.39 | 16.11 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.56 | 67.07 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 66.34 | 16.09 |      | 130.0 |         |
|           |                                                    | Z | 5.52 | 66.54 | 16.19 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 5.66 | 67.55 | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.72 | 67.24 | 16.55 |      | 130.0 |         |
|           |                                                    | Z | 5.76 | 67.49 | 16.67 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 5.63 | 67.57 | 17.15 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 67.19 | 16.71 |      | 130.0 |         |
|           |                                                    | Z | 5.73 | 67.50 | 16.85 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.69 | 67.71 | 17.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.98 | 16.63 |      | 130.0 |         |
|           |                                                    | Z | 5.64 | 67.12 | 16.68 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.36 | 66.53 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.38 | 66.12 | 16.02 |      | 130.0 |         |
|           |                                                    | Z | 5.47 | 66.52 | 16.21 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.40 | 66.78 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.41 | 66.32 | 16.17 |      | 130.0 |         |
|           |                                                    | Z | 5.48 | 66.65 | 16.33 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.26 | 66.02 | 16.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.27 | 65.59 | 15.53 |      | 130.0 |         |
|           |                                                    | Z | 5.34 | 65.94 | 15.71 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.83 | 66.88 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 66.47 | 16.18 |      | 130.0 |         |
|           |                                                    | Z | 5.86 | 66.75 | 16.30 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 5.94 | 67.19 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.94 | 66.79 | 16.33 |      | 130.0 |         |
|           |                                                    | Z | 5.98 | 67.06 | 16.44 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.01 | 67.39 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.96 | 66.85 | 16.33 |      | 130.0 |         |
|           |                                                    | Z | 6.00 | 67.11 | 16.45 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 5.91   | 67.09  | 16.74 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.91   | 66.70  | 16.30 |       | 130.0 |         |
|           |                                                        | Z | 5.96   | 67.00  | 16.43 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 5.83   | 66.88  | 16.58 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.86   | 66.56  | 16.17 |       | 130.0 |         |
|           |                                                        | Z | 5.93   | 66.93  | 16.34 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 5.99   | 67.15  | 16.74 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.98   | 66.73  | 16.28 |       | 130.0 |         |
|           |                                                        | Z | 6.02   | 66.98  | 16.39 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 5.96   | 67.18  | 16.91 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.99   | 66.86  | 16.51 |       | 130.0 |         |
|           |                                                        | Z | 6.04   | 67.17  | 16.64 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 5.82   | 66.90  | 16.67 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.84   | 66.57  | 16.25 |       | 130.0 |         |
|           |                                                        | Z | 5.89   | 66.88  | 16.40 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 5.87   | 67.05  | 16.76 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.88   | 66.71  | 16.35 |       | 130.0 |         |
|           |                                                        | Z | 5.96   | 67.09  | 16.52 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.02   | 67.22  | 16.81 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.06   | 66.92  | 16.42 |       | 130.0 |         |
|           |                                                        | Z | 6.08   | 67.13  | 16.51 |       | 130.0 |         |
| 10646-AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 7.45   | 98.05  | 36.37 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 5.70   | 87.94  | 31.48 |       | 60.0  |         |
|           |                                                        | Z | 10.68  | 104.19 | 37.43 |       | 60.0  |         |
| 10647-AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 6.28   | 94.10  | 35.07 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 5.09   | 85.56  | 30.67 |       | 60.0  |         |
|           |                                                        | Z | 8.75   | 99.75  | 36.06 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.35   | 60.00  | 5.99  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.42   | 60.00  | 6.66  |       | 150.0 |         |
|           |                                                        | Z | 0.51   | 61.64  | 8.47  |       | 150.0 |         |
| 10652-AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 3.43   | 68.40  | 17.05 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.04   | 65.40  | 15.46 |       | 80.0  |         |
|           |                                                        | Z | 3.29   | 66.60  | 16.23 |       | 80.0  |         |
| 10653-AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 3.85   | 66.81  | 17.07 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.63   | 65.00  | 15.94 |       | 80.0  |         |
|           |                                                        | Z | 3.82   | 65.84  | 16.44 |       | 80.0  |         |
| 10654-AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 3.86   | 66.20  | 17.05 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.67   | 64.66  | 16.00 |       | 80.0  |         |
|           |                                                        | Z | 3.83   | 65.44  | 16.46 |       | 80.0  |         |
| 10655-AAD | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 3.94   | 66.00  | 17.05 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.75   | 64.59  | 16.05 |       | 80.0  |         |
|           |                                                        | Z | 3.91   | 65.37  | 16.49 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 100.00 | 108.27 | 24.21 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 20.54  | 89.19  | 19.09 |       | 50.0  |         |
|           |                                                        | Z | 100.00 | 106.85 | 23.58 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 109.79 | 23.79 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 105.04 | 21.61 |       | 60.0  |         |
|           |                                                        | Z | 100.00 | 107.25 | 22.69 |       | 60.0  |         |

|           |                             |   |        |        |        |      |       |         |
|-----------|-----------------------------|---|--------|--------|--------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 116.02 | 25.06  | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 103.57 | 19.60  |      | 80.0  |         |
|           |                             | Z | 100.00 | 110.44 | 22.79  |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 127.15 | 28.10  | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 96.83  | 15.82  |      | 100.0 |         |
|           |                             | Z | 100.00 | 114.65 | 23.34  |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 99.99  | 357.35 | 106.97 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 0.15   | 60.00  | 2.92   |      | 120.0 |         |
|           |                             | Z | 100.00 | 114.05 | 21.55  |      | 120.0 |         |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-7490\_Jan18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7490**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-14.v4, QA CAL-23.v5, QA CAL-25.v6**  
 Calibration procedure for dosimetric E-field probes

Calibration date: **January 26, 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  $(22 \pm 3)^{\circ}\text{C}$  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 |

|                |                      |                                   |               |
|----------------|----------------------|-----------------------------------|---------------|
| Calibrated by: | Name<br>Leif Klysner | Function<br>Laboratory Technician | Signature<br> |
| Approved by:   | Katja Pokovic        | Technical Manager                 |               |

Issued: January 27, 2018

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



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### Glossary:

|                          |                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                      | tissue simulating liquid                                                                                                                                |
| NORM <sub>x,y,z</sub>    | sensitivity in free space                                                                                                                               |
| ConvF                    | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                              |
| DCP                      | diode compression point                                                                                                                                 |
| CF                       | crest factor (1/duty_cycle) of the RF signal                                                                                                            |
| A, B, C, D               | modulation dependent linearization parameters                                                                                                           |
| Polarization $\phi$      | $\phi$ rotation around probe axis                                                                                                                       |
| Polarization $\vartheta$ | $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center),<br>i.e., $\vartheta = 0$ 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:

- 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
- 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
- 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
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

### Methods Applied and Interpretation of Parameters:

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\vartheta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the  $E^2$ -field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* 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.
- DCP<sub>x,y,z</sub>**: 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
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: 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  $f \leq 800$  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 NORM<sub>x,y,z</sub> \* 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  $\pm 50$  MHz to  $\pm 100$  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 NORM<sub>x</sub> (no uncertainty required).

# Probe EX3DV4

## SN:7490

Manufactured: March 20, 2017  
Calibrated: January 26, 2018

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7490

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.38     | 0.43     | 0.51     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 98.5     | 97.9     | 95.7     |               |

### Modulation Calibration Parameters

| UID | Communication System Name |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C   | D<br>dB | VR<br>mV | Unc <sup>E</sup><br>(k=2) |
|-----|---------------------------|---|---------|------------------------------|-----|---------|----------|---------------------------|
| 0   | CW                        | X | 0.0     | 0.0                          | 1.0 | 0.00    | 140.0    | $\pm 3.5 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 144.6    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 139.9    |                           |

Note: For details on UID parameters see Appendix.

### Sensor Model Parameters

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$\text{V}^{-1}$ | T1<br>$\text{ms}\cdot\text{V}^{-2}$ | T2<br>$\text{ms}\cdot\text{V}^{-1}$ | T3<br>ms | T4<br>$\text{V}^{-2}$ | T5<br>$\text{V}^{-1}$ | T6    |
|---|----------|----------|-----------------------------|-------------------------------------|-------------------------------------|----------|-----------------------|-----------------------|-------|
| X | 33.66    | 250.6    | 35.51                       | 5.627                               | 0.000                               | 4.997    | 1.696                 | 0.036                 | 1.006 |
| Y | 32.74    | 252.0    | 37.44                       | 3.509                               | 0.163                               | 5.025    | 0.359                 | 0.334                 | 1.006 |
| Z | 37.42    | 282.8    | 36.41                       | 7.740                               | 0.000                               | 5.071    | 0.000                 | 0.345                 | 1.006 |

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%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Numerical linearization parameter: uncertainty not required.

<sup>E</sup> 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:7490

### Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 41.9                               | 0.89                            | 10.38   | 10.38   | 10.38   | 0.43               | 0.85                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 10.14   | 10.14   | 10.14   | 0.39               | 0.86                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.81    | 8.81    | 8.81    | 0.35               | 0.84                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.52    | 8.52    | 8.52    | 0.30               | 0.85                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 8.26    | 8.26    | 8.26    | 0.29               | 0.84                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.89    | 7.89    | 7.89    | 0.33               | 0.80                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.66    | 7.66    | 7.66    | 0.34               | 0.89                    | ± 12.0 %  |
| 5250                 | 35.9                               | 4.71                            | 5.46    | 5.46    | 5.46    | 0.35               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.75    | 4.75    | 4.75    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 4.99    | 4.99    | 4.99    | 0.40               | 1.80                    | ± 13.1 %  |

<sup>C</sup> 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.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) 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 ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> 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:7490

### Calibration Parameter Determined in Body Tissue Simulating Media

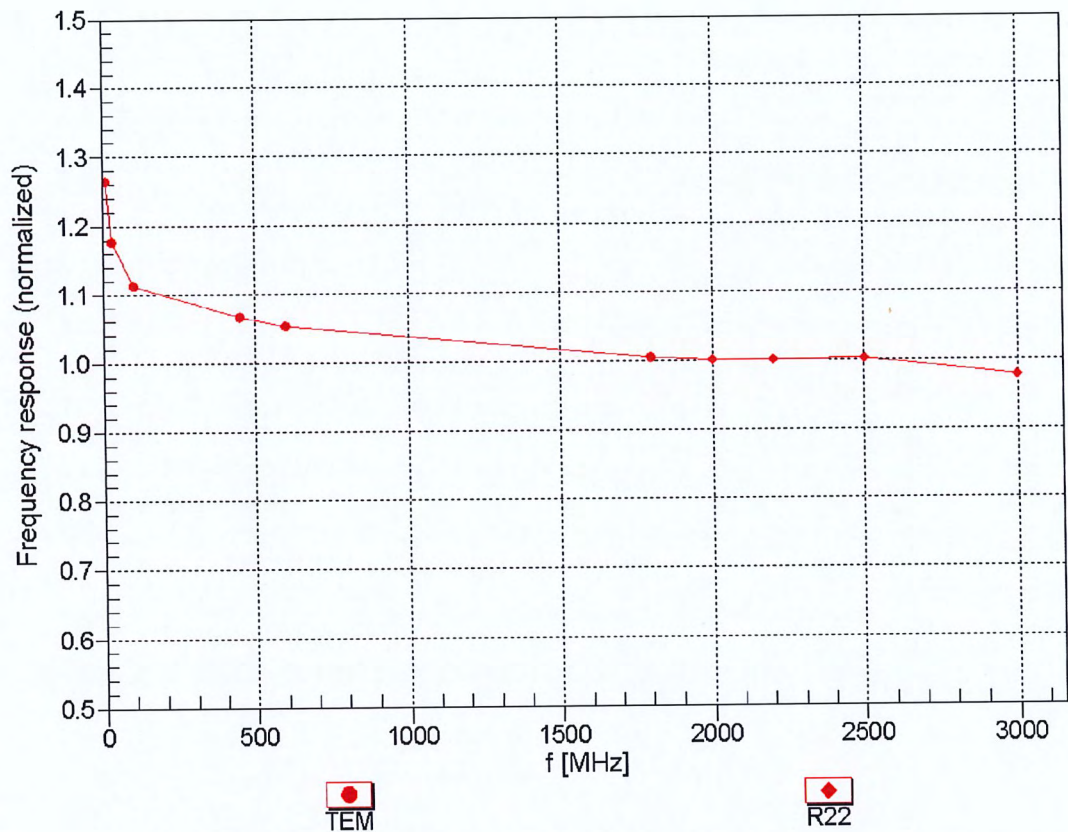
| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 10.66   | 10.66   | 10.66   | 0.32               | 1.04                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 10.30   | 10.30   | 10.30   | 0.46               | 0.85                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.69    | 8.69    | 8.69    | 0.45               | 0.80                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 8.32    | 8.32    | 8.32    | 0.41               | 0.84                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 8.09    | 8.09    | 8.09    | 0.35               | 0.90                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 8.07    | 8.07    | 8.07    | 0.30               | 0.95                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.69    | 7.69    | 7.69    | 0.32               | 0.95                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 5.14    | 5.14    | 5.14    | 0.35               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.21    | 4.21    | 4.21    | 0.40               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.51    | 4.51    | 4.51    | 0.45               | 1.90                    | ± 13.1 %  |

<sup>C</sup> 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.

<sup>F</sup> At frequencies below 3 GHz, the validity of tissue parameters ( $\epsilon$  and  $\sigma$ ) 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 ( $\epsilon$  and  $\sigma$ ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

<sup>G</sup> 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.

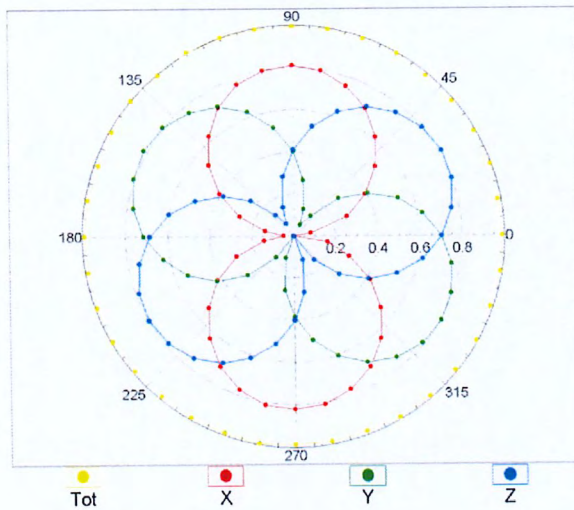
**Frequency Response of E-Field**  
(TEM-Cell:ifi110 EXX, Waveguide: R22)



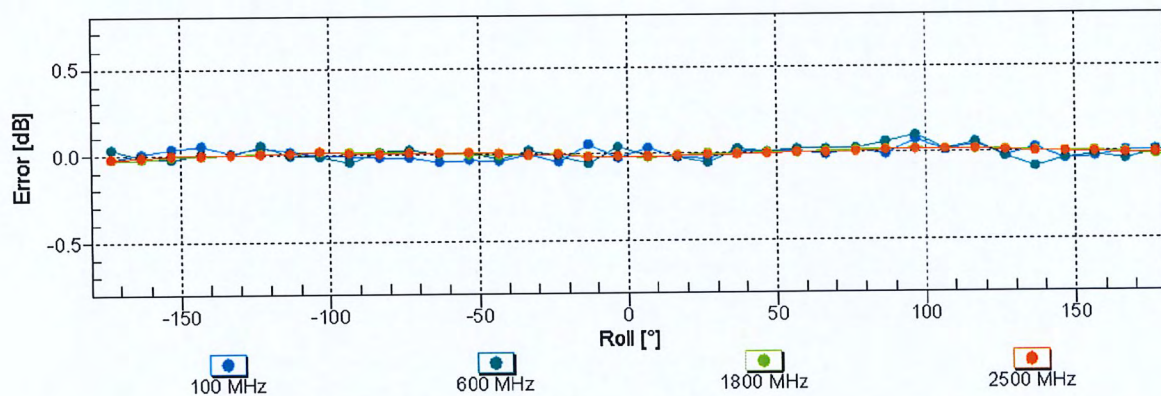
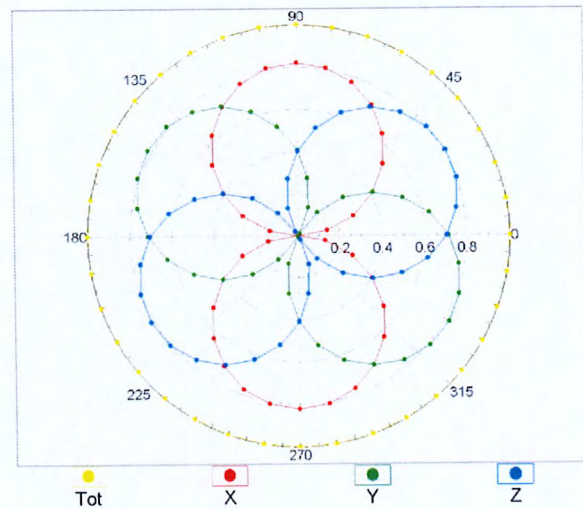
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

## Receiving Pattern ( $\phi$ ), $\vartheta = 0^\circ$

$f=600$  MHz, TEM



$f=1800$  MHz, R22



Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )