

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

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

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

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

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

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

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

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

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

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

<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: **ES3-3213\_Feb18**

## CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3213**

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

*Bm ✓  
03-02-2018*

Calibration date: **February 13, 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<br>Michael Weber | Function<br>Laboratory Technician | Signature<br>             |
| Approved by:                                                                                                    | Katja Pokovic         | Technical Manager                 |                           |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                       |                                   | Issued: February 13, 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 ES3DV3

## SN:3213

Manufactured: October 14, 2008  
Calibrated: February 13, 2018

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

## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 1.43     | 1.32     | 1.29     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 100.3    | 104.3    | 100.0    |               |

### 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    | 219.3    | $\pm 2.7 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 219.1    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 213.7    |                           |

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 | 55.43    | 404.4    | 36.34                       | 28.23                                 | 1.967                                 | 5.10     | 0.398                 | 0.555                 | 1.011 |
| Y | 56.36    | 406.4    | 35.71                       | 28.34                                 | 2.153                                 | 5.10     | 1.040                 | 0.438                 | 1.013 |
| Z | 52.80    | 385.3    | 36.34                       | 28.19                                 | 1.829                                 | 5.10     | 0.000                 | 0.541                 | 1.011 |

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: ES3DV3 - SN:3213

### 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                            | 6.75    | 6.75    | 6.75    | 0.64               | 1.30                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 6.42    | 6.42    | 6.42    | 0.48               | 1.50                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 5.45    | 5.45    | 5.45    | 0.52               | 1.41                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 5.30    | 5.30    | 5.30    | 0.79               | 1.17                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 4.94    | 4.94    | 4.94    | 0.59               | 1.37                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 4.72    | 4.72    | 4.72    | 0.80               | 1.21                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 4.53    | 4.53    | 4.53    | 0.72               | 1.33                    | ± 12.0 %  |

<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: ES3DV3 - SN:3213

### 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                            | 6.30    | 6.30    | 6.30    | 0.80               | 1.13                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 6.20    | 6.20    | 6.20    | 0.41               | 1.66                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 5.10    | 5.10    | 5.10    | 0.37               | 1.82                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 4.88    | 4.88    | 4.88    | 0.59               | 1.51                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 4.62    | 4.62    | 4.62    | 0.80               | 1.30                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 4.53    | 4.53    | 4.53    | 0.80               | 1.25                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 4.33    | 4.33    | 4.33    | 0.80               | 1.25                    | ± 12.0 %  |

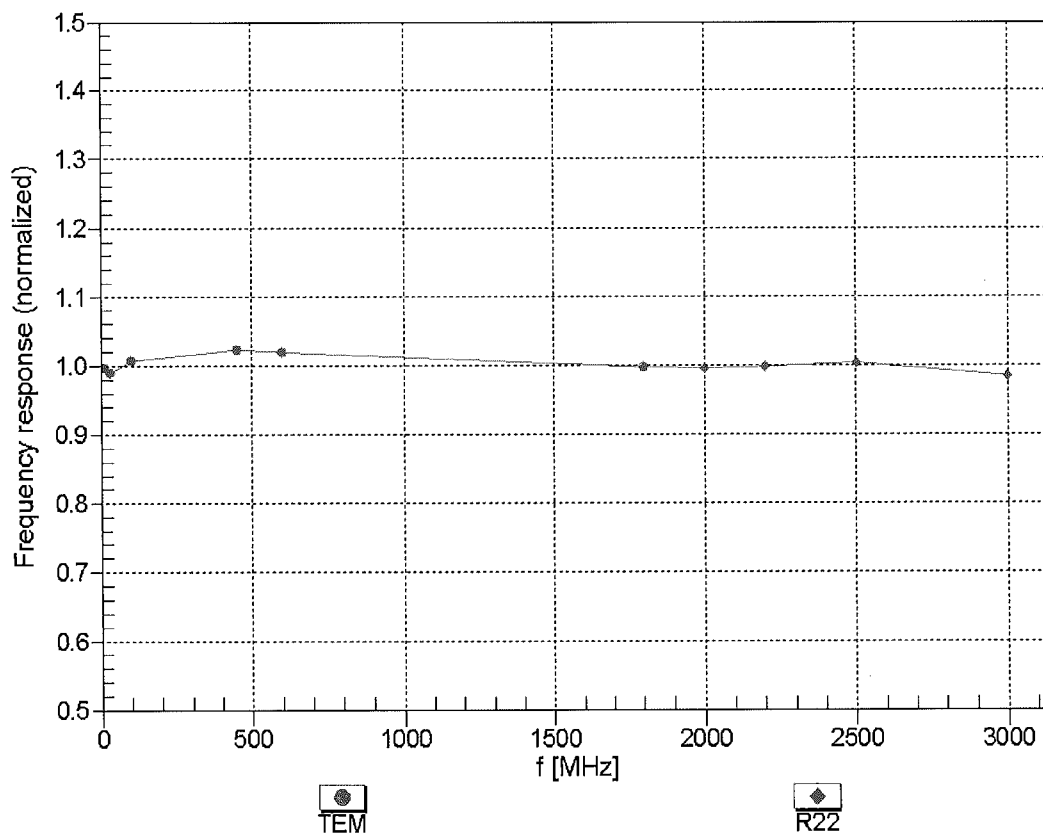
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below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

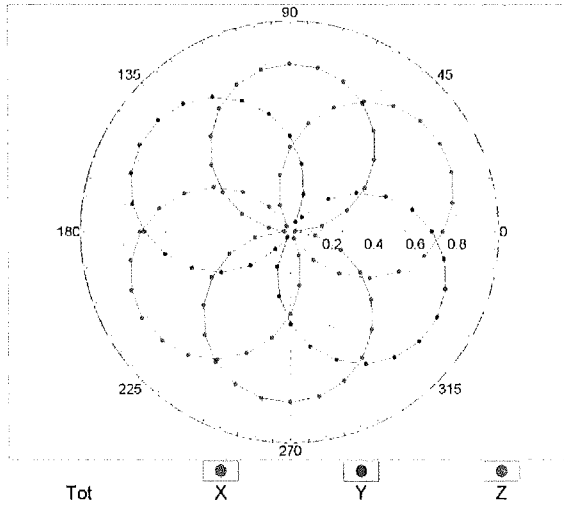
(TEM-Cell:ifi110 EXX, Waveguide: R22)



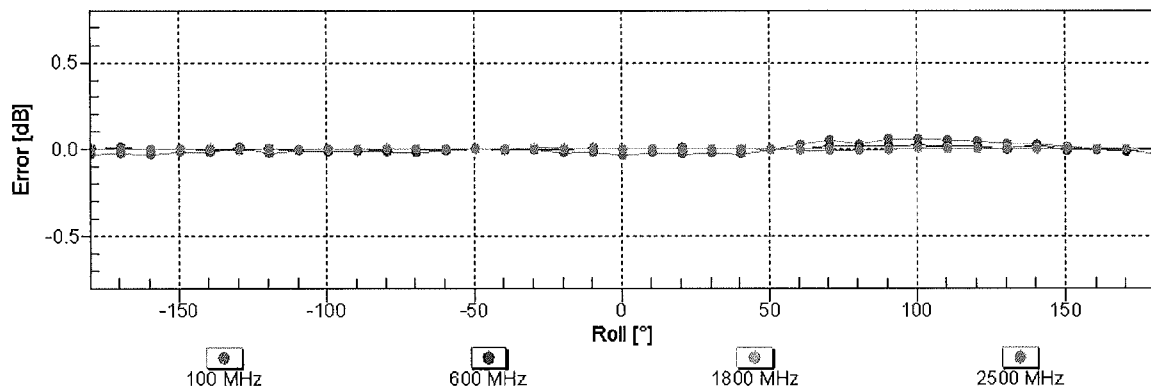
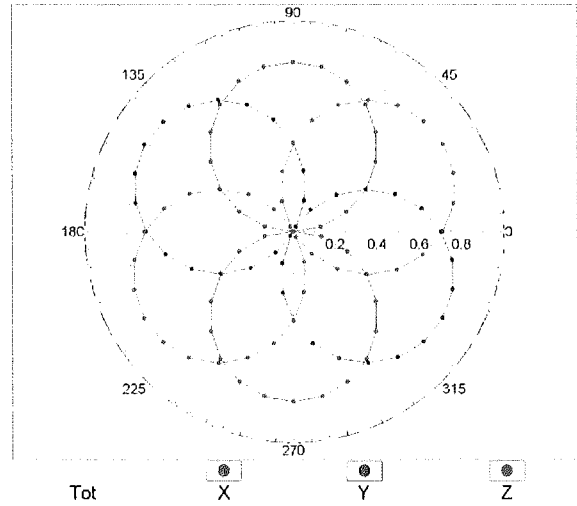
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

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

f=600 MHz,TEM

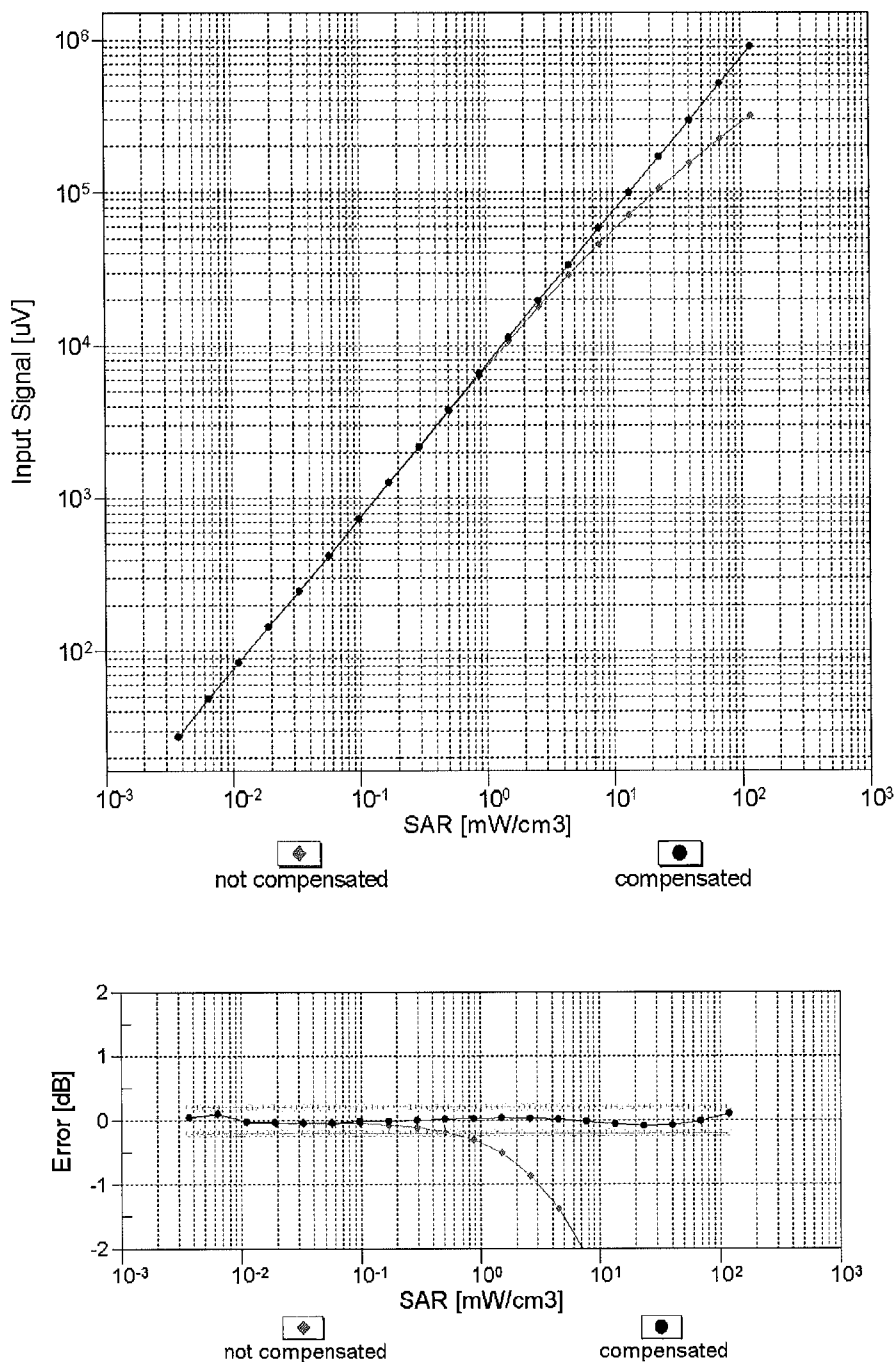


f=1800 MHz,R22



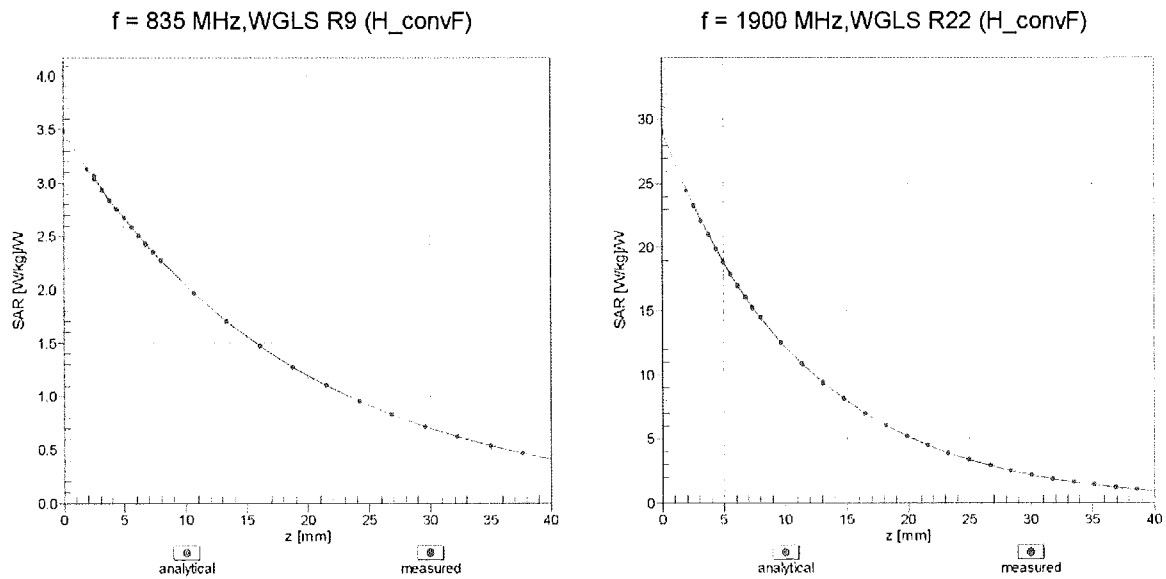
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

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



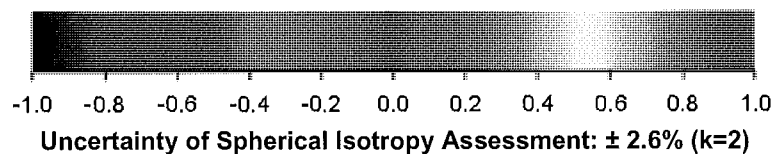
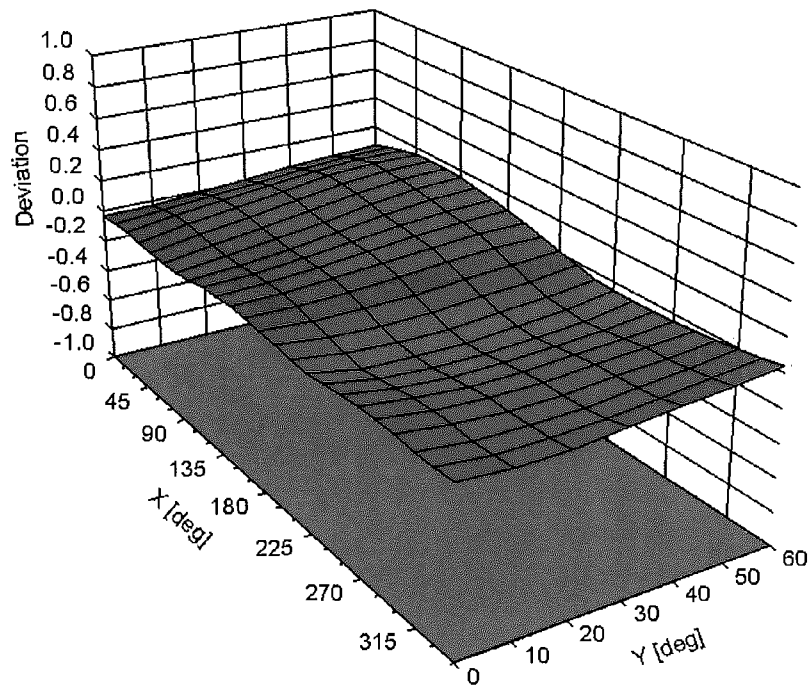
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3213

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 100.6      |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 10 mm      |
| Tip Diameter                                  | 4 mm       |
| Probe Tip to Sensor X Calibration Point       | 2 mm       |
| Probe Tip to Sensor Y Calibration Point       | 2 mm       |
| Probe Tip to Sensor Z Calibration Point       | 2 mm       |
| Recommended Measurement Distance from Surface | 3 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    | 219.3    | $\pm 2.7 \%$                     |
|               |                                               | Y | 0.00    | 0.00                   | 1.00  |         | 219.1    |                                  |
|               |                                               | Z | 0.00    | 0.00                   | 1.00  |         | 213.7    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 7.64    | 78.36                  | 17.77 | 10.00   | 25.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 8.93    | 80.69                  | 18.99 |         | 25.0     |                                  |
|               |                                               | Z | 7.43    | 77.97                  | 17.46 |         | 25.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 0.94    | 65.73                  | 13.94 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.08    | 67.98                  | 15.48 |         | 150.0    |                                  |
|               |                                               | Z | 0.93    | 65.52                  | 13.77 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.23    | 64.18                  | 15.06 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.29    | 65.11                  | 15.84 |         | 150.0    |                                  |
|               |                                               | Z | 1.22    | 64.10                  | 14.97 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 5.06    | 67.01                  | 17.27 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.11    | 67.24                  | 17.46 |         | 150.0    |                                  |
|               |                                               | Z | 5.03    | 67.01                  | 17.25 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 58.23   | 111.57                 | 29.90 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 38.28   | 105.54                 | 28.67 |         | 50.0     |                                  |
|               |                                               | Z | 83.35   | 116.76                 | 31.01 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 42.41   | 106.55                 | 28.63 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 31.06   | 102.12                 | 27.76 |         | 50.0     |                                  |
|               |                                               | Z | 55.17   | 110.35                 | 29.43 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 116.42                 | 29.15 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 117.64                 | 29.89 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 115.95                 | 28.84 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 22.66   | 114.16                 | 43.61 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 32.36   | 125.54                 | 47.77 |         | 50.0     |                                  |
|               |                                               | Z | 20.92   | 112.18                 | 42.96 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 22.06   | 107.62                 | 37.21 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 29.09   | 114.84                 | 39.79 |         | 60.0     |                                  |
|               |                                               | Z | 22.32   | 108.24                 | 37.43 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 114.90                 | 27.59 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 116.49                 | 28.47 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 114.42                 | 27.29 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 114.37                 | 26.58 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 116.53                 | 27.70 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 113.85                 | 26.28 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 13.21   | 95.56                  | 31.98 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 16.23   | 100.64                 | 33.98 |         | 80.0     |                                  |
|               |                                               | Z | 13.05   | 95.55                  | 31.99 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 114.59                 | 27.76 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 116.05                 | 28.60 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 114.06                 | 27.44 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 112.38                 | 24.24 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 116.66                 | 26.24 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 111.54                 | 23.82 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 112.51 | 23.27 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 119.82 | 26.49 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 111.35 | 22.74 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 19.77  | 98.57  | 26.87 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 22.51  | 101.06 | 27.89 |       | 70.0  |         |
|           |                                                     | Z | 20.62  | 99.03  | 26.84 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 5.26   | 81.87  | 19.91 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 7.30   | 87.04  | 22.01 |       | 100.0 |         |
|           |                                                     | Z | 5.17   | 81.44  | 19.55 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 2.97   | 75.56  | 17.30 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.02   | 80.17  | 19.40 |       | 100.0 |         |
|           |                                                     | Z | 2.90   | 75.11  | 16.93 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 25.61  | 102.92 | 28.18 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 28.89  | 105.33 | 29.15 |       | 70.0  |         |
|           |                                                     | Z | 27.23  | 103.63 | 28.21 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 5.03   | 81.31  | 19.68 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 7.01   | 86.52  | 21.80 |       | 100.0 |         |
|           |                                                     | Z | 4.92   | 80.81  | 19.30 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 3.05   | 76.11  | 17.60 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.14   | 80.86  | 19.74 |       | 100.0 |         |
|           |                                                     | Z | 2.97   | 75.64  | 17.22 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 1.52   | 68.64  | 14.11 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.86   | 71.69  | 15.85 |       | 150.0 |         |
|           |                                                     | Z | 1.44   | 68.18  | 13.70 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 115.25 | 28.83 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 116.43 | 29.57 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 114.73 | 28.50 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 111.44 | 0.10  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.00   | 116.05 | 0.75  |       | 150.0 |         |
|           |                                                     | Z | 0.00   | 113.36 | 0.21  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 15.69  | 90.02  | 25.55 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 13.84  | 87.79  | 25.13 |       | 25.0  |         |
|           |                                                     | Z | 17.52  | 91.95  | 25.99 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 19.88  | 94.41  | 25.54 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 17.39  | 92.41  | 25.24 |       | 40.0  |         |
|           |                                                     | Z | 22.32  | 96.16  | 25.89 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 15.96  | 91.92  | 25.75 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 16.02  | 92.06  | 26.04 |       | 50.0  |         |
|           |                                                     | Z | 16.84  | 92.83  | 25.91 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 9.21   | 88.16  | 28.55 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 10.78  | 91.87  | 30.15 |       | 100.0 |         |
|           |                                                     | Z | 9.04   | 87.96  | 28.49 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.36   | 66.07  | 16.00 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.46   | 67.28  | 16.91 |       | 110.0 |         |
|           |                                                     | Z | 1.35   | 65.96  | 15.91 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 52.62  | 119.34 | 30.14 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 130.86 | 33.40 |       | 110.0 |         |
|           |                                                     | Z | 47.54  | 117.73 | 29.68 |       | 110.0 |         |

|           |                                                |   |       |       |       |      |       |         |
|-----------|------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 7.64  | 91.52 | 25.20 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 11.51 | 98.81 | 27.78 |      | 110.0 |         |
|           |                                                | Z | 7.56  | 91.41 | 25.11 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.79  | 66.76 | 16.54 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.84  | 66.99 | 16.73 |      | 100.0 |         |
|           |                                                | Z | 4.76  | 66.76 | 16.52 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.82  | 66.91 | 16.68 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.87  | 67.15 | 16.87 |      | 100.0 |         |
|           |                                                | Z | 4.79  | 66.91 | 16.65 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 5.14  | 67.25 | 16.96 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.20  | 67.49 | 17.14 |      | 100.0 |         |
|           |                                                | Z | 5.10  | 67.24 | 16.93 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 5.04  | 67.27 | 17.12 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.10  | 67.51 | 17.31 |      | 100.0 |         |
|           |                                                | Z | 5.00  | 67.25 | 17.09 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 5.09  | 67.39 | 17.35 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.15  | 67.65 | 17.54 |      | 100.0 |         |
|           |                                                | Z | 5.06  | 67.37 | 17.32 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.41  | 67.60 | 17.83 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.47  | 67.85 | 18.03 |      | 100.0 |         |
|           |                                                | Z | 5.38  | 67.60 | 17.82 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.53  | 67.90 | 18.19 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.60  | 68.19 | 18.41 |      | 100.0 |         |
|           |                                                | Z | 5.49  | 67.88 | 18.16 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.62  | 67.88 | 18.39 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.69  | 68.17 | 18.62 |      | 100.0 |         |
|           |                                                | Z | 5.57  | 67.88 | 18.36 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 5.20  | 67.23 | 17.66 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.25  | 67.48 | 17.85 |      | 100.0 |         |
|           |                                                | Z | 5.17  | 67.24 | 17.64 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.24  | 67.75 | 17.96 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.31  | 68.03 | 18.18 |      | 100.0 |         |
|           |                                                | Z | 5.21  | 67.74 | 17.94 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.36  | 68.08 | 18.38 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.44  | 68.38 | 18.61 |      | 100.0 |         |
|           |                                                | Z | 5.33  | 68.07 | 18.36 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.39  | 68.13 | 18.62 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.47  | 68.45 | 18.87 |      | 100.0 |         |
|           |                                                | Z | 5.36  | 68.12 | 18.60 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.52  | 68.55 | 19.10 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.61  | 68.93 | 19.38 |      | 90.0  |         |
|           |                                                | Z | 5.48  | 68.52 | 19.07 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.53  | 68.37 | 19.24 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.62  | 68.75 | 19.52 |      | 90.0  |         |
|           |                                                | Z | 5.50  | 68.36 | 19.22 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.57  | 68.46 | 19.34 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.66  | 68.84 | 19.63 |      | 90.0  |         |
|           |                                                | Z | 5.54  | 68.44 | 19.32 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.76   | 64.13  | 11.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.90   | 66.35  | 12.99 |      | 150.0 |         |
|           |                                                     | Z | 0.73   | 63.81  | 11.00 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 1.73   | 62.47  | 7.53  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 1.91   | 63.29  | 8.22  |      | 80.0  |         |
|           |                                                     | Z | 1.67   | 62.23  | 7.30  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 116.51 | 29.21 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 117.72 | 29.95 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 116.03 | 28.90 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.73   | 66.45  | 14.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.84   | 67.58  | 15.67 |      | 150.0 |         |
|           |                                                     | Z | 1.71   | 66.38  | 14.75 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.70   | 66.40  | 14.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.81   | 67.56  | 15.65 |      | 150.0 |         |
|           |                                                     | Z | 1.68   | 66.33  | 14.71 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 22.00  | 107.50 | 37.17 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 28.88  | 114.61 | 39.71 |      | 60.0  |         |
|           |                                                     | Z | 22.27  | 108.13 | 37.40 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.03   | 69.43  | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.22   | 70.56  | 16.70 |      | 150.0 |         |
|           |                                                     | Z | 2.99   | 69.29  | 15.96 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.23   | 67.20  | 15.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.33   | 67.78  | 16.01 |      | 150.0 |         |
|           |                                                     | Z | 3.20   | 67.12  | 15.56 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.34   | 67.17  | 15.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.42   | 67.69  | 16.08 |      | 150.0 |         |
|           |                                                     | Z | 3.31   | 67.10  | 15.66 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 8.49   | 78.45  | 21.33 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.79   | 79.00  | 21.62 |      | 65.0  |         |
|           |                                                     | Z | 8.39   | 78.42  | 21.32 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 8.27   | 76.76  | 21.53 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.57   | 77.41  | 21.89 |      | 65.0  |         |
|           |                                                     | Z | 8.21   | 76.79  | 21.53 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 8.13   | 76.44  | 21.71 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.83   | 75.63  | 21.42 |      | 65.0  |         |
|           |                                                     | Z | 7.93   | 76.10  | 21.55 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.67   | 68.71  | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.83   | 69.80  | 16.55 |      | 150.0 |         |
|           |                                                     | Z | 2.63   | 68.57  | 15.78 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.89   | 66.95  | 15.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.98   | 67.57  | 15.91 |      | 150.0 |         |
|           |                                                     | Z | 2.86   | 66.87  | 15.40 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.17   | 67.76  | 15.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.32   | 68.94  | 16.22 |      | 150.0 |         |
|           |                                                     | Z | 2.13   | 67.62  | 15.34 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.56   | 67.34  | 15.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.66   | 68.04  | 16.08 |      | 150.0 |         |
|           |                                                     | Z | 2.53   | 67.28  | 15.48 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.02 | 66.95 | 15.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.10 | 67.51 | 15.95 |      | 150.0 |         |
|           |                                                | Z | 2.98 | 66.88 | 15.48 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.72 | 67.49 | 15.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.81 | 68.13 | 16.19 |      | 150.0 |         |
|           |                                                | Z | 2.68 | 67.45 | 15.64 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.17 | 67.15 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.21 | 67.35 | 16.50 |      | 150.0 |         |
|           |                                                | Z | 5.15 | 67.16 | 16.34 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.53 | 67.49 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.58 | 67.70 | 16.70 |      | 150.0 |         |
|           |                                                | Z | 5.48 | 67.42 | 16.49 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.30 | 67.42 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.34 | 67.62 | 16.57 |      | 150.0 |         |
|           |                                                | Z | 5.27 | 67.41 | 16.40 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.15 | 67.08 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.20 | 67.30 | 16.50 |      | 150.0 |         |
|           |                                                | Z | 5.12 | 67.04 | 16.30 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.63 | 67.73 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.66 | 67.91 | 16.81 |      | 150.0 |         |
|           |                                                | Z | 5.59 | 67.70 | 16.64 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.27 | 67.36 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.31 | 67.56 | 16.55 |      | 150.0 |         |
|           |                                                | Z | 5.24 | 67.35 | 16.38 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.38 | 67.18 | 15.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.47 | 67.70 | 16.01 |      | 150.0 |         |
|           |                                                | Z | 3.35 | 67.11 | 15.59 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.50 | 67.27 | 15.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.59 | 67.74 | 16.15 |      | 150.0 |         |
|           |                                                | Z | 3.47 | 67.21 | 15.77 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.93 | 67.51 | 15.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.09 | 68.84 | 15.93 |      | 150.0 |         |
|           |                                                | Z | 1.89 | 67.35 | 14.89 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.38 | 67.70 | 15.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.51 | 68.61 | 15.82 |      | 150.0 |         |
|           |                                                | Z | 2.34 | 67.60 | 15.02 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.24 | 66.02 | 13.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.36 | 66.87 | 14.53 |      | 150.0 |         |
|           |                                                | Z | 2.19 | 65.88 | 13.71 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.22 | 64.47 | 11.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.37 | 66.07 | 12.76 |      | 150.0 |         |
|           |                                                | Z | 1.15 | 64.01 | 11.10 |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 2.40 | 68.51 | 13.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.25 | 72.57 | 15.44 |      | 150.0 |         |
|           |                                                | Z | 2.13 | 67.36 | 12.68 |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 2.86 | 70.85 | 14.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.17 | 75.98 | 16.98 |      | 150.0 |         |
|           |                                                | Z | 2.50 | 69.50 | 13.83 |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.90 | 67.00 | 15.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.99 | 67.62 | 15.95 |      | 150.0 |         |
|           |                                            | Z | 2.86 | 66.92 | 15.44 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.02 | 66.99 | 15.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.11 | 67.55 | 15.98 |      | 150.0 |         |
|           |                                            | Z | 2.99 | 66.93 | 15.52 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 8.96 | 80.66 | 22.26 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 9.32 | 81.32 | 22.60 |      | 65.0  |         |
|           |                                            | Z | 9.00 | 80.93 | 22.35 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 7.88 | 76.96 | 21.35 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.23 | 77.73 | 21.78 |      | 65.0  |         |
|           |                                            | Z | 7.82 | 76.98 | 21.33 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 8.28 | 77.78 | 22.03 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.58 | 78.42 | 22.39 |      | 65.0  |         |
|           |                                            | Z | 8.24 | 77.86 | 22.04 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.21 | 68.11 | 15.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.36 | 69.30 | 16.45 |      | 150.0 |         |
|           |                                            | Z | 2.17 | 67.96 | 15.57 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.56 | 67.35 | 15.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.66 | 68.05 | 16.10 |      | 150.0 |         |
|           |                                            | Z | 2.53 | 67.29 | 15.50 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.77 | 67.43 | 14.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.94 | 68.94 | 15.78 |      | 150.0 |         |
|           |                                            | Z | 1.72 | 67.23 | 14.58 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.05 | 66.34 | 13.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.19 | 67.38 | 14.58 |      | 150.0 |         |
|           |                                            | Z | 2.00 | 66.16 | 13.59 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.72 | 67.54 | 15.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.82 | 68.17 | 16.23 |      | 150.0 |         |
|           |                                            | Z | 2.68 | 67.50 | 15.68 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.14 | 66.71 | 14.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.28 | 67.74 | 14.81 |      | 150.0 |         |
|           |                                            | Z | 2.09 | 66.52 | 13.84 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.72 | 68.07 | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.84 | 68.89 | 16.38 |      | 150.0 |         |
|           |                                            | Z | 2.69 | 68.00 | 15.76 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.91 | 66.88 | 15.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.00 | 67.45 | 15.91 |      | 150.0 |         |
|           |                                            | Z | 2.88 | 66.82 | 15.43 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.02 | 67.01 | 15.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.11 | 67.54 | 16.00 |      | 150.0 |         |
|           |                                            | Z | 2.99 | 66.96 | 15.54 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.77 | 69.87 | 19.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.99 | 71.07 | 20.04 |      | 150.0 |         |
|           |                                            | Z | 3.62 | 69.43 | 19.11 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.72 | 72.88 | 19.79 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.23 | 74.95 | 20.86 |      | 150.0 |         |
|           |                                            | Z | 4.39 | 72.04 | 19.48 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.18  | 74.86  | 20.97 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.75  | 76.97  | 22.01 |      | 150.0 |         |
|           |                                            | Z | 4.80  | 74.00  | 20.67 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.27  | 70.16  | 19.42 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.60  | 72.33  | 20.65 |      | 150.0 |         |
|           |                                            | Z | 3.01  | 68.98  | 18.94 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 4.60  | 76.17  | 21.67 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.62  | 80.32  | 23.51 |      | 150.0 |         |
|           |                                            | Z | 3.98  | 74.14  | 20.96 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 3.81  | 72.17  | 19.05 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.54  | 75.67  | 20.74 |      | 150.0 |         |
|           |                                            | Z | 3.36  | 70.59  | 18.47 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 30.28 | 111.82 | 34.48 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 76.86 | 130.98 | 39.85 |      | 65.0  |         |
|           |                                            | Z | 23.60 | 107.83 | 33.49 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 34.72 | 108.92 | 31.80 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 74.54 | 122.99 | 35.68 |      | 65.0  |         |
|           |                                            | Z | 31.06 | 107.91 | 31.67 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 26.76 | 102.85 | 29.55 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 50.48 | 114.18 | 32.83 |      | 65.0  |         |
|           |                                            | Z | 23.63 | 101.61 | 29.31 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 3.23  | 69.86  | 19.18 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.55  | 72.01  | 20.41 |      | 150.0 |         |
|           |                                            | Z | 2.98  | 68.71  | 18.72 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 4.60  | 76.19  | 21.68 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.63  | 80.35  | 23.53 |      | 150.0 |         |
|           |                                            | Z | 3.98  | 74.16  | 20.97 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.26  | 70.01  | 19.27 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 72.16  | 20.50 |      | 150.0 |         |
|           |                                            | Z | 3.00  | 68.84  | 18.80 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 4.55  | 75.95  | 21.56 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.56  | 80.06  | 23.39 |      | 150.0 |         |
|           |                                            | Z | 3.95  | 73.96  | 20.86 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 4.17  | 74.04  | 20.23 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.04  | 77.87  | 21.99 |      | 150.0 |         |
|           |                                            | Z | 3.65  | 72.28  | 19.60 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 3.80  | 72.10  | 19.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.52  | 75.59  | 20.69 |      | 150.0 |         |
|           |                                            | Z | 3.36  | 70.53  | 18.43 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.25  | 69.99  | 19.27 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 72.15  | 20.49 |      | 150.0 |         |
|           |                                            | Z | 3.00  | 68.83  | 18.80 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 4.54  | 75.93  | 21.54 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.55  | 80.04  | 23.38 |      | 150.0 |         |
|           |                                            | Z | 3.94  | 73.93  | 20.85 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 3.79  | 72.07  | 18.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.51  | 75.56  | 20.68 |      | 150.0 |         |
|           |                                            | Z | 3.35  | 70.51  | 18.42 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.26 | 70.03 | 19.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.59 | 72.19 | 20.51 |      | 150.0 |         |
|           |                                               | Z | 3.01 | 68.87 | 18.82 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 4.56 | 76.00 | 21.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.57 | 80.12 | 23.42 |      | 150.0 |         |
|           |                                               | Z | 3.96 | 74.00 | 20.89 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 3.81 | 72.14 | 19.03 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.54 | 75.64 | 20.72 |      | 150.0 |         |
|           |                                               | Z | 3.37 | 70.57 | 18.45 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.27 | 70.08 | 19.34 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.60 | 72.24 | 20.57 |      | 150.0 |         |
|           |                                               | Z | 3.02 | 68.91 | 18.87 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 4.71 | 76.65 | 21.94 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.78 | 80.88 | 23.80 |      | 150.0 |         |
|           |                                               | Z | 4.07 | 74.57 | 21.23 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 3.89 | 72.56 | 19.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.65 | 76.13 | 21.00 |      | 150.0 |         |
|           |                                               | Z | 3.43 | 70.95 | 18.70 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.57 | 66.50 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.61 | 66.73 | 16.23 |      | 150.0 |         |
|           |                                               | Z | 4.54 | 66.49 | 16.01 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.75 | 66.84 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.80 | 67.09 | 16.35 |      | 150.0 |         |
|           |                                               | Z | 4.71 | 66.82 | 16.14 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.79 | 66.87 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.84 | 67.11 | 16.37 |      | 150.0 |         |
|           |                                               | Z | 4.76 | 66.85 | 16.15 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.58 | 66.58 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.63 | 66.82 | 16.26 |      | 150.0 |         |
|           |                                               | Z | 4.54 | 66.56 | 16.03 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.77 | 66.86 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.82 | 67.11 | 16.37 |      | 150.0 |         |
|           |                                               | Z | 4.73 | 66.84 | 16.15 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.80 | 66.89 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.85 | 67.13 | 16.38 |      | 150.0 |         |
|           |                                               | Z | 4.76 | 66.87 | 16.17 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.52 | 66.58 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.58 | 66.83 | 16.22 |      | 150.0 |         |
|           |                                               | Z | 4.49 | 66.56 | 15.99 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.76 | 66.85 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.81 | 67.09 | 16.36 |      | 150.0 |         |
|           |                                               | Z | 4.72 | 66.82 | 16.14 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.80 | 66.82 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.86 | 67.06 | 16.37 |      | 150.0 |         |
|           |                                               | Z | 4.77 | 66.80 | 16.16 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.13 | 67.08 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.18 | 67.32 | 16.50 |      | 150.0 |         |
|           |                                               | Z | 5.10 | 67.04 | 16.29 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.46  | 67.35  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.51  | 67.58  | 16.66 |      | 150.0 |         |
|           |                                           | Z | 5.42  | 67.30  | 16.45 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.17  | 67.18  | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.22  | 67.40  | 16.46 |      | 150.0 |         |
|           |                                           | Z | 5.14  | 67.14  | 16.27 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.80  | 65.74  | 15.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.87  | 66.19  | 15.45 |      | 150.0 |         |
|           |                                           | Z | 2.77  | 65.70  | 14.98 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 37.38 | 110.41 | 32.30 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 81.50 | 124.82 | 36.22 |      | 65.0  |         |
|           |                                           | Z | 33.47 | 109.42 | 32.18 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 29.60 | 104.69 | 30.14 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 53.65 | 115.37 | 33.21 |      | 65.0  |         |
|           |                                           | Z | 27.65 | 104.42 | 30.19 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 32.41 | 113.60 | 35.07 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 69.82 | 129.54 | 39.59 |      | 65.0  |         |
|           |                                           | Z | 28.33 | 111.82 | 34.72 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 34.78 | 108.94 | 31.81 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 74.32 | 122.93 | 35.67 |      | 65.0  |         |
|           |                                           | Z | 31.14 | 107.94 | 31.68 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 27.87 | 103.54 | 29.74 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 50.12 | 114.03 | 32.79 |      | 65.0  |         |
|           |                                           | Z | 25.97 | 103.21 | 29.78 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 30.34 | 112.17 | 34.60 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 64.44 | 127.76 | 39.06 |      | 65.0  |         |
|           |                                           | Z | 26.54 | 110.39 | 34.24 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 34.78 | 108.95 | 31.81 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 74.45 | 122.97 | 35.68 |      | 65.0  |         |
|           |                                           | Z | 31.13 | 107.95 | 31.68 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 27.88 | 103.55 | 29.75 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 50.22 | 114.08 | 32.80 |      | 65.0  |         |
|           |                                           | Z | 25.97 | 103.22 | 29.78 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 28.47 | 110.69 | 34.07 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 59.28 | 125.81 | 38.45 |      | 65.0  |         |
|           |                                           | Z | 24.97 | 108.97 | 33.72 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 34.92 | 109.04 | 31.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 75.02 | 123.12 | 35.72 |      | 65.0  |         |
|           |                                           | Z | 31.25 | 108.03 | 31.71 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 28.18 | 103.71 | 29.79 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 50.93 | 114.30 | 32.85 |      | 65.0  |         |
|           |                                           | Z | 26.26 | 103.39 | 29.82 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 30.66 | 112.40 | 34.66 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 65.75 | 128.19 | 39.17 |      | 65.0  |         |
|           |                                           | Z | 26.79 | 110.61 | 34.30 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 34.79 | 108.97 | 31.82 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 74.62 | 123.02 | 35.69 |      | 65.0  |         |
|           |                                           | Z | 31.13 | 107.96 | 31.69 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 27.87 | 103.57 | 29.75 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 50.30 | 114.13 | 32.82 |      | 65.0 |         |
|           |                                            | Z | 25.95 | 103.23 | 29.78 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 30.53 | 112.33 | 34.64 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 65.39 | 128.09 | 39.15 |      | 65.0 |         |
|           |                                            | Z | 26.68 | 110.54 | 34.28 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 11.82 | 86.67  | 27.53 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 13.66 | 90.07  | 29.00 |      | 65.0 |         |
|           |                                            | Z | 11.24 | 86.07  | 27.33 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 11.41 | 85.92  | 27.17 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 13.45 | 89.74  | 28.82 |      | 65.0 |         |
|           |                                            | Z | 10.57 | 84.73  | 26.73 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 9.24  | 83.16  | 27.04 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.64 | 86.64  | 28.68 |      | 65.0 |         |
|           |                                            | Z | 8.64  | 81.99  | 26.56 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 9.03  | 80.20  | 20.72 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.95  | 81.82  | 21.52 |      | 65.0 |         |
|           |                                            | Z | 8.70  | 79.77  | 20.42 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 8.84  | 79.62  | 20.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.72  | 81.20  | 21.24 |      | 65.0 |         |
|           |                                            | Z | 8.49  | 79.13  | 20.13 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 8.67  | 82.28  | 21.37 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.40  | 83.61  | 22.04 |      | 65.0 |         |
|           |                                            | Z | 8.57  | 82.11  | 21.15 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 7.23  | 77.21  | 20.08 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.59  | 77.99  | 20.54 |      | 65.0 |         |
|           |                                            | Z | 7.13  | 77.07  | 19.88 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 7.20  | 76.70  | 19.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.57  | 77.51  | 20.35 |      | 65.0 |         |
|           |                                            | Z | 7.09  | 76.52  | 19.65 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 9.92  | 84.79  | 23.00 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.62 | 85.95  | 23.57 |      | 65.0 |         |
|           |                                            | Z | 10.01 | 85.03  | 22.98 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 8.21  | 79.48  | 22.35 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.54  | 80.13  | 22.71 |      | 65.0 |         |
|           |                                            | Z | 8.20  | 79.60  | 22.34 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 7.75  | 77.32  | 21.20 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.11  | 78.10  | 21.64 |      | 65.0 |         |
|           |                                            | Z | 7.70  | 77.35  | 21.14 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 9.77  | 84.02  | 23.49 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.31 | 84.92  | 23.94 |      | 65.0 |         |
|           |                                            | Z | 9.89  | 84.42  | 23.60 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 7.68  | 76.36  | 21.13 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.00  | 77.10  | 21.55 |      | 65.0 |         |
|           |                                            | Z | 7.63  | 76.40  | 21.10 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 8.06  | 77.17  | 21.76 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.36  | 77.82  | 22.13 |      | 65.0 |         |
|           |                                            | Z | 8.03  | 77.25  | 21.75 |      | 65.0 |         |

|           |                                             |   |       |       |       |      |      |         |
|-----------|---------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 8.65  | 80.28 | 22.35 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.02  | 80.99 | 22.72 |      | 65.0 |         |
|           |                                             | Z | 8.68  | 80.54 | 22.43 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 7.67  | 77.22 | 18.70 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.58  | 78.99 | 19.61 |      | 65.0 |         |
|           |                                             | Z | 7.24  | 76.45 | 18.22 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 7.44  | 76.40 | 18.29 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.29  | 78.12 | 19.18 |      | 65.0 |         |
|           |                                             | Z | 6.99  | 75.59 | 17.78 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 7.04  | 78.52 | 19.29 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.71  | 79.96 | 20.05 |      | 65.0 |         |
|           |                                             | Z | 6.74  | 77.86 | 18.83 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 7.62  | 78.03 | 20.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.97  | 78.76 | 21.31 |      | 65.0 |         |
|           |                                             | Z | 7.55  | 78.00 | 20.76 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 7.62  | 77.74 | 20.79 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.97  | 78.46 | 21.21 |      | 65.0 |         |
|           |                                             | Z | 7.55  | 77.69 | 20.65 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 9.43  | 83.76 | 22.98 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 10.04 | 84.84 | 23.52 |      | 65.0 |         |
|           |                                             | Z | 9.50  | 84.03 | 22.99 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 8.20  | 79.43 | 22.31 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.53  | 80.09 | 22.68 |      | 65.0 |         |
|           |                                             | Z | 8.18  | 79.55 | 22.30 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 7.75  | 77.31 | 21.19 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.10  | 78.09 | 21.64 |      | 65.0 |         |
|           |                                             | Z | 7.69  | 77.34 | 21.14 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 9.70  | 83.85 | 23.41 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 10.24 | 84.77 | 23.87 |      | 65.0 |         |
|           |                                             | Z | 9.81  | 84.24 | 23.51 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 7.88  | 76.96 | 21.35 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.22  | 77.73 | 21.78 |      | 65.0 |         |
|           |                                             | Z | 7.82  | 76.99 | 21.33 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 8.27  | 77.77 | 22.03 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.58  | 78.42 | 22.39 |      | 65.0 |         |
|           |                                             | Z | 8.23  | 77.85 | 22.03 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 8.94  | 80.62 | 22.25 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.31  | 81.28 | 22.59 |      | 65.0 |         |
|           |                                             | Z | 8.98  | 80.89 | 22.34 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 8.36  | 76.49 | 21.55 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.63  | 77.08 | 21.88 |      | 65.0 |         |
|           |                                             | Z | 8.31  | 76.53 | 21.55 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 8.29  | 76.07 | 21.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.55  | 76.65 | 21.78 |      | 65.0 |         |
|           |                                             | Z | 8.24  | 76.11 | 21.45 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 8.43  | 77.83 | 21.33 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.69  | 78.31 | 21.60 |      | 65.0 |         |
|           |                                             | Z | 8.42  | 77.98 | 21.39 |      | 65.0 |         |

|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.55  | 65.90 | 14.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.63  | 66.48 | 15.31 |      | 150.0 |         |
|           |                                                                    | Z | 2.53  | 65.88 | 14.78 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.52  | 66.64 | 14.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.66  | 68.17 | 15.66 |      | 150.0 |         |
|           |                                                                    | Z | 1.50  | 66.49 | 14.49 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 4.62  | 67.49 | 12.27 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.00  | 68.49 | 13.05 |      | 50.0  |         |
|           |                                                                    | Z | 4.42  | 66.98 | 11.81 |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 8.56  | 79.12 | 19.84 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.04  | 80.04 | 20.47 |      | 50.0  |         |
|           |                                                                    | Z | 8.20  | 78.37 | 19.32 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 8.72  | 79.33 | 19.94 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.22  | 80.28 | 20.58 |      | 50.0  |         |
|           |                                                                    | Z | 8.35  | 78.58 | 19.43 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.31  | 66.62 | 12.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.55  | 69.01 | 14.40 |      | 150.0 |         |
|           |                                                                    | Z | 1.25  | 66.21 | 12.49 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.75  | 63.97 | 11.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.88  | 66.12 | 12.85 |      | 150.0 |         |
|           |                                                                    | Z | 0.72  | 63.66 | 10.91 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 0.85  | 66.24 | 12.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.08  | 69.81 | 15.02 |      | 150.0 |         |
|           |                                                                    | Z | 0.81  | 65.82 | 12.39 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 1.07  | 69.43 | 14.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.49  | 74.49 | 17.52 |      | 150.0 |         |
|           |                                                                    | Z | 1.02  | 68.94 | 14.36 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 11.66 | 86.40 | 24.85 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 11.94 | 86.89 | 25.26 |      | 50.0  |         |
|           |                                                                    | Z | 12.14 | 87.13 | 24.94 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.68  | 68.79 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.84  | 69.89 | 16.60 |      | 150.0 |         |
|           |                                                                    | Z | 2.64  | 68.65 | 15.84 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.50  | 66.36 | 13.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.68  | 68.07 | 14.56 |      | 150.0 |         |
|           |                                                                    | Z | 1.44  | 66.01 | 13.05 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 2.99  | 70.93 | 15.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 3.88  | 74.74 | 17.20 |      | 150.0 |         |
|           |                                                                    | Z | 2.71  | 70.03 | 14.84 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 2.29  | 66.50 | 12.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.73  | 68.87 | 13.94 |      | 150.0 |         |
|           |                                                                    | Z | 2.09  | 65.76 | 12.08 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 5.48  | 67.66 | 18.50 | 4.17 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 5.78  | 68.84 | 19.23 |      | 80.0  |         |
|           |                                                                    | Z | 5.37  | 67.36 | 18.28 |      | 80.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.94  | 68.12 | 19.14 | 4.96 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 6.22  | 69.31 | 19.91 |      | 80.0  |         |
|           |                                                                    | Z | 5.87  | 68.03 | 19.05 |      | 80.0  |         |

|           |                                                                     |   |       |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.76  | 68.09 | 19.15 | 4.96  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.07  | 69.41 | 19.99 |       | 80.0  |         |
|           |                                                                     | Z | 5.69  | 67.97 | 19.02 |       | 80.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.43  | 67.45 | 18.35 | 4.17  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.68  | 68.54 | 19.05 |       | 80.0  |         |
|           |                                                                     | Z | 5.37  | 67.37 | 18.26 |       | 80.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 7.18  | 77.42 | 24.28 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 9.01  | 83.08 | 27.04 |       | 50.0  |         |
|           |                                                                     | Z | 7.00  | 76.95 | 23.93 |       | 50.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 5.96  | 70.23 | 20.82 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.58  | 72.76 | 22.30 |       | 50.0  |         |
|           |                                                                     | Z | 5.86  | 69.99 | 20.61 |       | 50.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 6.41  | 73.34 | 22.47 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.70  | 73.58 | 22.50 |       | 50.0  |         |
|           |                                                                     | Z | 6.29  | 73.03 | 22.22 |       | 50.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 6.49  | 73.92 | 22.75 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.78  | 74.12 | 22.76 |       | 50.0  |         |
|           |                                                                     | Z | 6.37  | 73.60 | 22.50 |       | 50.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 6.06  | 70.55 | 21.00 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.71  | 73.17 | 22.53 |       | 50.0  |         |
|           |                                                                     | Z | 5.95  | 70.29 | 20.78 |       | 50.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 5.95  | 70.41 | 20.82 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.61  | 73.05 | 22.35 |       | 50.0  |         |
|           |                                                                     | Z | 6.20  | 72.46 | 22.04 |       | 50.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.02  | 68.11 | 15.62 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.19  | 69.13 | 16.23 |       | 150.0 |         |
|           |                                                                     | Z | 2.98  | 67.98 | 15.55 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 6.80  | 77.50 | 18.05 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 7.71  | 79.38 | 18.97 |       | 70.0  |         |
|           |                                                                     | Z | 6.80  | 77.56 | 18.00 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 9.17  | 84.53 | 23.10 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 10.17 | 86.19 | 23.87 |       | 30.0  |         |
|           |                                                                     | Z | 9.47  | 85.21 | 23.28 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.09  | 63.63 | 14.71 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.15  | 64.55 | 15.51 |       | 150.0 |         |
|           |                                                                     | Z | 1.08  | 63.56 | 14.63 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.67  | 66.69 | 16.26 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.72  | 66.94 | 16.46 |       | 150.0 |         |
|           |                                                                     | Z | 4.64  | 66.69 | 16.24 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.67  | 66.69 | 16.26 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.72  | 66.94 | 16.46 |       | 150.0 |         |
|           |                                                                     | Z | 4.64  | 66.69 | 16.24 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.75  | 66.92 | 16.17 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.81  | 67.18 | 16.37 |       | 150.0 |         |
|           |                                                                     | Z | 4.72  | 66.89 | 16.14 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.45  | 67.19 | 16.39 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.49  | 67.37 | 16.55 |       | 150.0 |         |
|           |                                                                     | Z | 5.44  | 67.22 | 16.40 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.72   | 67.54  | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.76   | 67.75  | 16.56 |      | 150.0 |         |
|           |                                                                                 | Z | 5.68   | 67.48  | 16.38 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 1.31   | 66.62  | 12.89 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.55   | 69.01  | 14.40 |      | 115.0 |         |
|           |                                                                                 | Z | 1.25   | 66.21  | 12.49 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 1.31   | 66.62  | 12.89 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.55   | 69.01  | 14.40 |      | 115.0 |         |
|           |                                                                                 | Z | 1.25   | 66.21  | 12.49 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 25.28  | 103.83 | 26.72 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 122.83 | 31.28 |      | 100.0 |         |
|           |                                                                                 | Z | 15.62  | 98.87  | 25.67 |      | 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 | 120.77 | 30.63 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 100.00 | 121.50 | 31.09 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 121.84 | 30.99 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 0.97   | 62.31  | 13.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.01   | 63.10  | 14.65 |      | 150.0 |         |
|           |                                                                                 | Z | 0.96   | 62.25  | 13.81 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.57   | 66.54  | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.62   | 66.78  | 16.29 |      | 150.0 |         |
|           |                                                                                 | Z | 4.54   | 66.53  | 16.07 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.57   | 66.54  | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.62   | 66.78  | 16.29 |      | 150.0 |         |
|           |                                                                                 | Z | 4.54   | 66.53  | 16.07 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.55   | 66.67  | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.61   | 66.92  | 16.30 |      | 150.0 |         |
|           |                                                                                 | Z | 4.53   | 66.67  | 16.08 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.58   | 66.63  | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.63   | 66.88  | 16.30 |      | 150.0 |         |
|           |                                                                                 | Z | 4.55   | 66.63  | 16.09 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.70   | 66.66  | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.75   | 66.89  | 16.33 |      | 150.0 |         |
|           |                                                                                 | Z | 4.67   | 66.65  | 16.12 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.89   | 67.00  | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.94   | 67.25  | 16.46 |      | 150.0 |         |
|           |                                                                                 | Z | 4.85   | 66.98  | 16.24 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.80   | 66.94  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.85   | 67.19  | 16.42 |      | 150.0 |         |
|           |                                                                                 | Z | 4.76   | 66.92  | 16.20 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.43   | 67.40  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.46   | 67.59  | 16.64 |      | 150.0 |         |
|           |                                                                                 | Z | 5.40   | 67.39  | 16.48 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.43   | 67.42  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.47   | 67.60  | 16.64 |      | 150.0 |         |
|           |                                                                                 | Z | 5.40   | 67.41  | 16.48 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.43   | 67.37  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.47   | 67.57  | 16.62 |      | 150.0 |         |
|           |                                                                | Z | 5.41   | 67.36  | 16.45 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.15   | 69.76  | 17.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.19   | 69.88  | 17.76 |      | 150.0 |         |
|           |                                                                | Z | 4.12   | 69.84  | 17.60 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.26   | 67.02  | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.33   | 67.32  | 16.31 |      | 150.0 |         |
|           |                                                                | Z | 4.22   | 67.00  | 16.02 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.56   | 66.95  | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.62   | 67.22  | 16.37 |      | 150.0 |         |
|           |                                                                | Z | 4.52   | 66.93  | 16.13 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.81   | 66.98  | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.87   | 67.22  | 16.44 |      | 150.0 |         |
|           |                                                                | Z | 4.78   | 66.96  | 16.22 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.20   | 70.38  | 17.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.25   | 70.53  | 17.68 |      | 150.0 |         |
|           |                                                                | Z | 4.16   | 70.46  | 17.47 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 120.59 | 30.55 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 121.33 | 31.01 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 121.65 | 30.91 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.54   | 66.87  | 15.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.62   | 67.29  | 15.69 |      | 150.0 |         |
|           |                                                                | Z | 3.49   | 66.83  | 15.25 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.09   | 66.78  | 15.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.15   | 67.09  | 16.16 |      | 150.0 |         |
|           |                                                                | Z | 4.05   | 66.76  | 15.87 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.36   | 66.75  | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.42   | 67.03  | 16.26 |      | 150.0 |         |
|           |                                                                | Z | 4.33   | 66.74  | 16.01 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.56   | 66.71  | 16.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.61   | 66.97  | 16.29 |      | 150.0 |         |
|           |                                                                | Z | 4.53   | 66.69  | 16.06 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.43   | 67.01  | 14.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.53   | 67.50  | 15.37 |      | 150.0 |         |
|           |                                                                | Z | 3.37   | 66.93  | 14.84 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.29   | 67.98  | 16.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.32   | 68.16  | 16.79 |      | 150.0 |         |
|           |                                                                | Z | 6.26   | 67.96  | 16.65 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.79   | 65.17  | 15.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.83   | 65.41  | 16.01 |      | 150.0 |         |
|           |                                                                | Z | 3.78   | 65.16  | 15.77 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.84   | 69.59  | 16.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.91   | 69.84  | 17.18 |      | 150.0 |         |
|           |                                                                | Z | 3.81   | 69.69  | 16.86 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 5.05   | 67.70  | 17.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.09   | 67.77  | 17.90 |      | 150.0 |         |
|           |                                                                | Z | 5.00   | 67.75  | 17.77 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.79   | 65.91  | 14.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.92   | 68.57  | 16.19 |      | 150.0 |         |
|           |                                                                   | Z | 0.78   | 65.69  | 14.19 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 124.09 | 32.24 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 125.81 | 33.13 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 125.28 | 32.66 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 82.18  | 106.66 | 24.50 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 110.22 | 25.68 |      | 80.0  |         |
|           |                                                                   | Z | 90.90  | 108.32 | 24.86 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 13.11  | 84.75  | 18.36 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 107.13 | 24.20 |      | 80.0  |         |
|           |                                                                   | Z | 11.64  | 83.97  | 18.10 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 122.05 | 31.13 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 123.91 | 32.10 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.17 | 31.52 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 34.70  | 96.83  | 22.08 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.74 | 25.45 |      | 80.0  |         |
|           |                                                                   | Z | 33.97  | 97.14  | 22.15 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 8.66   | 80.23  | 16.95 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 88.88  | 105.43 | 23.71 |      | 80.0  |         |
|           |                                                                   | Z | 7.53   | 79.24  | 16.62 |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 122.26 | 31.23 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.12 | 32.19 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.40 | 31.62 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 42.56  | 99.17  | 22.68 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.90 | 25.52 |      | 80.0  |         |
|           |                                                                   | Z | 42.79  | 99.79  | 22.82 |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 8.79   | 80.40  | 17.00 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 94.78  | 106.12 | 23.86 |      | 80.0  |         |
|           |                                                                   | Z | 7.65   | 79.43  | 16.67 |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 122.29 | 31.23 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.15 | 32.20 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.43 | 31.63 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 42.39  | 99.09  | 22.65 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.85 | 25.49 |      | 80.0  |         |
|           |                                                                   | Z | 42.62  | 99.70  | 22.79 |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 8.75   | 80.33  | 16.97 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 95.63  | 106.16 | 23.85 |      | 80.0  |         |
|           |                                                                   | Z | 7.61   | 79.36  | 16.63 |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 122.26 | 31.22 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 124.13 | 32.18 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.40 | 31.61 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 41.57  | 98.89  | 22.60 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 109.86 | 25.49 |      | 80.0  |         |
|           |                                                                   | Z | 41.71  | 99.48  | 22.73 |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 8.66   | 80.23  | 16.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 92.76  | 105.86 | 23.79 |      | 80.0  |         |
|           |                                                                   | Z | 7.52   | 79.25  | 16.60 |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 36.02  | 97.20  | 22.15 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 100.00 | 109.70 | 25.42 |      | 80.0 |         |
|           |                                                                     | Z | 35.46  | 97.58  | 22.24 |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 8.55   | 80.07  | 16.88 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 89.69  | 105.45 | 23.69 |      | 80.0 |         |
|           |                                                                     | Z | 7.42   | 79.08  | 16.54 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 12.76  | 92.36  | 25.32 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 18.65  | 98.88  | 27.57 |      | 80.0 |         |
|           |                                                                     | Z | 13.95  | 94.12  | 25.81 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 12.57  | 87.00  | 22.01 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 19.95  | 93.91  | 24.32 |      | 80.0 |         |
|           |                                                                     | Z | 12.93  | 87.73  | 22.15 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 10.42  | 83.70  | 20.62 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 16.05  | 89.97  | 22.81 |      | 80.0 |         |
|           |                                                                     | Z | 10.45  | 84.04  | 20.63 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.39   | 75.05  | 18.02 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.40   | 78.13  | 19.40 |      | 80.0 |         |
|           |                                                                     | Z | 4.23   | 74.62  | 17.69 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 7.31   | 79.21  | 19.52 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.15   | 82.68  | 20.99 |      | 80.0 |         |
|           |                                                                     | Z | 7.17   | 79.05  | 19.31 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.75   | 77.88  | 19.05 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.31   | 81.08  | 20.44 |      | 80.0 |         |
|           |                                                                     | Z | 6.55   | 77.60  | 18.79 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.80   | 76.47  | 19.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.70   | 79.15  | 20.55 |      | 80.0 |         |
|           |                                                                     | Z | 4.72   | 76.35  | 19.21 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.16   | 71.40  | 17.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.57   | 72.84  | 17.80 |      | 80.0 |         |
|           |                                                                     | Z | 4.07   | 71.21  | 16.82 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.14   | 70.99  | 16.86 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.52   | 72.34  | 17.60 |      | 80.0 |         |
|           |                                                                     | Z | 4.04   | 70.79  | 16.64 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.95   | 75.43  | 19.57 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.59   | 77.40  | 20.48 |      | 80.0 |         |
|           |                                                                     | Z | 4.87   | 75.36  | 19.51 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.39   | 71.05  | 17.97 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.67   | 72.07  | 18.53 |      | 80.0 |         |
|           |                                                                     | Z | 4.33   | 71.01  | 17.90 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.47   | 70.81  | 17.90 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.74   | 71.76  | 18.43 |      | 80.0 |         |
|           |                                                                     | Z | 4.41   | 70.77  | 17.83 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.94   | 73.38  | 18.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.38   | 74.76  | 19.60 |      | 80.0 |         |
|           |                                                                     | Z | 4.87   | 73.32  | 18.89 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.67   | 70.17  | 17.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.91   | 70.97  | 18.36 |      | 80.0 |         |
|           |                                                                     | Z | 4.62   | 70.13  | 17.86 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.74 | 70.00 | 17.86 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.96 | 70.77 | 18.30 |      | 80.0 |         |
|           |                                                                      | Z | 4.68 | 69.97 | 17.81 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.42 | 74.96 | 19.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.98 | 76.57 | 20.11 |      | 80.0 |         |
|           |                                                                      | Z | 5.33 | 74.86 | 19.31 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.74 | 70.64 | 18.10 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.99 | 71.49 | 18.58 |      | 80.0 |         |
|           |                                                                      | Z | 4.68 | 70.58 | 18.06 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.80 | 70.29 | 18.01 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.03 | 71.08 | 18.45 |      | 80.0 |         |
|           |                                                                      | Z | 4.74 | 70.24 | 17.97 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.26 | 70.91 | 15.58 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.08 | 73.99 | 17.07 |      | 80.0 |         |
|           |                                                                      | Z | 3.04 | 70.05 | 15.01 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.52 | 65.21 | 12.20 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.96 | 67.17 | 13.35 |      | 80.0 |         |
|           |                                                                      | Z | 2.32 | 64.31 | 11.53 |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.46 | 64.66 | 11.82 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.87 | 66.51 | 12.93 |      | 80.0 |         |
|           |                                                                      | Z | 2.25 | 63.75 | 11.14 |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.75 | 75.65 | 19.32 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.48 | 77.92 | 20.36 |      | 80.0 |         |
|           |                                                                      | Z | 4.68 | 75.58 | 19.22 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.26 | 71.24 | 17.39 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.61 | 72.46 | 18.05 |      | 80.0 |         |
|           |                                                                      | Z | 4.19 | 71.15 | 17.24 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.30 | 71.03 | 17.26 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.65 | 72.20 | 17.90 |      | 80.0 |         |
|           |                                                                      | Z | 4.23 | 70.93 | 17.11 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.89 | 75.24 | 19.48 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.52 | 77.21 | 20.39 |      | 80.0 |         |
|           |                                                                      | Z | 4.81 | 75.16 | 19.42 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.37 | 70.96 | 17.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.66 | 71.99 | 18.49 |      | 80.0 |         |
|           |                                                                      | Z | 4.31 | 70.92 | 17.85 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.44 | 70.72 | 17.85 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.72 | 71.68 | 18.38 |      | 80.0 |         |
|           |                                                                      | Z | 4.39 | 70.68 | 17.78 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.37 | 74.82 | 19.29 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.93 | 76.44 | 20.05 |      | 80.0 |         |
|           |                                                                      | Z | 5.29 | 74.72 | 19.25 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.72 | 70.58 | 18.07 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.98 | 71.44 | 18.54 |      | 80.0 |         |
|           |                                                                      | Z | 4.67 | 70.52 | 18.02 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.78 | 70.23 | 17.97 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.02 | 71.02 | 18.41 |      | 80.0  |         |
|           |                                                                     | Z | 4.72 | 70.18 | 17.93 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 5.48 | 73.02 | 18.63 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.87 | 74.15 | 19.19 |      | 80.0  |         |
|           |                                                                     | Z | 5.41 | 72.94 | 18.60 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.18 | 70.13 | 17.99 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.40 | 70.84 | 18.39 |      | 80.0  |         |
|           |                                                                     | Z | 5.12 | 70.07 | 17.96 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.21 | 69.83 | 17.92 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.42 | 70.49 | 18.29 |      | 80.0  |         |
|           |                                                                     | Z | 5.15 | 69.78 | 17.89 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 5.85 | 74.74 | 19.13 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.39 | 76.18 | 19.80 |      | 80.0  |         |
|           |                                                                     | Z | 5.76 | 74.62 | 19.09 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.10 | 70.52 | 18.13 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.34 | 71.31 | 18.56 |      | 80.0  |         |
|           |                                                                     | Z | 5.03 | 70.43 | 18.08 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.08 | 70.03 | 18.00 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.29 | 70.75 | 18.40 |      | 80.0  |         |
|           |                                                                     | Z | 5.02 | 69.96 | 17.96 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.93 | 62.43 | 13.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.97 | 63.29 | 14.71 |      | 150.0 |         |
|           |                                                                     | Z | 0.92 | 62.37 | 13.81 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.48 | 66.52 | 14.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.65 | 71.79 | 17.60 |      | 150.0 |         |
|           |                                                                     | Z | 0.47 | 66.19 | 14.01 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.76 | 63.81 | 14.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.83 | 65.38 | 15.37 |      | 150.0 |         |
|           |                                                                     | Z | 0.75 | 63.68 | 13.95 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.56 | 66.61 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.61 | 66.85 | 16.27 |      | 150.0 |         |
|           |                                                                     | Z | 4.53 | 66.60 | 16.05 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.76 | 66.88 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.82 | 67.13 | 16.41 |      | 150.0 |         |
|           |                                                                     | Z | 4.73 | 66.86 | 16.18 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.61 | 66.83 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.67 | 67.09 | 16.32 |      | 150.0 |         |
|           |                                                                     | Z | 4.57 | 66.81 | 16.09 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.54 | 66.82 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.60 | 67.09 | 16.31 |      | 150.0 |         |
|           |                                                                     | Z | 4.51 | 66.79 | 16.07 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.60 | 66.88 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.65 | 67.13 | 16.37 |      | 150.0 |         |
|           |                                                                     | Z | 4.56 | 66.87 | 16.15 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.47 | 66.73 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.52 | 66.99 | 16.21 |      | 150.0 |         |
|           |                                                            | Z | 4.44 | 66.72 | 15.98 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.55 | 66.81 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.60 | 67.07 | 16.35 |      | 150.0 |         |
|           |                                                            | Z | 4.51 | 66.79 | 16.12 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.52 | 65.83 | 15.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.57 | 66.08 | 15.92 |      | 150.0 |         |
|           |                                                            | Z | 4.49 | 65.82 | 15.70 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.70 | 66.21 | 15.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.76 | 66.48 | 16.07 |      | 150.0 |         |
|           |                                                            | Z | 4.66 | 66.20 | 15.85 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.61 | 66.17 | 15.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.67 | 66.44 | 16.02 |      | 150.0 |         |
|           |                                                            | Z | 4.58 | 66.15 | 15.78 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.63 | 66.19 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.69 | 66.46 | 16.05 |      | 150.0 |         |
|           |                                                            | Z | 4.60 | 66.17 | 15.82 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.63 | 66.19 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.69 | 66.46 | 16.05 |      | 150.0 |         |
|           |                                                            | Z | 4.60 | 66.17 | 15.82 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.63 | 66.31 | 15.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.69 | 66.59 | 16.07 |      | 150.0 |         |
|           |                                                            | Z | 4.59 | 66.28 | 15.83 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.48 | 66.15 | 15.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.55 | 66.44 | 16.01 |      | 150.0 |         |
|           |                                                            | Z | 4.45 | 66.12 | 15.75 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.64 | 66.22 | 15.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.70 | 66.49 | 16.03 |      | 150.0 |         |
|           |                                                            | Z | 4.60 | 66.20 | 15.80 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.17 | 66.38 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.22 | 66.61 | 16.12 |      | 150.0 |         |
|           |                                                            | Z | 5.14 | 66.36 | 15.93 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.24 | 66.55 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.29 | 66.77 | 16.19 |      | 150.0 |         |
|           |                                                            | Z | 5.21 | 66.54 | 16.01 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.11 | 66.49 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.16 | 66.73 | 16.15 |      | 150.0 |         |
|           |                                                            | Z | 5.07 | 66.46 | 15.95 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.17 | 66.48 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.22 | 66.71 | 16.14 |      | 150.0 |         |
|           |                                                            | Z | 5.14 | 66.45 | 15.95 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.27 | 66.54 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.32 | 66.77 | 16.22 |      | 150.0 |         |
|           |                                                            | Z | 5.23 | 66.49 | 16.02 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.19 | 66.52 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.24 | 66.75 | 16.22 |      | 150.0 |         |
|           |                                                            | Z | 5.16 | 66.50 | 16.03 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.16 | 66.38 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.21 | 66.61 | 16.15 |      | 150.0 |         |
|           |                                                    | Z | 5.13 | 66.35 | 15.95 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.32 | 66.47 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.37 | 66.69 | 16.20 |      | 150.0 |         |
|           |                                                    | Z | 5.29 | 66.44 | 16.02 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.41 | 66.52 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.45 | 66.73 | 16.24 |      | 150.0 |         |
|           |                                                    | Z | 5.38 | 66.51 | 16.07 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.47 | 66.50 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.51 | 66.71 | 16.11 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 66.47 | 15.93 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.69 | 66.97 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.73 | 67.17 | 16.28 |      | 150.0 |         |
|           |                                                    | Z | 5.66 | 66.95 | 16.12 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.56 | 66.76 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.60 | 66.98 | 16.21 |      | 150.0 |         |
|           |                                                    | Z | 5.52 | 66.71 | 16.02 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.64 | 66.85 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 67.07 | 16.24 |      | 150.0 |         |
|           |                                                    | Z | 5.60 | 66.78 | 16.04 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 6.00 | 68.11 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.04 | 68.30 | 16.83 |      | 150.0 |         |
|           |                                                    | Z | 5.95 | 68.00 | 16.63 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.58 | 66.74 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.62 | 66.95 | 16.20 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 66.72 | 16.03 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.58 | 66.77 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 67.00 | 16.18 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 66.74 | 16.00 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.49 | 66.55 | 15.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.53 | 66.77 | 16.08 |      | 150.0 |         |
|           |                                                    | Z | 5.46 | 66.52 | 15.90 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.58 | 66.61 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.83 | 16.14 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 66.57 | 15.96 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.88 | 66.89 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.92 | 67.10 | 16.21 |      | 150.0 |         |
|           |                                                    | Z | 5.86 | 66.86 | 16.04 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.03 | 67.23 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.07 | 67.43 | 16.35 |      | 150.0 |         |
|           |                                                    | Z | 6.00 | 67.20 | 16.19 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.04 | 67.26 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.08 | 67.46 | 16.36 |      | 150.0 |         |
|           |                                                    | Z | 6.02 | 67.23 | 16.20 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.01 | 67.18 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.06 | 67.39 | 16.35 |      | 150.0 |         |
|           |                                                    | Z | 5.98 | 67.14 | 16.17 |      | 150.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.07 | 67.37 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.12 | 67.58 | 16.46 |      | 150.0 |         |
|           |                                                                 | Z | 6.04 | 67.31 | 16.27 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.06 | 67.18 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.10 | 67.40 | 16.41 |      | 150.0 |         |
|           |                                                                 | Z | 6.03 | 67.14 | 16.23 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.98 | 67.16 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.02 | 67.38 | 16.43 |      | 150.0 |         |
|           |                                                                 | Z | 5.95 | 67.13 | 16.26 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.14 | 67.65 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.18 | 67.88 | 16.69 |      | 150.0 |         |
|           |                                                                 | Z | 6.10 | 67.57 | 16.48 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.53 | 68.40 | 16.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.57 | 68.59 | 17.00 |      | 150.0 |         |
|           |                                                                 | Z | 6.44 | 68.19 | 16.75 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.91 | 66.77 | 16.29 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.96 | 67.01 | 16.49 |      | 150.0 |         |
|           |                                                                 | Z | 4.88 | 66.76 | 16.26 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.15 | 67.23 | 16.61 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.20 | 67.46 | 16.79 |      | 150.0 |         |
|           |                                                                 | Z | 5.11 | 67.20 | 16.58 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.98 | 67.08 | 16.43 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.04 | 67.33 | 16.62 |      | 150.0 |         |
|           |                                                                 | Z | 4.94 | 67.05 | 16.40 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.00 | 67.42 | 16.74 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.05 | 67.64 | 16.92 |      | 150.0 |         |
|           |                                                                 | Z | 4.96 | 67.39 | 16.72 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.90 | 66.88 | 16.22 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.96 | 67.15 | 16.44 |      | 150.0 |         |
|           |                                                                 | Z | 4.87 | 66.87 | 16.19 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.95 | 67.46 | 16.77 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.00 | 67.68 | 16.94 |      | 150.0 |         |
|           |                                                                 | Z | 4.91 | 67.46 | 16.76 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.99 | 67.34 | 16.73 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.04 | 67.57 | 16.91 |      | 150.0 |         |
|           |                                                                 | Z | 4.95 | 67.33 | 16.71 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.25 | 64.93 | 15.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.32 | 65.99 | 16.25 |      | 130.0 |         |
|           |                                                                 | Z | 1.24 | 64.84 | 15.31 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.27 | 65.48 | 15.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.35 | 66.62 | 16.60 |      | 130.0 |         |
|           |                                                                 | Z | 1.26 | 65.38 | 15.63 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 2.10 | 81.92 | 20.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 6.18 | 99.59 | 26.88 |      | 130.0 |         |
|           |                                                                 | Z | 1.98 | 81.02 | 20.18 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.40 | 70.72 | 18.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.59 | 73.16 | 19.61 |      | 130.0 |         |
|           |                                                                 | Z | 1.38 | 70.53 | 18.01 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.72 | 66.64 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.77 | 66.88 | 16.58 |      | 130.0 |         |
|           |                                                                 | Z | 4.69 | 66.63 | 16.36 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.74 | 66.78 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.79 | 67.02 | 16.63 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.78 | 16.41 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.96 | 67.10 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.01 | 67.33 | 16.80 |      | 130.0 |         |
|           |                                                                 | Z | 4.92 | 67.08 | 16.59 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.85 | 67.23 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.90 | 67.46 | 16.88 |      | 130.0 |         |
|           |                                                                 | Z | 4.81 | 67.21 | 16.67 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.63 | 66.62 | 16.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.70 | 66.91 | 16.30 |      | 130.0 |         |
|           |                                                                 | Z | 4.60 | 66.59 | 16.04 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.68 | 66.64 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.74 | 66.93 | 16.33 |      | 130.0 |         |
|           |                                                                 | Z | 4.64 | 66.62 | 16.06 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.75 | 67.28 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 67.52 | 16.83 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.26 | 16.61 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.59 | 66.41 | 15.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.72 | 16.14 |      | 130.0 |         |
|           |                                                                 | Z | 4.55 | 66.37 | 15.85 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.72 | 66.64 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.77 | 66.88 | 16.58 |      | 130.0 |         |
|           |                                                                 | Z | 4.69 | 66.63 | 16.36 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.74 | 66.78 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.79 | 67.02 | 16.63 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.78 | 16.41 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.96 | 67.10 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.01 | 67.33 | 16.80 |      | 130.0 |         |
|           |                                                                 | Z | 4.92 | 67.08 | 16.59 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.85 | 67.23 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.90 | 67.46 | 16.88 |      | 130.0 |         |
|           |                                                                 | Z | 4.81 | 67.21 | 16.67 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.63 | 66.62 | 16.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.70 | 66.91 | 16.30 |      | 130.0 |         |
|           |                                                                 | Z | 4.60 | 66.59 | 16.04 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.68 | 66.64 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.74 | 66.93 | 16.33 |      | 130.0 |         |
|           |                                                                 | Z | 4.64 | 66.62 | 16.06 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.75 | 67.28 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 67.52 | 16.83 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.26 | 16.61 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.59 | 66.41 | 15.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.72 | 16.14 |      | 130.0 |         |
|           |                                                                 | Z | 4.55 | 66.37 | 15.85 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.87 | 66.69 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.92 | 66.92 | 16.67 |      | 130.0 |         |
|           |                                                       | Z | 4.84 | 66.69 | 16.46 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.03 | 67.03 | 16.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.08 | 67.26 | 16.79 |      | 130.0 |         |
|           |                                                       | Z | 5.00 | 67.02 | 16.59 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.96 | 66.97 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.01 | 67.21 | 16.70 |      | 130.0 |         |
|           |                                                       | Z | 4.92 | 66.95 | 16.48 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.01 | 67.11 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.06 | 67.34 | 16.83 |      | 130.0 |         |
|           |                                                       | Z | 4.97 | 67.10 | 16.62 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.98 | 67.08 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.04 | 67.32 | 16.74 |      | 130.0 |         |
|           |                                                       | Z | 4.94 | 67.06 | 16.53 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.92 | 67.08 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.98 | 67.33 | 16.75 |      | 130.0 |         |
|           |                                                       | Z | 4.88 | 67.06 | 16.53 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.87 | 67.00 | 16.45 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.93 | 67.26 | 16.65 |      | 130.0 |         |
|           |                                                       | Z | 4.83 | 66.97 | 16.42 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.85 | 67.21 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.90 | 67.45 | 16.87 |      | 130.0 |         |
|           |                                                       | Z | 4.81 | 67.18 | 16.66 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.55 | 67.30 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.59 | 67.50 | 16.88 |      | 130.0 |         |
|           |                                                       | Z | 5.52 | 67.28 | 16.71 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.76 | 67.97 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.80 | 68.15 | 17.19 |      | 130.0 |         |
|           |                                                       | Z | 5.71 | 67.90 | 16.99 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.61 | 67.58 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.65 | 67.77 | 17.00 |      | 130.0 |         |
|           |                                                       | Z | 5.57 | 67.54 | 16.83 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.69 | 67.58 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.73 | 67.78 | 16.94 |      | 130.0 |         |
|           |                                                       | Z | 5.66 | 67.57 | 16.76 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.77 | 67.85 | 17.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.81 | 68.03 | 17.18 |      | 130.0 |         |
|           |                                                       | Z | 5.73 | 67.82 | 17.01 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.55 | 67.27 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.60 | 67.47 | 16.89 |      | 130.0 |         |
|           |                                                       | Z | 5.52 | 67.24 | 16.71 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.69 | 67.68 | 16.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.73 | 67.87 | 17.10 |      | 130.0 |         |
|           |                                                       | Z | 5.66 | 67.69 | 16.94 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.43 | 67.03 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.48 | 67.26 | 16.66 |      | 130.0 |         |
|           |                                                       | Z | 5.41 | 67.03 | 16.47 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.70 | 65.95 | 16.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.75 | 66.19 | 16.26 |      | 130.0 |         |
|           |                                                   | Z | 4.67 | 65.95 | 16.05 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.89 | 66.37 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.95 | 66.62 | 16.43 |      | 130.0 |         |
|           |                                                   | Z | 4.86 | 66.36 | 16.22 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.78 | 66.23 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.84 | 66.50 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 4.75 | 66.21 | 16.06 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.83 | 66.38 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.89 | 66.63 | 16.43 |      | 130.0 |         |
|           |                                                   | Z | 4.80 | 66.36 | 16.22 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.75 | 66.21 | 16.10 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.81 | 66.47 | 16.30 |      | 130.0 |         |
|           |                                                   | Z | 4.72 | 66.18 | 16.07 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.77 | 66.37 | 16.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.83 | 66.65 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 4.73 | 66.35 | 16.12 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.78 | 66.28 | 16.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.84 | 66.57 | 16.26 |      | 130.0 |         |
|           |                                                   | Z | 4.74 | 66.25 | 16.02 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.71 | 66.42 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.77 | 66.68 | 16.44 |      | 130.0 |         |
|           |                                                   | Z | 4.67 | 66.39 | 16.22 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.76 | 66.06 | 15.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.82 | 66.34 | 16.11 |      | 130.0 |         |
|           |                                                   | Z | 4.72 | 66.04 | 15.87 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.36 | 66.52 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.40 | 66.73 | 16.47 |      | 130.0 |         |
|           |                                                   | Z | 5.33 | 66.49 | 16.29 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.42 | 66.67 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.47 | 66.87 | 16.51 |      | 130.0 |         |
|           |                                                   | Z | 5.40 | 66.69 | 16.36 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.31 | 66.69 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.36 | 66.91 | 16.54 |      | 130.0 |         |
|           |                                                   | Z | 5.28 | 66.66 | 16.36 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.34 | 66.55 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.39 | 66.77 | 16.41 |      | 130.0 |         |
|           |                                                   | Z | 5.31 | 66.53 | 16.23 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.44 | 66.61 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.49 | 66.85 | 16.50 |      | 130.0 |         |
|           |                                                   | Z | 5.40 | 66.57 | 16.30 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.41 | 66.65 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.46 | 66.85 | 16.61 |      | 130.0 |         |
|           |                                                   | Z | 5.38 | 66.63 | 16.44 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.43 | 66.83 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.47 | 67.03 | 16.69 |      | 130.0 |         |
|           |                                                   | Z | 5.41 | 66.83 | 16.53 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.31 | 66.37 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.36 | 66.60 | 16.37 |      | 130.0 |         |
|           |                                                    | Z | 5.28 | 66.35 | 16.18 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.51 | 66.60 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.55 | 66.80 | 16.53 |      | 130.0 |         |
|           |                                                    | Z | 5.48 | 66.57 | 16.35 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.96 | 67.84 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.00 | 68.03 | 17.20 |      | 130.0 |         |
|           |                                                    | Z | 5.91 | 67.77 | 17.00 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.63 | 66.56 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 66.76 | 16.40 |      | 130.0 |         |
|           |                                                    | Z | 5.61 | 66.54 | 16.24 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.91 | 67.22 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.95 | 67.40 | 16.68 |      | 130.0 |         |
|           |                                                    | Z | 5.89 | 67.20 | 16.54 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.69 | 66.73 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 66.95 | 16.40 |      | 130.0 |         |
|           |                                                    | Z | 5.67 | 66.70 | 16.22 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.78 | 66.80 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 67.01 | 16.42 |      | 130.0 |         |
|           |                                                    | Z | 5.76 | 66.81 | 16.27 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.42 | 68.87 | 17.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.45 | 69.07 | 17.46 |      | 130.0 |         |
|           |                                                    | Z | 6.35 | 68.76 | 17.24 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.17 | 68.24 | 17.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.22 | 68.45 | 17.31 |      | 130.0 |         |
|           |                                                    | Z | 6.11 | 68.14 | 17.12 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.86 | 67.20 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.89 | 67.37 | 16.79 |      | 130.0 |         |
|           |                                                    | Z | 5.84 | 67.20 | 16.66 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.75 | 66.86 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.80 | 67.09 | 16.49 |      | 130.0 |         |
|           |                                                    | Z | 5.72 | 66.81 | 16.30 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.73 | 66.86 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.78 | 67.07 | 16.54 |      | 130.0 |         |
|           |                                                    | Z | 5.70 | 66.82 | 16.36 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.63 | 66.29 | 15.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 66.55 | 16.05 |      | 130.0 |         |
|           |                                                    | Z | 5.60 | 66.24 | 15.82 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.06 | 66.98 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.09 | 67.16 | 16.51 |      | 130.0 |         |
|           |                                                    | Z | 6.04 | 66.95 | 16.36 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.23 | 67.40 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.27 | 67.58 | 16.70 |      | 130.0 |         |
|           |                                                    | Z | 6.21 | 67.38 | 16.55 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.23 | 67.37 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.27 | 67.56 | 16.67 |      | 130.0 |         |
|           |                                                    | Z | 6.21 | 67.35 | 16.52 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.21   | 67.31  | 16.55 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.25   | 67.51  | 16.69 |       | 130.0 |         |
|           |                                                        | Z | 6.18   | 67.27  | 16.52 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.23   | 67.39  | 16.53 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.28   | 67.61  | 16.69 |       | 130.0 |         |
|           |                                                        | Z | 6.20   | 67.33  | 16.50 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.24   | 67.19  | 16.45 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.28   | 67.39  | 16.60 |       | 130.0 |         |
|           |                                                        | Z | 6.22   | 67.18  | 16.44 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.29   | 67.45  | 16.73 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.33   | 67.63  | 16.87 |       | 130.0 |         |
|           |                                                        | Z | 6.26   | 67.41  | 16.72 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.13   | 67.18  | 16.51 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.18   | 67.38  | 16.66 |       | 130.0 |         |
|           |                                                        | Z | 6.11   | 67.15  | 16.49 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.35   | 67.83  | 16.86 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.40   | 68.06  | 17.03 |       | 130.0 |         |
|           |                                                        | Z | 6.30   | 67.74  | 16.80 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.89   | 68.98  | 17.38 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.90   | 69.10  | 17.50 |       | 130.0 |         |
|           |                                                        | Z | 6.83   | 68.87  | 17.33 |       | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 48.50  | 125.76 | 41.37 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 90.47  | 140.91 | 45.72 |       | 60.0  |         |
|           |                                                        | Z | 50.32  | 127.46 | 41.96 |       | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 48.77  | 126.82 | 41.82 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 98.14  | 143.92 | 46.67 |       | 60.0  |         |
|           |                                                        | Z | 49.92  | 128.24 | 42.34 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.66   | 62.51  | 9.96  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.73   | 63.91  | 11.18 |       | 150.0 |         |
|           |                                                        | Z | 0.63   | 62.25  | 9.61  |       | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 4.17   | 68.03  | 16.99 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.34   | 68.67  | 17.39 |       | 80.0  |         |
|           |                                                        | Z | 4.13   | 68.01  | 16.93 |       | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 4.68   | 67.42  | 17.15 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.82   | 67.93  | 17.48 |       | 80.0  |         |
|           |                                                        | Z | 4.65   | 67.40  | 17.11 |       | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.64   | 67.10  | 17.16 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.76   | 67.59  | 17.48 |       | 80.0  |         |
|           |                                                        | Z | 4.61   | 67.07  | 17.13 |       | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 4.70   | 67.12  | 17.21 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.82   | 67.61  | 17.53 |       | 80.0  |         |
|           |                                                        | Z | 4.67   | 67.08  | 17.17 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 17.27  | 91.20  | 23.98 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 16.02  | 90.22  | 23.99 |       | 50.0  |         |
|           |                                                        | Z | 18.59  | 92.23  | 24.12 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 114.98 | 28.67 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 100.00 | 116.21 | 29.42 |       | 60.0  |         |
|           |                                                        | Z | 100.00 | 114.43 | 28.33 |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 112.03 | 25.82 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 100.00 | 113.99 | 26.86 |      | 80.0  |         |
|           |                             | Z | 100.00 | 111.43 | 25.48 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 111.06 | 24.05 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 114.62 | 25.75 |      | 100.0 |         |
|           |                             | Z | 100.00 | 110.31 | 23.67 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 108.64 | 21.32 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 100.00 | 117.33 | 25.06 |      | 120.0 |         |
|           |                             | Z | 100.00 | 107.31 | 20.72 |      | 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: **EX3-7410\_Jul17**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7410**

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

BN ✓  
 8/3/2017

Calibration date: **July 17, 2017**

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         | 31-Dec-16 (No. ES3-3013_Dec16)    | Dec-17                 |
| DAE4                       | SN: 660          | 7-Dec-16 (No. DAE4-660_Dec16)     | Dec-17                 |
| 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-16) | In house check: Oct-17 |

|                |                               |                                          |               |
|----------------|-------------------------------|------------------------------------------|---------------|
| Calibrated by: | Name<br><b>Jeton Kastrati</b> | Function<br><b>Laboratory Technician</b> | Signature<br> |
| Approved by:   | <b>Katja Pokovic</b>          | <b>Technical Manager</b>                 |               |

Issued: July 17, 2017

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 $\varphi$   | $\varphi$ 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:7410

Manufactured: November 24, 2015  
Calibrated: July 17, 2017

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.40     | 0.46     | 0.43     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 95.4     | 94.7     | 91.2     |               |

### 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    | 130.7    | $\pm 3.5 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 146.7    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 132.5    |                           |

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 | 41.43    | 313.6    | 36.54                       | 8.525                               | 0.381                               | 5.024    | 0.000                 | 0.467                 | 1.003 |
| Y | 41.67    | 315.5    | 36.57                       | 10.32                               | 0.000                               | 5.055    | 0.334                 | 0.426                 | 1.004 |
| Z | 51.58    | 393.9    | 37.05                       | 11.42                               | 0.427                               | 5.066    | 0.000                 | 0.561                 | 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:7410

### 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                            | 10.60   | 10.60   | 10.60   | 0.53               | 0.80                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 10.08   | 10.08   | 10.08   | 0.41               | 0.98                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 8.66    | 8.66    | 8.66    | 0.41               | 0.82                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 8.37    | 8.37    | 8.37    | 0.28               | 1.19                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 8.02    | 8.02    | 8.02    | 0.35               | 0.80                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 7.68    | 7.68    | 7.68    | 0.33               | 0.89                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 7.42    | 7.42    | 7.42    | 0.40               | 0.80                    | ± 12.0 %  |

<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:7410

### 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                            | 10.19   | 10.19   | 10.19   | 0.33               | 1.02                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 9.95    | 9.95    | 9.95    | 0.50               | 0.80                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.32    | 8.32    | 8.32    | 0.39               | 0.86                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.98    | 7.98    | 7.98    | 0.44               | 0.86                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.85    | 7.85    | 7.85    | 0.44               | 0.84                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.69    | 7.69    | 7.69    | 0.37               | 0.89                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.43    | 7.43    | 7.43    | 0.28               | 0.99                    | ± 12.0 %  |

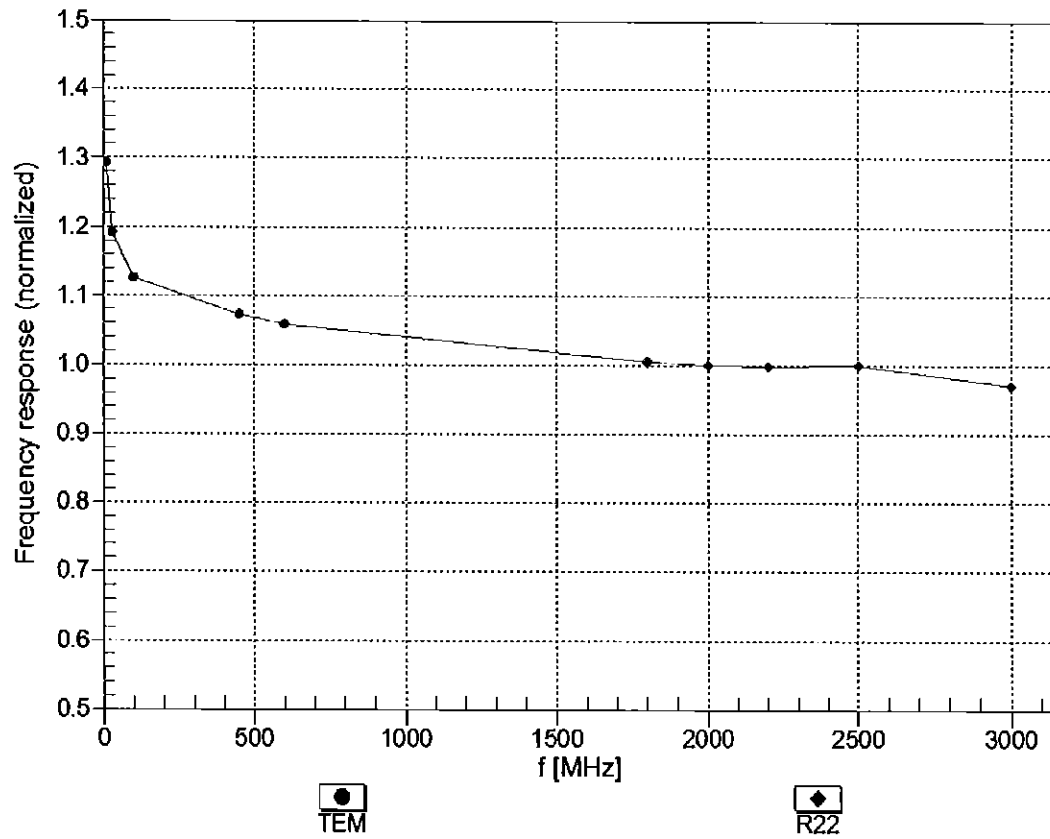
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below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

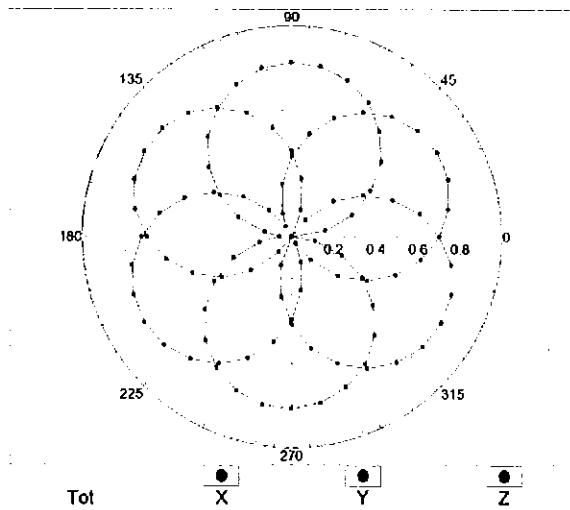
(TEM-Cell:ifi110 EXX, Waveguide: R22)



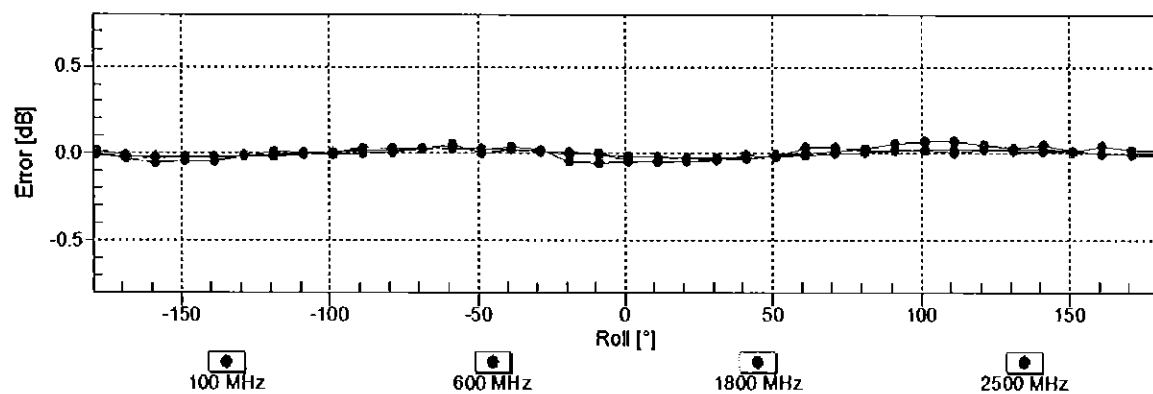
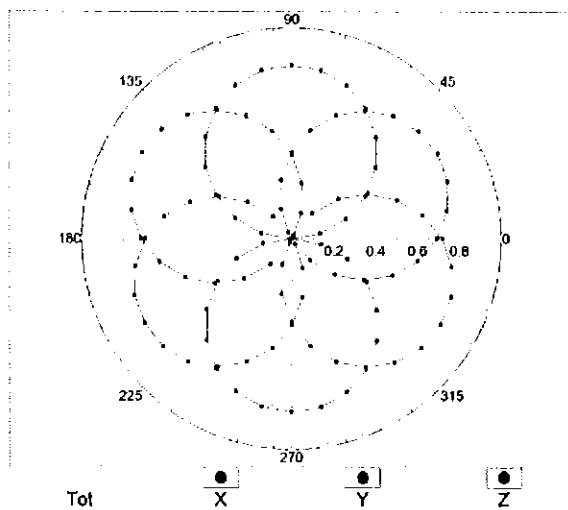
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

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

f=600 MHz,TEM

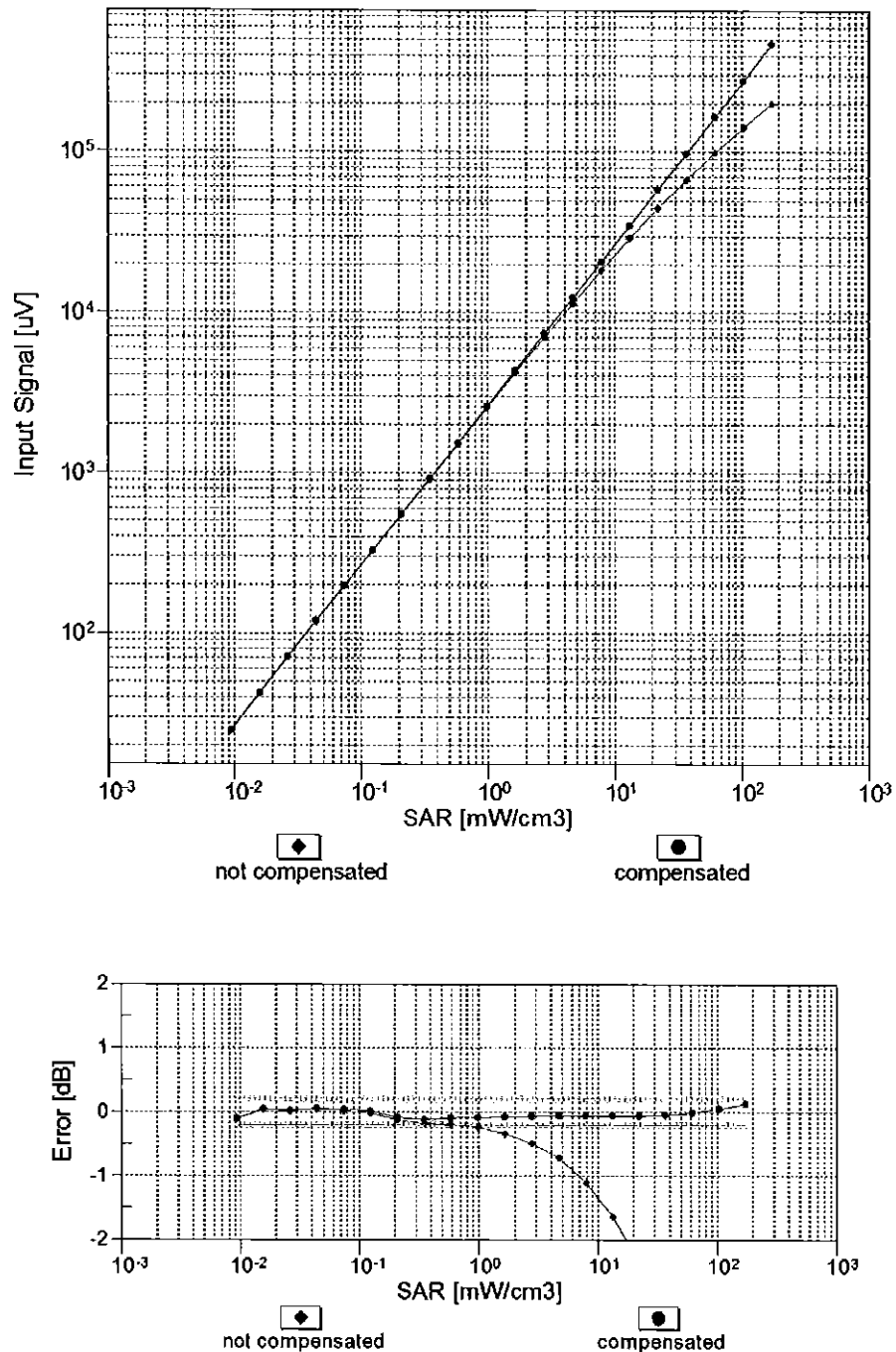


f=1800 MHz,R22



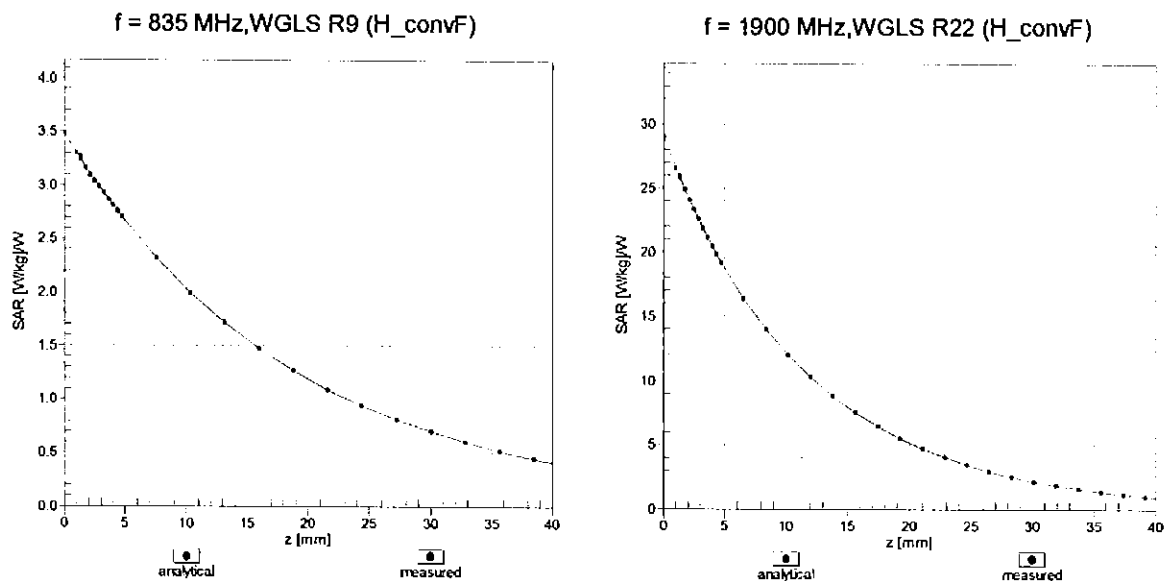
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

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



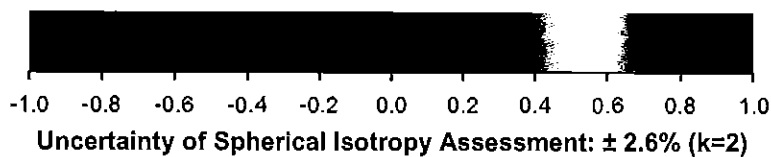
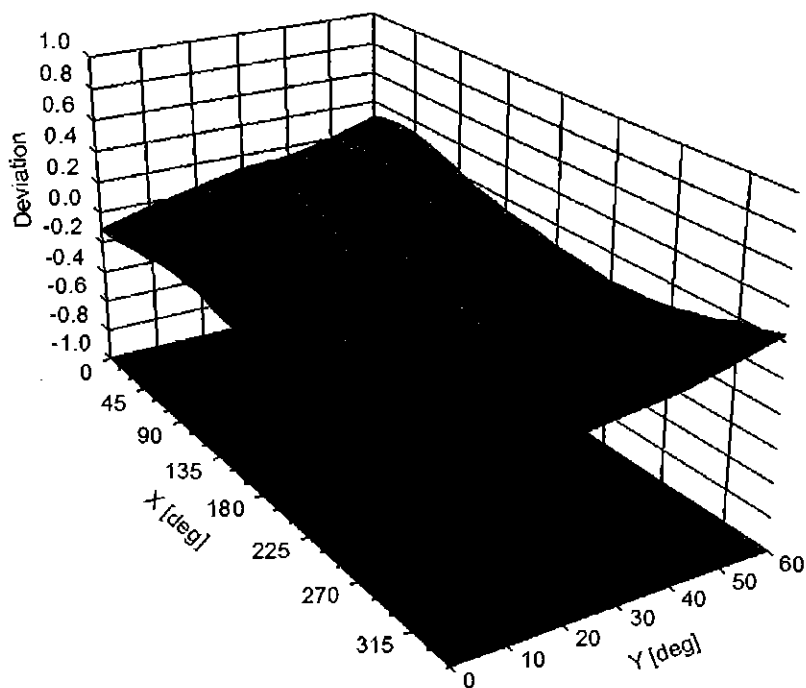
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



**DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410****Other Probe Parameters**

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 1.2        |
| 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    | 130.7    | $\pm 3.5 \%$                     |
|               |                                               | Y | 0.00    | 0.00                   | 1.00  |         | 146.7    |                                  |
|               |                                               | Z | 0.00    | 0.00                   | 1.00  |         | 132.5    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 2.07    | 65.38                  | 9.86  | 10.00   | 20.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.71    | 64.71                  | 9.07  |         | 20.0     |                                  |
|               |                                               | Z | 3.44    | 71.14                  | 12.92 |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.05    | 67.82                  | 15.62 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.11    | 68.91                  | 16.28 |         | 150.0    |                                  |
|               |                                               | Z | 1.02    | 66.59                  | 14.94 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.16    | 63.70                  | 15.28 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.18    | 64.10                  | 15.65 |         | 150.0    |                                  |
|               |                                               | Z | 1.17    | 63.41                  | 15.09 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.78    | 66.61                  | 17.05 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 4.80    | 66.74                  | 17.21 |         | 150.0    |                                  |
|               |                                               | Z | 4.93    | 66.52                  | 17.11 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 111.37                 | 25.72 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 111.58                 | 25.35 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 117.02                 | 28.59 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 110.83                 | 25.53 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 1707.76 | 142.54                 | 31.32 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 116.46                 | 28.39 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 111.84                 | 24.81 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 114.48                 | 25.68 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 118.35                 | 28.09 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 3.46    | 65.17                  | 23.20 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.27    | 82.06                  | 33.95 |         | 50.0     |                                  |
|               |                                               | Z | 3.61    | 65.78                  | 23.81 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 6.19    | 83.69                  | 29.67 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 7.27    | 90.43                  | 33.46 |         | 60.0     |                                  |
|               |                                               | Z | 7.46    | 87.49                  | 31.34 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 114.23                 | 25.06 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 119.65                 | 27.19 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 121.09                 | 28.48 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 118.39                 | 26.12 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 127.35                 | 29.74 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 125.00                 | 29.42 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 4.31    | 75.70                  | 25.15 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 4.62    | 78.76                  | 27.21 |         | 80.0     |                                  |
|               |                                               | Z | 5.10    | 78.80                  | 26.60 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 110.42                 | 23.70 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 113.76                 | 24.95 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 117.44                 | 27.22 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 118.50                 | 24.77 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 132.66                 | 30.37 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 126.29                 | 28.44 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 133.47 | 29.67 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 157.48 | 38.89 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 136.04 | 31.29 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 8.66   | 91.15  | 24.16 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 61.92  | 124.81 | 33.89 |       | 70.0  |         |
|           |                                                     | Z | 18.44  | 105.53 | 29.79 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 2.66   | 76.47  | 17.66 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.91   | 85.76  | 21.28 |       | 100.0 |         |
|           |                                                     | Z | 3.14   | 79.12  | 19.77 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 1.87   | 72.76  | 15.96 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.71   | 78.22  | 18.36 |       | 100.0 |         |
|           |                                                     | Z | 2.01   | 73.50  | 17.25 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 12.89  | 97.56  | 26.18 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 133.04 | 35.90 |       | 70.0  |         |
|           |                                                     | Z | 33.52  | 115.95 | 32.67 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 2.40   | 75.20  | 17.16 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.17   | 83.65  | 20.57 |       | 100.0 |         |
|           |                                                     | Z | 2.91   | 78.15  | 19.38 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 1.89   | 73.11  | 16.24 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.73   | 78.67  | 18.67 |       | 100.0 |         |
|           |                                                     | Z | 2.03   | 73.85  | 17.51 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 1.93   | 73.30  | 15.79 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.16   | 74.82  | 16.50 |       | 150.0 |         |
|           |                                                     | Z | 1.82   | 71.39  | 15.74 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 108.18 | 23.51 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 108.75 | 23.44 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 113.77 | 26.32 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 97.63  | 1.20  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.00   | 97.90  | 0.75  |       | 150.0 |         |
|           |                                                     | Z | 0.00   | 95.09  | 2.63  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 29.38  | 92.85  | 22.01 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 106.19 | 24.33 |       | 25.0  |         |
|           |                                                     | Z | 100.00 | 113.54 | 28.60 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 92.32  | 108.50 | 25.07 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 108.13 | 24.14 |       | 40.0  |         |
|           |                                                     | Z | 100.00 | 114.66 | 27.93 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 28.80  | 103.53 | 27.62 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 125.87 | 33.73 |       | 50.0  |         |
|           |                                                     | Z | 90.56  | 125.80 | 34.77 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 3.55   | 72.15  | 22.79 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 3.72   | 74.09  | 24.21 |       | 100.0 |         |
|           |                                                     | Z | 4.11   | 74.59  | 23.97 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.17   | 64.52  | 15.76 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.20   | 65.09  | 16.25 |       | 110.0 |         |
|           |                                                     | Z | 1.19   | 64.38  | 15.68 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 5.38   | 97.28  | 26.54 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 94.12  | 145.74 | 39.06 |       | 110.0 |         |
|           |                                                     | Z | 7.25   | 100.99 | 27.69 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 2.03 | 75.84 | 20.79 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 2.53 | 80.86 | 23.32 |      | 110.0 |         |
|           |                                                | Z | 2.46 | 78.49 | 22.05 |      | 110.0 |         |
| 10062-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.60 | 66.68 | 16.54 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.62 | 66.77 | 16.65 |      | 100.0 |         |
|           |                                                | Z | 4.74 | 66.54 | 16.54 |      | 100.0 |         |
| 10063-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.61 | 66.74 | 16.62 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.63 | 66.85 | 16.75 |      | 100.0 |         |
|           |                                                | Z | 4.75 | 66.63 | 16.64 |      | 100.0 |         |
| 10064-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.88 | 66.97 | 16.83 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.90 | 67.08 | 16.96 |      | 100.0 |         |
|           |                                                | Z | 5.06 | 66.93 | 16.89 |      | 100.0 |         |
| 10065-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.74 | 66.82 | 16.90 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.76 | 66.95 | 17.05 |      | 100.0 |         |
|           |                                                | Z | 4.91 | 66.81 | 16.98 |      | 100.0 |         |
| 10066-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.74 | 66.80 | 17.04 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.77 | 66.94 | 17.21 |      | 100.0 |         |
|           |                                                | Z | 4.93 | 66.83 | 17.15 |      | 100.0 |         |
| 10067-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.03 | 66.98 | 17.46 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.05 | 67.14 | 17.66 |      | 100.0 |         |
|           |                                                | Z | 5.21 | 66.94 | 17.57 |      | 100.0 |         |
| 10068-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.05 | 66.91 | 17.63 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.07 | 67.08 | 17.84 |      | 100.0 |         |
|           |                                                | Z | 5.27 | 67.04 | 17.82 |      | 100.0 |         |
| 10069-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.12 | 66.93 | 17.81 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.15 | 67.10 | 18.04 |      | 100.0 |         |
|           |                                                | Z | 5.34 | 66.99 | 17.99 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.86 | 66.65 | 17.32 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.89 | 66.79 | 17.50 |      | 100.0 |         |
|           |                                                | Z | 5.01 | 66.60 | 17.41 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.82 | 66.89 | 17.50 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.84 | 67.05 | 17.70 |      | 100.0 |         |
|           |                                                | Z | 4.99 | 66.92 | 17.63 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 4.86 | 67.00 | 17.79 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.89 | 67.17 | 18.02 |      | 100.0 |         |
|           |                                                | Z | 5.04 | 67.03 | 17.94 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.85 | 66.87 | 17.91 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.86 | 67.04 | 18.15 |      | 100.0 |         |
|           |                                                | Z | 5.01 | 66.88 | 18.08 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 4.86 | 66.89 | 18.16 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.87 | 67.06 | 18.42 |      | 90.0  |         |
|           |                                                | Z | 5.04 | 67.00 | 18.40 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 4.88 | 66.70 | 18.29 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.89 | 66.85 | 18.55 |      | 90.0  |         |
|           |                                                | Z | 5.03 | 66.71 | 18.47 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 4.91 | 66.76 | 18.38 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 4.91 | 66.91 | 18.65 |      | 90.0  |         |
|           |                                                | Z | 5.05 | 66.76 | 18.56 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.83   | 66.43  | 12.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.90   | 67.46  | 13.02 |      | 150.0 |         |
|           |                                                     | Z | 0.87   | 65.72  | 12.74 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.60   | 60.00  | 4.03  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 1.74   | 63.67  | 4.99  |      | 80.0  |         |
|           |                                                     | Z | 0.50   | 57.10  | 2.51  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 111.84 | 24.82 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 114.47 | 25.69 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 118.36 | 28.12 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.87   | 68.36  | 15.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.92   | 68.79  | 16.27 |      | 150.0 |         |
|           |                                                     | Z | 1.83   | 67.16  | 15.53 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.83   | 68.30  | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.88   | 68.76  | 16.25 |      | 150.0 |         |
|           |                                                     | Z | 1.79   | 67.10  | 15.49 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 6.23   | 83.81  | 29.72 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 7.34   | 90.66  | 33.54 |      | 60.0  |         |
|           |                                                     | Z | 7.51   | 87.64  | 31.39 |      | 60.0  |         |
| 10100-CAC | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.10   | 70.42  | 16.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.17   | 70.79  | 17.14 |      | 150.0 |         |
|           |                                                     | Z | 3.14   | 69.95  | 16.56 |      | 150.0 |         |
| 10101-CAC | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.21   | 67.53  | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.24   | 67.71  | 16.18 |      | 150.0 |         |
|           |                                                     | Z | 3.28   | 67.33  | 15.89 |      | 150.0 |         |
| 10102-CAC | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.31   | 67.53  | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.34   | 67.67  | 16.26 |      | 150.0 |         |
|           |                                                     | Z | 3.39   | 67.31  | 16.00 |      | 150.0 |         |
| 10103-CAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 5.23   | 73.47  | 19.72 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.84   | 75.95  | 21.01 |      | 65.0  |         |
|           |                                                     | Z | 5.88   | 74.83  | 20.39 |      | 65.0  |         |
| 10104-CAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 5.46   | 71.98  | 19.77 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.63   | 73.01  | 20.49 |      | 65.0  |         |
|           |                                                     | Z | 6.00   | 73.07  | 20.39 |      | 65.0  |         |
| 10105-CAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 5.42   | 71.61  | 19.91 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 5.43   | 72.06  | 20.36 |      | 65.0  |         |
|           |                                                     | Z | 5.47   | 71.05  | 19.77 |      | 65.0  |         |
| 10108-CAD | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.70   | 69.72  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.76   | 70.10  | 16.99 |      | 150.0 |         |
|           |                                                     | Z | 2.75   | 69.19  | 16.39 |      | 150.0 |         |
| 10109-CAD | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.86   | 67.48  | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.89   | 67.67  | 16.11 |      | 150.0 |         |
|           |                                                     | Z | 2.94   | 67.16  | 15.80 |      | 150.0 |         |
| 10110-CAD | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.18   | 68.93  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.24   | 69.40  | 16.63 |      | 150.0 |         |
|           |                                                     | Z | 2.24   | 68.24  | 15.99 |      | 150.0 |         |
| 10111-CAD | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.61   | 68.71  | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.63   | 68.84  | 16.47 |      | 150.0 |         |
|           |                                                     | Z | 2.65   | 67.91  | 16.10 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAD | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 2.99 | 67.52 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.01 | 67.67 | 16.15 |      | 150.0 |         |
|           |                                                | Z | 3.06 | 67.16 | 15.86 |      | 150.0 |         |
| 10113-CAD | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.77 | 68.89 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.78 | 68.97 | 16.58 |      | 150.0 |         |
|           |                                                | Z | 2.81 | 68.06 | 16.24 |      | 150.0 |         |
| 10114-CAB | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.09 | 67.23 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.10 | 67.28 | 16.60 |      | 150.0 |         |
|           |                                                | Z | 5.19 | 67.11 | 16.46 |      | 150.0 |         |
| 10115-CAB | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.34 | 67.29 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.35 | 67.33 | 16.63 |      | 150.0 |         |
|           |                                                | Z | 5.51 | 67.33 | 16.58 |      | 150.0 |         |
| 10116-CAB | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.18 | 67.42 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.19 | 67.47 | 16.62 |      | 150.0 |         |
|           |                                                | Z | 5.30 | 67.34 | 16.50 |      | 150.0 |         |
| 10117-CAB | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.06 | 67.11 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.07 | 67.16 | 16.56 |      | 150.0 |         |
|           |                                                | Z | 5.16 | 66.99 | 16.42 |      | 150.0 |         |
| 10118-CAB | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.42 | 67.49 | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.44 | 67.54 | 16.74 |      | 150.0 |         |
|           |                                                | Z | 5.60 | 67.55 | 16.70 |      | 150.0 |         |
| 10119-CAB | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.16 | 67.38 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.17 | 67.43 | 16.62 |      | 150.0 |         |
|           |                                                | Z | 5.27 | 67.27 | 16.48 |      | 150.0 |         |
| 10140-CAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.34 | 67.53 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.37 | 67.68 | 16.18 |      | 150.0 |         |
|           |                                                | Z | 3.42 | 67.31 | 15.91 |      | 150.0 |         |
| 10141-CAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.47 | 67.67 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.49 | 67.79 | 16.35 |      | 150.0 |         |
|           |                                                | Z | 3.55 | 67.42 | 16.09 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 1.97 | 69.09 | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.03 | 69.63 | 16.28 |      | 150.0 |         |
|           |                                                | Z | 2.02 | 68.20 | 15.69 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.49 | 69.65 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.52 | 69.83 | 16.12 |      | 150.0 |         |
|           |                                                | Z | 2.51 | 68.62 | 15.86 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.16 | 66.67 | 13.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.21 | 66.99 | 14.22 |      | 150.0 |         |
|           |                                                | Z | 2.30 | 66.43 | 14.30 |      | 150.0 |         |
| 10145-CAD | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.07 | 64.11 | 10.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.11 | 64.57 | 11.01 |      | 150.0 |         |
|           |                                                | Z | 1.31 | 65.51 | 12.40 |      | 150.0 |         |
| 10146-CAD | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 1.34 | 62.65 | 9.02  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.43 | 63.27 | 9.42  |      | 150.0 |         |
|           |                                                | Z | 2.01 | 66.35 | 12.18 |      | 150.0 |         |
| 10147-CAD | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 1.45 | 63.47 | 9.57  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.57 | 64.27 | 10.06 |      | 150.0 |         |
|           |                                                | Z | 2.34 | 68.34 | 13.28 |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.87 | 67.55 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.90 | 67.73 | 16.15 |      | 150.0 |         |
|           |                                            | Z | 2.95 | 67.22 | 15.84 |      | 150.0 |         |
| 10150-CAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.00 | 67.58 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.02 | 67.73 | 16.20 |      | 150.0 |         |
|           |                                            | Z | 3.07 | 67.21 | 15.90 |      | 150.0 |         |
| 10151-CAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 5.65 | 76.57 | 21.08 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.17 | 78.83 | 22.29 |      | 65.0  |         |
|           |                                            | Z | 6.35 | 77.82 | 21.74 |      | 65.0  |         |
| 10152-CAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 4.98 | 71.84 | 19.37 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.18 | 73.09 | 20.20 |      | 65.0  |         |
|           |                                            | Z | 5.53 | 73.00 | 20.11 |      | 65.0  |         |
| 10153-CAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 5.35 | 72.93 | 20.23 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.53 | 74.06 | 20.99 |      | 65.0  |         |
|           |                                            | Z | 5.88 | 73.94 | 20.90 |      | 65.0  |         |
| 10154-CAD | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.24 | 69.40 | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.29 | 69.81 | 16.88 |      | 150.0 |         |
|           |                                            | Z | 2.29 | 68.69 | 16.27 |      | 150.0 |         |
| 10155-CAD | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.62 | 68.74 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.64 | 68.87 | 16.49 |      | 150.0 |         |
|           |                                            | Z | 2.65 | 67.91 | 16.11 |      | 150.0 |         |
| 10156-CAD | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.81 | 69.21 | 15.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.88 | 69.80 | 16.04 |      | 150.0 |         |
|           |                                            | Z | 1.87 | 68.31 | 15.53 |      | 150.0 |         |
| 10157-CAD | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.01 | 67.27 | 13.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.06 | 67.66 | 14.24 |      | 150.0 |         |
|           |                                            | Z | 2.13 | 67.00 | 14.37 |      | 150.0 |         |
| 10158-CAD | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.78 | 68.97 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.79 | 69.05 | 16.63 |      | 150.0 |         |
|           |                                            | Z | 2.81 | 68.12 | 16.28 |      | 150.0 |         |
| 10159-CAD | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.12 | 67.76 | 14.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.17 | 68.10 | 14.50 |      | 150.0 |         |
|           |                                            | Z | 2.25 | 67.49 | 14.68 |      | 150.0 |         |
| 10160-CAC | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.73 | 68.96 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.78 | 69.27 | 16.76 |      | 150.0 |         |
|           |                                            | Z | 2.78 | 68.34 | 16.22 |      | 150.0 |         |
| 10161-CAC | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.89 | 67.56 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.92 | 67.72 | 16.12 |      | 150.0 |         |
|           |                                            | Z | 2.97 | 67.14 | 15.84 |      | 150.0 |         |
| 10162-CAC | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.00 | 67.76 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.03 | 67.89 | 16.24 |      | 150.0 |         |
|           |                                            | Z | 3.08 | 67.27 | 15.94 |      | 150.0 |         |
| 10166-CAD | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.29 | 68.55 | 18.62 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.39 | 69.14 | 19.00 |      | 150.0 |         |
|           |                                            | Z | 3.56 | 68.77 | 18.74 |      | 150.0 |         |
| 10167-CAD | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 3.85 | 70.83 | 18.84 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.06 | 71.87 | 19.39 |      | 150.0 |         |
|           |                                            | Z | 4.27 | 71.19 | 19.04 |      | 150.0 |         |

|           |                                            |   |       |       |       |      |       |         |
|-----------|--------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10168-CAD | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 4.31  | 73.34 | 20.36 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.51  | 74.19 | 20.77 |      | 150.0 |         |
|           |                                            | Z | 4.72  | 73.40 | 20.38 |      | 150.0 |         |
| 10169-CAC | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 2.65  | 67.07 | 17.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.76  | 67.90 | 18.46 |      | 150.0 |         |
|           |                                            | Z | 2.95  | 68.18 | 18.47 |      | 150.0 |         |
| 10170-CAC | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 3.35  | 71.83 | 19.98 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 73.08 | 20.56 |      | 150.0 |         |
|           |                                            | Z | 3.90  | 73.37 | 20.58 |      | 150.0 |         |
| 10171-AAC | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 2.80  | 68.11 | 17.24 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.01  | 69.49 | 17.99 |      | 150.0 |         |
|           |                                            | Z | 3.23  | 69.44 | 17.85 |      | 150.0 |         |
| 10172-CAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.65  | 76.31 | 22.99 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 5.48  | 85.89 | 27.40 |      | 65.0  |         |
|           |                                            | Z | 5.55  | 83.03 | 25.87 |      | 65.0  |         |
| 10173-CAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 6.66  | 85.15 | 24.55 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 10.56 | 95.03 | 28.43 |      | 65.0  |         |
|           |                                            | Z | 12.26 | 94.72 | 28.10 |      | 65.0  |         |
| 10174-CAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 4.93  | 79.32 | 21.92 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.98  | 90.91 | 26.48 |      | 65.0  |         |
|           |                                            | Z | 8.81  | 87.78 | 25.30 |      | 65.0  |         |
| 10175-CAD | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 2.62  | 66.79 | 17.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.73  | 67.64 | 18.24 |      | 150.0 |         |
|           |                                            | Z | 2.91  | 67.87 | 18.21 |      | 150.0 |         |
| 10176-CAD | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 3.35  | 71.86 | 19.99 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 73.10 | 20.58 |      | 150.0 |         |
|           |                                            | Z | 3.90  | 73.39 | 20.59 |      | 150.0 |         |
| 10177-CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 2.64  | 66.92 | 17.79 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.75  | 67.76 | 18.31 |      | 150.0 |         |
|           |                                            | Z | 2.94  | 68.03 | 18.32 |      | 150.0 |         |
| 10178-CAD | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 3.33  | 71.68 | 19.88 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.56  | 72.95 | 20.49 |      | 150.0 |         |
|           |                                            | Z | 3.86  | 73.15 | 20.45 |      | 150.0 |         |
| 10179-CAD | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 3.04  | 69.83 | 18.46 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.27  | 71.21 | 19.16 |      | 150.0 |         |
|           |                                            | Z | 3.53  | 71.24 | 19.06 |      | 150.0 |         |
| 10180-CAD | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 2.79  | 68.06 | 17.20 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.00  | 69.44 | 17.95 |      | 150.0 |         |
|           |                                            | Z | 3.23  | 69.37 | 17.80 |      | 150.0 |         |
| 10181-CAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 2.64  | 66.91 | 17.79 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.74  | 67.75 | 18.31 |      | 150.0 |         |
|           |                                            | Z | 2.93  | 68.01 | 18.31 |      | 150.0 |         |
| 10182-CAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 3.32  | 71.66 | 19.87 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.55  | 72.93 | 20.48 |      | 150.0 |         |
|           |                                            | Z | 3.85  | 73.13 | 20.44 |      | 150.0 |         |
| 10183-AAB | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 2.79  | 68.04 | 17.19 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.00  | 69.42 | 17.94 |      | 150.0 |         |
|           |                                            | Z | 3.22  | 69.35 | 17.79 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 2.65 | 66.95 | 17.81 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.75 | 67.79 | 18.33 |      | 150.0 |         |
|           |                                               | Z | 2.95 | 68.05 | 18.33 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 3.34 | 71.72 | 19.91 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.57 | 72.99 | 20.51 |      | 150.0 |         |
|           |                                               | Z | 3.87 | 73.20 | 20.48 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 2.80 | 68.09 | 17.22 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.01 | 69.48 | 17.97 |      | 150.0 |         |
|           |                                               | Z | 3.23 | 69.41 | 17.82 |      | 150.0 |         |
| 10187-CAD | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 2.66 | 67.00 | 17.88 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.76 | 67.84 | 18.40 |      | 150.0 |         |
|           |                                               | Z | 2.95 | 68.09 | 18.39 |      | 150.0 |         |
| 10188-CAD | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 3.43 | 72.31 | 20.28 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.66 | 73.53 | 20.84 |      | 150.0 |         |
|           |                                               | Z | 4.00 | 73.86 | 20.87 |      | 150.0 |         |
| 10189-AAD | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 2.85 | 68.45 | 17.48 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.07 | 69.84 | 18.22 |      | 150.0 |         |
|           |                                               | Z | 3.30 | 69.81 | 18.09 |      | 150.0 |         |
| 10193-CAB | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.48 | 66.73 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.49 | 66.78 | 16.30 |      | 150.0 |         |
|           |                                               | Z | 4.58 | 66.49 | 16.16 |      | 150.0 |         |
| 10194-CAB | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.63 | 67.01 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.65 | 67.06 | 16.43 |      | 150.0 |         |
|           |                                               | Z | 4.76 | 66.82 | 16.28 |      | 150.0 |         |
| 10195-CAB | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.67 | 67.04 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.69 | 67.09 | 16.44 |      | 150.0 |         |
|           |                                               | Z | 4.80 | 66.85 | 16.30 |      | 150.0 |         |
| 10196-CAB | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.47 | 66.77 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.48 | 66.82 | 16.30 |      | 150.0 |         |
|           |                                               | Z | 4.59 | 66.56 | 16.19 |      | 150.0 |         |
| 10197-CAB | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.64 | 67.02 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.66 | 67.08 | 16.44 |      | 150.0 |         |
|           |                                               | Z | 4.78 | 66.84 | 16.30 |      | 150.0 |         |
| 10198-CAB | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.67 | 67.05 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.68 | 67.10 | 16.45 |      | 150.0 |         |
|           |                                               | Z | 4.81 | 66.86 | 16.31 |      | 150.0 |         |
| 10219-CAB | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.42 | 66.79 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.44 | 66.84 | 16.27 |      | 150.0 |         |
|           |                                               | Z | 4.54 | 66.57 | 16.15 |      | 150.0 |         |
| 10220-CAB | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.64 | 66.99 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.65 | 67.04 | 16.42 |      | 150.0 |         |
|           |                                               | Z | 4.77 | 66.82 | 16.29 |      | 150.0 |         |
| 10221-CAB | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.68 | 66.98 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.69 | 67.03 | 16.44 |      | 150.0 |         |
|           |                                               | Z | 4.81 | 66.80 | 16.30 |      | 150.0 |         |
| 10222-CAB | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.03 | 67.11 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.04 | 67.15 | 16.55 |      | 150.0 |         |
|           |                                               | Z | 5.14 | 67.00 | 16.41 |      | 150.0 |         |

|           |                                           |   |       |       |       |      |       |         |
|-----------|-------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10223-CAB | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.33  | 67.33 | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.34  | 67.38 | 16.68 |      | 150.0 |         |
|           |                                           | Z | 5.45  | 67.21 | 16.54 |      | 150.0 |         |
| 10224-CAB | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.07  | 67.22 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.09  | 67.26 | 16.53 |      | 150.0 |         |
|           |                                           | Z | 5.18  | 67.11 | 16.40 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.76  | 66.33 | 15.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.78  | 66.46 | 15.44 |      | 150.0 |         |
|           |                                           | Z | 2.85  | 65.93 | 15.34 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 7.05  | 86.26 | 25.03 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 11.33 | 96.43 | 28.97 |      | 65.0  |         |
|           |                                           | Z | 13.18 | 96.17 | 28.66 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 7.07  | 85.23 | 24.04 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 11.45 | 95.09 | 27.83 |      | 65.0  |         |
|           |                                           | Z | 12.76 | 94.16 | 27.40 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 4.84  | 82.15 | 25.37 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 6.17  | 88.64 | 28.46 |      | 65.0  |         |
|           |                                           | Z | 7.76  | 90.12 | 28.51 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 6.71  | 85.26 | 24.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.65 | 95.13 | 28.47 |      | 65.0  |         |
|           |                                           | Z | 12.36 | 94.84 | 28.14 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 6.68  | 84.20 | 23.61 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.65 | 93.73 | 27.33 |      | 65.0  |         |
|           |                                           | Z | 11.94 | 92.89 | 26.92 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 4.67  | 81.40 | 24.99 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.94  | 87.77 | 28.07 |      | 65.0  |         |
|           |                                           | Z | 7.43  | 89.17 | 28.10 |      | 65.0  |         |
| 10232-CAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 6.69  | 85.24 | 24.58 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.63 | 95.12 | 28.47 |      | 65.0  |         |
|           |                                           | Z | 12.34 | 94.82 | 28.14 |      | 65.0  |         |
| 10233-CAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 6.66  | 84.17 | 23.60 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.62 | 93.69 | 27.32 |      | 65.0  |         |
|           |                                           | Z | 11.91 | 92.86 | 26.91 |      | 65.0  |         |
| 10234-CAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 4.54  | 80.75 | 24.63 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.76  | 87.05 | 27.69 |      | 65.0  |         |
|           |                                           | Z | 7.17  | 88.32 | 27.68 |      | 65.0  |         |
| 10235-CAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 6.69  | 85.26 | 24.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.64 | 95.16 | 28.48 |      | 65.0  |         |
|           |                                           | Z | 12.35 | 94.85 | 28.15 |      | 65.0  |         |
| 10236-CAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 6.73  | 84.30 | 23.64 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.78 | 93.91 | 27.38 |      | 65.0  |         |
|           |                                           | Z | 12.05 | 93.03 | 26.96 |      | 65.0  |         |
| 10237-CAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 4.67  | 81.42 | 25.00 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 5.94  | 87.83 | 28.10 |      | 65.0  |         |
|           |                                           | Z | 7.43  | 89.21 | 28.12 |      | 65.0  |         |
| 10238-CAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 6.68  | 85.21 | 24.57 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 10.60 | 95.09 | 28.46 |      | 65.0  |         |
|           |                                           | Z | 12.31 | 94.79 | 28.13 |      | 65.0  |         |

|           |                                            |   |       |       |       |      |      |         |
|-----------|--------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10239-CAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 6.64  | 84.13 | 23.58 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.57 | 93.64 | 27.30 |      | 65.0 |         |
|           |                                            | Z | 11.87 | 92.82 | 26.90 |      | 65.0 |         |
| 10240-CAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 4.66  | 81.38 | 24.99 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.92  | 87.78 | 28.08 |      | 65.0 |         |
|           |                                            | Z | 7.41  | 89.16 | 28.10 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 6.49  | 77.69 | 23.88 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.06  | 80.22 | 25.34 |      | 65.0 |         |
|           |                                            | Z | 7.33  | 78.75 | 24.61 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.69  | 74.96 | 22.63 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.72  | 79.20 | 24.84 |      | 65.0 |         |
|           |                                            | Z | 6.48  | 76.10 | 23.39 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 5.22  | 73.93 | 23.04 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.37  | 75.23 | 24.06 |      | 65.0 |         |
|           |                                            | Z | 5.30  | 72.76 | 22.72 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 4.03  | 70.70 | 15.63 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.63  | 73.27 | 17.01 |      | 65.0 |         |
|           |                                            | Z | 5.80  | 76.12 | 19.17 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 3.94  | 70.12 | 15.32 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.47  | 72.48 | 16.60 |      | 65.0 |         |
|           |                                            | Z | 5.67  | 75.49 | 18.85 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 4.17  | 75.16 | 18.15 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.29  | 79.64 | 20.23 |      | 65.0 |         |
|           |                                            | Z | 5.81  | 80.17 | 21.10 |      | 65.0 |         |
| 10247-CAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 4.10  | 71.58 | 17.29 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.43  | 73.43 | 18.37 |      | 65.0 |         |
|           |                                            | Z | 4.92  | 74.07 | 19.21 |      | 65.0 |         |
| 10248-CAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 4.07  | 70.96 | 16.98 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.37  | 72.65 | 17.99 |      | 65.0 |         |
|           |                                            | Z | 4.90  | 73.42 | 18.88 |      | 65.0 |         |
| 10249-CAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 5.33  | 79.24 | 20.92 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.73  | 84.01 | 23.05 |      | 65.0 |         |
|           |                                            | Z | 6.62  | 82.34 | 22.76 |      | 65.0 |         |
| 10250-CAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 4.99  | 74.32 | 20.40 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.24  | 75.79 | 21.30 |      | 65.0 |         |
|           |                                            | Z | 5.59  | 75.60 | 21.35 |      | 65.0 |         |
| 10251-CAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 4.75  | 72.14 | 19.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 4.99  | 73.56 | 19.92 |      | 65.0 |         |
|           |                                            | Z | 5.35  | 73.44 | 20.02 |      | 65.0 |         |
| 10252-CAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 5.62  | 79.05 | 22.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.48  | 82.42 | 23.65 |      | 65.0 |         |
|           |                                            | Z | 6.49  | 80.72 | 22.96 |      | 65.0 |         |
| 10253-CAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 4.91  | 71.43 | 19.12 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.09  | 72.60 | 19.93 |      | 65.0 |         |
|           |                                            | Z | 5.40  | 72.41 | 19.86 |      | 65.0 |         |
| 10254-CAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 5.23  | 72.40 | 19.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.41  | 73.49 | 20.63 |      | 65.0 |         |
|           |                                            | Z | 5.73  | 73.30 | 20.57 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 5.37 | 75.82 | 20.95 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.81 | 77.90 | 22.11 |      | 65.0 |         |
|           |                                             | Z | 5.98 | 76.90 | 21.60 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 2.95 | 66.44 | 12.43 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.25 | 68.14 | 13.47 |      | 65.0 |         |
|           |                                             | Z | 4.63 | 72.57 | 16.66 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 2.90 | 65.89 | 12.05 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.14 | 67.36 | 12.98 |      | 65.0 |         |
|           |                                             | Z | 4.49 | 71.73 | 16.18 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 2.90 | 69.51 | 14.64 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 3.44 | 72.54 | 16.25 |      | 65.0 |         |
|           |                                             | Z | 4.52 | 75.89 | 18.60 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 4.46 | 72.72 | 18.47 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.78 | 74.47 | 19.50 |      | 65.0 |         |
|           |                                             | Z | 5.19 | 74.62 | 19.97 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 4.49 | 72.43 | 18.33 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.79 | 74.08 | 19.32 |      | 65.0 |         |
|           |                                             | Z | 5.22 | 74.34 | 19.84 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 5.17 | 78.27 | 21.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.16 | 82.12 | 22.85 |      | 65.0 |         |
|           |                                             | Z | 6.14 | 80.53 | 22.44 |      | 65.0 |         |
| 10262-CAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 4.98 | 74.25 | 20.35 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.23 | 75.73 | 21.26 |      | 65.0 |         |
|           |                                             | Z | 5.58 | 75.55 | 21.31 |      | 65.0 |         |
| 10263-CAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 4.74 | 72.12 | 19.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.98 | 73.53 | 19.91 |      | 65.0 |         |
|           |                                             | Z | 5.34 | 73.42 | 20.01 |      | 65.0 |         |
| 10264-CAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 5.56 | 78.83 | 21.90 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.41 | 82.18 | 23.54 |      | 65.0 |         |
|           |                                             | Z | 6.42 | 80.51 | 22.86 |      | 65.0 |         |
| 10265-CAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 4.98 | 71.84 | 19.37 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.18 | 73.09 | 20.20 |      | 65.0 |         |
|           |                                             | Z | 5.53 | 73.00 | 20.12 |      | 65.0 |         |
| 10266-CAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 5.34 | 72.91 | 20.22 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.53 | 74.04 | 20.98 |      | 65.0 |         |
|           |                                             | Z | 5.88 | 73.92 | 20.89 |      | 65.0 |         |
| 10267-CAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 5.64 | 76.53 | 21.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.16 | 78.78 | 22.27 |      | 65.0 |         |
|           |                                             | Z | 6.34 | 77.78 | 21.72 |      | 65.0 |         |
| 10268-CAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 5.63 | 71.94 | 19.85 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.78 | 72.88 | 20.51 |      | 65.0 |         |
|           |                                             | Z | 6.14 | 72.88 | 20.41 |      | 65.0 |         |
| 10269-CAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 5.64 | 71.57 | 19.72 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.77 | 72.45 | 20.36 |      | 65.0 |         |
|           |                                             | Z | 6.12 | 72.44 | 20.27 |      | 65.0 |         |
| 10270-CAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 5.66 | 74.09 | 20.17 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.94 | 75.48 | 21.01 |      | 65.0 |         |
|           |                                             | Z | 6.22 | 75.05 | 20.69 |      | 65.0 |         |

|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.58  | 66.84 | 15.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.61  | 67.05 | 15.49 |      | 150.0 |         |
|           |                                                                    | Z | 2.61  | 66.19 | 15.19 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.62  | 68.33 | 15.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.68  | 69.01 | 16.23 |      | 150.0 |         |
|           |                                                                    | Z | 1.61  | 67.33 | 15.34 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.71  | 60.26 | 5.85  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 1.46  | 60.00 | 5.35  |      | 50.0  |         |
|           |                                                                    | Z | 2.08  | 61.87 | 7.57  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 3.48  | 68.77 | 13.21 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 3.86  | 71.42 | 14.38 |      | 50.0  |         |
|           |                                                                    | Z | 7.61  | 81.06 | 19.61 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 3.59  | 69.09 | 13.42 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.03  | 71.88 | 14.65 |      | 50.0  |         |
|           |                                                                    | Z | 7.80  | 81.31 | 19.76 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.38  | 68.75 | 13.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.49  | 69.81 | 14.11 |      | 150.0 |         |
|           |                                                                    | Z | 1.48  | 68.40 | 14.11 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.81  | 66.18 | 12.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.88  | 67.15 | 12.85 |      | 150.0 |         |
|           |                                                                    | Z | 0.85  | 65.51 | 12.62 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 1.25  | 72.63 | 15.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.48  | 75.02 | 16.70 |      | 150.0 |         |
|           |                                                                    | Z | 1.05  | 69.24 | 14.85 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 3.55  | 87.18 | 21.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 4.57  | 90.90 | 22.67 |      | 150.0 |         |
|           |                                                                    | Z | 1.55  | 74.98 | 17.80 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 10.90 | 87.79 | 24.10 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 17.38 | 97.96 | 27.91 |      | 50.0  |         |
|           |                                                                    | Z | 9.27  | 86.92 | 25.25 |      | 50.0  |         |
| 10297-AAB | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.71  | 69.84 | 16.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.77  | 70.21 | 17.06 |      | 150.0 |         |
|           |                                                                    | Z | 2.77  | 69.29 | 16.46 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.47  | 67.49 | 13.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.54  | 68.13 | 14.02 |      | 150.0 |         |
|           |                                                                    | Z | 1.61  | 67.49 | 14.26 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 1.91  | 66.04 | 11.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.08  | 67.06 | 12.49 |      | 150.0 |         |
|           |                                                                    | Z | 2.55  | 68.88 | 14.29 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 1.52  | 62.84 | 9.56  | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.60  | 63.32 | 9.89  |      | 150.0 |         |
|           |                                                                    | Z | 2.01  | 64.97 | 11.67 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.49  | 64.94 | 17.15 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.51  | 65.12 | 17.33 |      | 50.0  |         |
|           |                                                                    | Z | 4.77  | 65.09 | 17.35 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 4.98  | 65.58 | 17.87 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.02  | 65.83 | 18.08 |      | 50.0  |         |
|           |                                                                    | Z | 5.23  | 65.61 | 18.00 |      | 50.0  |         |

|           |                                                                     |   |      |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.72 | 65.17 | 17.66 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.76 | 65.39 | 17.86 |       | 50.0  |         |
|           |                                                                     | Z | 4.98 | 65.24 | 17.83 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.56 | 65.16 | 17.23 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.60 | 65.38 | 17.42 |       | 50.0  |         |
|           |                                                                     | Z | 4.79 | 65.14 | 17.34 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.06 | 66.26 | 18.68 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 3.98 | 66.05 | 18.73 |       | 35.0  |         |
|           |                                                                     | Z | 4.32 | 66.47 | 19.19 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.43 | 65.65 | 18.52 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.40 | 65.62 | 18.63 |       | 35.0  |         |
|           |                                                                     | Z | 4.69 | 65.80 | 18.88 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.31 | 65.69 | 18.43 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.27 | 65.62 | 18.52 |       | 35.0  |         |
|           |                                                                     | Z | 4.59 | 65.95 | 18.85 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.28 | 65.86 | 18.56 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.24 | 65.78 | 18.65 |       | 35.0  |         |
|           |                                                                     | Z | 4.55 | 66.08 | 18.95 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.47 | 65.79 | 18.63 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.44 | 65.78 | 18.76 |       | 35.0  |         |
|           |                                                                     | Z | 4.75 | 66.03 | 19.03 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.38 | 65.69 | 18.49 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.34 | 65.63 | 18.59 |       | 35.0  |         |
|           |                                                                     | Z | 4.64 | 65.84 | 18.85 |       | 35.0  |         |
| 10311-AAB | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.08 | 69.08 | 16.47 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.14 | 69.40 | 16.66 |       | 150.0 |         |
|           |                                                                     | Z | 3.12 | 68.62 | 16.13 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 2.89 | 72.65 | 16.29 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 4.19 | 78.79 | 18.89 |       | 70.0  |         |
|           |                                                                     | Z | 4.02 | 76.71 | 18.18 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 5.30 | 83.78 | 23.47 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 6.55 | 89.94 | 26.15 |       | 30.0  |         |
|           |                                                                     | Z | 6.97 | 88.50 | 25.50 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.08 | 63.77 | 15.30 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.10 | 64.11 | 15.62 |       | 150.0 |         |
|           |                                                                     | Z | 1.08 | 63.32 | 14.99 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.51 | 66.68 | 16.32 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.53 | 66.78 | 16.42 |       | 150.0 |         |
|           |                                                                     | Z | 4.64 | 66.54 | 16.30 |       | 150.0 |         |
| 10317-AAB | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.51 | 66.68 | 16.32 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.53 | 66.78 | 16.42 |       | 150.0 |         |
|           |                                                                     | Z | 4.64 | 66.54 | 16.30 |       | 150.0 |         |
| 10400-AAC | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.61 | 67.03 | 16.35 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.63 | 67.11 | 16.42 |       | 150.0 |         |
|           |                                                                     | Z | 4.76 | 66.86 | 16.27 |       | 150.0 |         |
| 10401-AAC | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.34 | 67.18 | 16.51 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.36 | 67.26 | 16.59 |       | 150.0 |         |
|           |                                                                     | Z | 5.46 | 67.09 | 16.45 |       | 150.0 |         |

|           |                                                                                |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAC | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                            | X | 5.59   | 67.45  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.60   | 67.49  | 16.57 |      | 150.0 |         |
|           |                                                                                | Z | 5.71   | 67.42  | 16.48 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                     | X | 1.38   | 68.75  | 13.54 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.49   | 69.81  | 14.11 |      | 115.0 |         |
|           |                                                                                | Z | 1.48   | 68.40  | 14.11 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                     | X | 1.38   | 68.75  | 13.54 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.49   | 69.81  | 14.11 |      | 115.0 |         |
|           |                                                                                | Z | 1.48   | 68.40  | 14.11 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                           | X | 17.35  | 99.43  | 24.90 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                | Y | 63.25  | 115.82 | 28.80 |      | 100.0 |         |
|           |                                                                                | Z | 11.61  | 93.88  | 24.12 |      | 100.0 |         |
| 10410-AAB | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                 | X | 8.36   | 91.25  | 22.62 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                | Y | 100.00 | 127.16 | 32.13 |      | 80.0  |         |
|           |                                                                                | Z | 100.00 | 125.70 | 32.09 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                      | X | 1.03   | 63.22  | 14.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 1.04   | 63.49  | 15.13 |      | 150.0 |         |
|           |                                                                                | Z | 1.02   | 62.64  | 14.46 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                  | X | 4.48   | 66.75  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.49   | 66.81  | 16.37 |      | 150.0 |         |
|           |                                                                                | Z | 4.59   | 66.53  | 16.22 |      | 150.0 |         |
| 10417-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                      | X | 4.48   | 66.75  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.49   | 66.81  | 16.37 |      | 150.0 |         |
|           |                                                                                | Z | 4.59   | 66.53  | 16.22 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)  | X | 4.47   | 66.94  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.48   | 67.00  | 16.41 |      | 150.0 |         |
|           |                                                                                | Z | 4.58   | 66.68  | 16.24 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble) | X | 4.49   | 66.88  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.50   | 66.93  | 16.40 |      | 150.0 |         |
|           |                                                                                | Z | 4.60   | 66.63  | 16.24 |      | 150.0 |         |
| 10422-AAA | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                   | X | 4.60   | 66.86  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.61   | 66.91  | 16.41 |      | 150.0 |         |
|           |                                                                                | Z | 4.72   | 66.64  | 16.26 |      | 150.0 |         |
| 10423-AAA | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                | X | 4.74   | 67.14  | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.76   | 67.20  | 16.51 |      | 150.0 |         |
|           |                                                                                | Z | 4.89   | 66.97  | 16.38 |      | 150.0 |         |
| 10424-AAA | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                | X | 4.67   | 67.10  | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.68   | 67.15  | 16.49 |      | 150.0 |         |
|           |                                                                                | Z | 4.81   | 66.91  | 16.35 |      | 150.0 |         |
| 10425-AAA | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                    | X | 5.29   | 67.34  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.30   | 67.39  | 16.66 |      | 150.0 |         |
|           |                                                                                | Z | 5.42   | 67.29  | 16.55 |      | 150.0 |         |
| 10426-AAA | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                  | X | 5.31   | 67.43  | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.32   | 67.48  | 16.70 |      | 150.0 |         |
|           |                                                                                | Z | 5.43   | 67.30  | 16.56 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAA | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.30   | 67.32  | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.31   | 67.37  | 16.64 |      | 150.0 |         |
|           |                                                                | Z | 5.44   | 67.28  | 16.54 |      | 150.0 |         |
| 10430-AAA | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.41   | 72.30  | 18.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.28   | 71.61  | 18.44 |      | 150.0 |         |
|           |                                                                | Z | 4.35   | 70.84  | 18.35 |      | 150.0 |         |
| 10431-AAA | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.12   | 67.35  | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.14   | 67.43  | 16.34 |      | 150.0 |         |
|           |                                                                | Z | 4.27   | 67.06  | 16.22 |      | 150.0 |         |
| 10432-AAA | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.43   | 67.18  | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.45   | 67.24  | 16.44 |      | 150.0 |         |
|           |                                                                | Z | 4.58   | 66.95  | 16.29 |      | 150.0 |         |
| 10433-AAA | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.69   | 67.13  | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.70   | 67.18  | 16.51 |      | 150.0 |         |
|           |                                                                | Z | 4.82   | 66.95  | 16.37 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.58   | 73.43  | 18.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.41   | 72.61  | 18.39 |      | 150.0 |         |
|           |                                                                | Z | 4.46   | 71.72  | 18.35 |      | 150.0 |         |
| 10435-AAB | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 7.84   | 90.24  | 22.26 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 126.90 | 32.00 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 125.48 | 31.98 |      | 80.0  |         |
| 10447-AAA | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.40   | 67.35  | 15.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.42   | 67.47  | 15.52 |      | 150.0 |         |
|           |                                                                | Z | 3.56   | 67.03  | 15.56 |      | 150.0 |         |
| 10448-AAA | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 3.98   | 67.14  | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.00   | 67.22  | 16.21 |      | 150.0 |         |
|           |                                                                | Z | 4.11   | 66.83  | 16.08 |      | 150.0 |         |
| 10449-AAA | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.26   | 67.02  | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.28   | 67.08  | 16.34 |      | 150.0 |         |
|           |                                                                | Z | 4.38   | 66.77  | 16.19 |      | 150.0 |         |
| 10450-AAA | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.47   | 66.91  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.48   | 66.96  | 16.37 |      | 150.0 |         |
|           |                                                                | Z | 4.58   | 66.71  | 16.22 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.25   | 67.38  | 14.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.28   | 67.53  | 15.01 |      | 150.0 |         |
|           |                                                                | Z | 3.46   | 67.22  | 15.21 |      | 150.0 |         |
| 10456-AAA | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.22   | 67.99  | 16.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.22   | 68.02  | 16.86 |      | 150.0 |         |
|           |                                                                | Z | 6.28   | 67.84  | 16.71 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.78   | 65.43  | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.79   | 65.48  | 16.08 |      | 150.0 |         |
|           |                                                                | Z | 3.83   | 65.16  | 15.92 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.02   | 66.44  | 14.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.06   | 66.64  | 14.18 |      | 150.0 |         |
|           |                                                                | Z | 3.28   | 66.54  | 14.63 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.18   | 65.23  | 15.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.18   | 65.21  | 15.41 |      | 150.0 |         |
|           |                                                                | Z | 4.47   | 65.25  | 15.75 |      | 150.0 |         |

|           |                                                                   |   |       |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.93  | 68.87  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 1.00  | 70.16  | 17.38 |      | 150.0 |         |
|           |                                                                   | Z | 0.88  | 67.06  | 15.60 |      | 150.0 |         |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.32  | 84.19  | 21.37 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 46.98 | 120.39 | 31.74 |      | 80.0  |         |
|           |                                                                   | Z | 70.92 | 123.84 | 32.55 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.93  | 61.17  | 8.92  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.50  | 66.22  | 11.48 |      | 80.0  |         |
|           |                                                                   | Z | 4.18  | 75.74  | 15.77 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.83  | 60.00  | 7.74  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.90  | 60.95  | 8.47  |      | 80.0  |         |
|           |                                                                   | Z | 1.89  | 66.55  | 11.77 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.27  | 79.79  | 19.27 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 44.63 | 117.13 | 30.10 |      | 80.0  |         |
|           |                                                                   | Z | 63.16 | 119.86 | 30.88 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.88  | 60.65  | 8.58  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.28  | 64.64  | 10.73 |      | 80.0  |         |
|           |                                                                   | Z | 2.98  | 72.01  | 14.38 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.83  | 60.00  | 7.69  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.85  | 60.44  | 8.16  |      | 80.0  |         |
|           |                                                                   | Z | 1.66  | 65.17  | 11.12 |      | 80.0  |         |
| 10467-AAB | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.54  | 80.96  | 19.70 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 60.93 | 121.68 | 31.18 |      | 80.0  |         |
|           |                                                                   | Z | 84.88 | 124.19 | 31.89 |      | 80.0  |         |
| 10468-AAB | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.89  | 60.80  | 8.68  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.33  | 65.06  | 10.94 |      | 80.0  |         |
|           |                                                                   | Z | 3.21  | 72.86  | 14.71 |      | 80.0  |         |
| 10469-AAB | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 0.83  | 60.00  | 7.69  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.85  | 60.46  | 8.17  |      | 80.0  |         |
|           |                                                                   | Z | 1.66  | 65.20  | 11.14 |      | 80.0  |         |
| 10470-AAB | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.54  | 80.99  | 19.71 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 63.11 | 122.20 | 31.29 |      | 80.0  |         |
|           |                                                                   | Z | 86.48 | 124.48 | 31.95 |      | 80.0  |         |
| 10471-AAB | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.88  | 60.76  | 8.65  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.32  | 64.98  | 10.89 |      | 80.0  |         |
|           |                                                                   | Z | 3.18  | 72.76  | 14.66 |      | 80.0  |         |
| 10472-AAB | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.83  | 60.00  | 7.68  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.84  | 60.42  | 8.13  |      | 80.0  |         |
|           |                                                                   | Z | 1.65  | 65.15  | 11.10 |      | 80.0  |         |
| 10473-AAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.52  | 80.93  | 19.68 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 62.71 | 122.07 | 31.26 |      | 80.0  |         |
|           |                                                                   | Z | 85.93 | 124.36 | 31.91 |      | 80.0  |         |
| 10474-AAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.88  | 60.74  | 8.64  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.31  | 64.94  | 10.87 |      | 80.0  |         |
|           |                                                                   | Z | 3.15  | 72.67  | 14.63 |      | 80.0  |         |
| 10475-AAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 0.83  | 60.00  | 7.68  | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 0.84  | 60.40  | 8.12  |      | 80.0  |         |
|           |                                                                   | Z | 1.64  | 65.11  | 11.08 |      | 80.0  |         |

|           |                                                                     |   |      |       |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10477-AAB | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.87 | 60.61 | 8.55  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.27 | 64.59 | 10.69 |      | 80.0 |         |
|           |                                                                     | Z | 2.97 | 71.99 | 14.36 |      | 80.0 |         |
| 10478-AAB | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 0.83 | 60.00 | 7.67  | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 0.84 | 60.37 | 8.09  |      | 80.0 |         |
|           |                                                                     | Z | 1.63 | 65.04 | 11.04 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.53 | 79.52 | 20.39 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.80 | 88.47 | 23.78 |      | 80.0 |         |
|           |                                                                     | Z | 5.78 | 82.49 | 22.28 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.53 | 72.09 | 15.68 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.36 | 79.96 | 18.76 |      | 80.0 |         |
|           |                                                                     | Z | 6.52 | 79.72 | 19.55 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.81 | 68.83 | 13.98 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.53 | 74.98 | 16.60 |      | 80.0 |         |
|           |                                                                     | Z | 5.48 | 76.73 | 18.13 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.20 | 68.90 | 15.09 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.93 | 73.22 | 17.16 |      | 80.0 |         |
|           |                                                                     | Z | 2.97 | 72.34 | 17.43 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.35 | 65.97 | 12.90 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.02 | 69.40 | 14.64 |      | 80.0 |         |
|           |                                                                     | Z | 4.23 | 73.30 | 17.24 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.28 | 65.32 | 12.60 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.83 | 68.32 | 14.18 |      | 80.0 |         |
|           |                                                                     | Z | 3.99 | 72.23 | 16.81 |      | 80.0 |         |
| 10485-AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.68 | 71.36 | 17.35 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.27 | 74.89 | 19.08 |      | 80.0 |         |
|           |                                                                     | Z | 3.17 | 72.95 | 18.56 |      | 80.0 |         |
| 10486-AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.64 | 67.61 | 15.00 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.99 | 69.69 | 16.14 |      | 80.0 |         |
|           |                                                                     | Z | 3.15 | 69.34 | 16.51 |      | 80.0 |         |
| 10487-AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.64 | 67.21 | 14.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.96 | 69.13 | 15.87 |      | 80.0 |         |
|           |                                                                     | Z | 3.15 | 68.96 | 16.33 |      | 80.0 |         |
| 10488-AAB | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.00 | 70.76 | 18.02 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.34 | 72.92 | 19.20 |      | 80.0 |         |
|           |                                                                     | Z | 3.42 | 71.88 | 18.69 |      | 80.0 |         |
| 10489-AAB | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.07 | 67.95 | 16.69 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.24 | 69.09 | 17.42 |      | 80.0 |         |
|           |                                                                     | Z | 3.37 | 68.53 | 17.27 |      | 80.0 |         |
| 10490-AAB | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.16 | 67.82 | 16.63 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.32 | 68.90 | 17.33 |      | 80.0 |         |
|           |                                                                     | Z | 3.47 | 68.38 | 17.21 |      | 80.0 |         |
| 10491-AAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.29 | 69.57 | 17.67 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.53 | 71.04 | 18.54 |      | 80.0 |         |
|           |                                                                     | Z | 3.67 | 70.46 | 18.17 |      | 80.0 |         |
| 10492-AAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.43 | 67.31 | 16.78 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.55 | 68.11 | 17.34 |      | 80.0 |         |
|           |                                                                     | Z | 3.72 | 67.80 | 17.20 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.50 | 67.21 | 16.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.62 | 67.97 | 17.27 |      | 80.0 |         |
|           |                                                                      | Z | 3.79 | 67.69 | 17.16 |      | 80.0 |         |
| 10494-AAB | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.52 | 70.87 | 18.10 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.84 | 72.64 | 19.08 |      | 80.0 |         |
|           |                                                                      | Z | 3.98 | 72.03 | 18.67 |      | 80.0 |         |
| 10495-AAB | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.45 | 67.59 | 16.97 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.58 | 68.42 | 17.54 |      | 80.0 |         |
|           |                                                                      | Z | 3.75 | 68.20 | 17.40 |      | 80.0 |         |
| 10496-AAB | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.54 | 67.39 | 16.91 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.65 | 68.15 | 17.44 |      | 80.0 |         |
|           |                                                                      | Z | 3.83 | 67.94 | 17.32 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 1.43 | 63.58 | 11.40 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.80 | 66.67 | 13.09 |      | 80.0 |         |
|           |                                                                      | Z | 2.27 | 68.74 | 14.99 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.24 | 60.00 | 8.33  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.23 | 60.00 | 8.51  |      | 80.0 |         |
|           |                                                                      | Z | 1.81 | 63.14 | 11.27 |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.26 | 60.00 | 8.18  | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.24 | 60.00 | 8.34  |      | 80.0 |         |
|           |                                                                      | Z | 1.76 | 62.56 | 10.83 |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.78 | 70.93 | 17.56 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.23 | 73.75 | 19.01 |      | 80.0 |         |
|           |                                                                      | Z | 3.21 | 72.13 | 18.47 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.86 | 67.97 | 15.75 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.13 | 69.65 | 16.71 |      | 80.0 |         |
|           |                                                                      | Z | 3.25 | 69.01 | 16.80 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.90 | 67.83 | 15.61 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.18 | 69.45 | 16.55 |      | 80.0 |         |
|           |                                                                      | Z | 3.31 | 68.90 | 16.69 |      | 80.0 |         |
| 10503-AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 2.96 | 70.56 | 17.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.29 | 72.71 | 19.10 |      | 80.0 |         |
|           |                                                                      | Z | 3.38 | 71.68 | 18.59 |      | 80.0 |         |
| 10504-AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.05 | 67.84 | 16.62 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.22 | 69.00 | 17.36 |      | 80.0 |         |
|           |                                                                      | Z | 3.35 | 68.44 | 17.21 |      | 80.0 |         |
| 10505-AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.14 | 67.73 | 16.57 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.31 | 68.81 | 17.27 |      | 80.0 |         |
|           |                                                                      | Z | 3.45 | 68.28 | 17.16 |      | 80.0 |         |
| 10506-AAB | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.49 | 70.73 | 18.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.81 | 72.49 | 19.00 |      | 80.0 |         |
|           |                                                                      | Z | 3.95 | 71.88 | 18.59 |      | 80.0 |         |
| 10507-AAB | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.44 | 67.53 | 16.93 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.56 | 68.36 | 17.50 |      | 80.0 |         |
|           |                                                                      | Z | 3.73 | 68.13 | 17.36 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAB | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.53 | 67.32 | 16.87 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.64 | 68.08 | 17.40 |      | 80.0  |         |
|           |                                                                     | Z | 3.82 | 67.87 | 17.27 |      | 80.0  |         |
| 10509-AAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.90 | 69.82 | 17.65 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.14 | 71.06 | 18.38 |      | 80.0  |         |
|           |                                                                     | Z | 4.30 | 70.72 | 18.09 |      | 80.0  |         |
| 10510-AAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.92 | 67.34 | 16.97 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.03 | 67.99 | 17.44 |      | 80.0  |         |
|           |                                                                     | Z | 4.22 | 67.93 | 17.34 |      | 80.0  |         |
| 10511-AAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.99 | 67.15 | 16.93 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.09 | 67.75 | 17.36 |      | 80.0  |         |
|           |                                                                     | Z | 4.28 | 67.68 | 17.27 |      | 80.0  |         |
| 10512-AAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 4.00 | 71.09 | 18.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.33 | 72.71 | 18.93 |      | 80.0  |         |
|           |                                                                     | Z | 4.49 | 72.31 | 18.60 |      | 80.0  |         |
| 10513-AAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.80 | 67.50 | 17.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.92 | 68.21 | 17.54 |      | 80.0  |         |
|           |                                                                     | Z | 4.11 | 68.20 | 17.45 |      | 80.0  |         |
| 10514-AAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.85 | 67.16 | 16.95 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 3.95 | 67.80 | 17.41 |      | 80.0  |         |
|           |                                                                     | Z | 4.13 | 67.78 | 17.32 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.99 | 63.41 | 14.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.00 | 63.71 | 15.22 |      | 150.0 |         |
|           |                                                                     | Z | 0.98 | 62.80 | 14.50 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.63 | 71.18 | 17.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.75 | 74.25 | 19.60 |      | 150.0 |         |
|           |                                                                     | Z | 0.56 | 68.07 | 16.15 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.84 | 65.39 | 15.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.87 | 66.03 | 16.14 |      | 150.0 |         |
|           |                                                                     | Z | 0.82 | 64.43 | 14.97 |      | 150.0 |         |
| 10518-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.47 | 66.84 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.48 | 66.90 | 16.36 |      | 150.0 |         |
|           |                                                                     | Z | 4.58 | 66.60 | 16.20 |      | 150.0 |         |
| 10519-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.63 | 67.03 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.64 | 67.09 | 16.46 |      | 150.0 |         |
|           |                                                                     | Z | 4.77 | 66.85 | 16.33 |      | 150.0 |         |
| 10520-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.49 | 66.98 | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.50 | 67.04 | 16.38 |      | 150.0 |         |
|           |                                                                     | Z | 4.62 | 66.81 | 16.25 |      | 150.0 |         |
| 10521-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.42 | 66.97 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.43 | 67.03 | 16.37 |      | 150.0 |         |
|           |                                                                     | Z | 4.55 | 66.80 | 16.23 |      | 150.0 |         |
| 10522-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.48 | 67.10 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.49 | 67.16 | 16.47 |      | 150.0 |         |
|           |                                                                     | Z | 4.61 | 66.88 | 16.31 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.38 | 67.02 | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.40 | 67.08 | 16.35 |      | 150.0 |         |
|           |                                                            | Z | 4.49 | 66.74 | 16.15 |      | 150.0 |         |
| 10524-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.42 | 67.02 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.44 | 67.08 | 16.44 |      | 150.0 |         |
|           |                                                            | Z | 4.56 | 66.80 | 16.28 |      | 150.0 |         |
| 10525-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.44 | 66.11 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.45 | 66.16 | 16.04 |      | 150.0 |         |
|           |                                                            | Z | 4.54 | 65.84 | 15.87 |      | 150.0 |         |
| 10526-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.58 | 66.42 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.59 | 66.48 | 16.17 |      | 150.0 |         |
|           |                                                            | Z | 4.71 | 66.22 | 16.01 |      | 150.0 |         |
| 10527-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.51 | 66.39 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.52 | 66.45 | 16.12 |      | 150.0 |         |
|           |                                                            | Z | 4.63 | 66.17 | 15.95 |      | 150.0 |         |
| 10528-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.52 | 66.40 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.54 | 66.46 | 16.15 |      | 150.0 |         |
|           |                                                            | Z | 4.65 | 66.19 | 15.99 |      | 150.0 |         |
| 10529-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.52 | 66.40 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.54 | 66.46 | 16.15 |      | 150.0 |         |
|           |                                                            | Z | 4.65 | 66.19 | 15.99 |      | 150.0 |         |
| 10531-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.50 | 66.46 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.51 | 66.53 | 16.14 |      | 150.0 |         |
|           |                                                            | Z | 4.64 | 66.30 | 16.00 |      | 150.0 |         |
| 10532-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.37 | 66.32 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.39 | 66.39 | 16.08 |      | 150.0 |         |
|           |                                                            | Z | 4.50 | 66.15 | 15.93 |      | 150.0 |         |
| 10533-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.53 | 66.48 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.54 | 66.54 | 16.15 |      | 150.0 |         |
|           |                                                            | Z | 4.66 | 66.23 | 15.97 |      | 150.0 |         |
| 10534-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.07 | 66.45 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.09 | 66.50 | 16.19 |      | 150.0 |         |
|           |                                                            | Z | 5.19 | 66.33 | 16.06 |      | 150.0 |         |
| 10535-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.13 | 66.62 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.14 | 66.67 | 16.27 |      | 150.0 |         |
|           |                                                            | Z | 5.25 | 66.51 | 16.14 |      | 150.0 |         |
| 10536-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.01 | 66.59 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.03 | 66.64 | 16.24 |      | 150.0 |         |
|           |                                                            | Z | 5.12 | 66.45 | 16.09 |      | 150.0 |         |
| 10537-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.07 | 66.55 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.08 | 66.59 | 16.22 |      | 150.0 |         |
|           |                                                            | Z | 5.18 | 66.42 | 16.08 |      | 150.0 |         |
| 10538-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.14 | 66.54 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.15 | 66.59 | 16.25 |      | 150.0 |         |
|           |                                                            | Z | 5.27 | 66.46 | 16.14 |      | 150.0 |         |
| 10540-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.07 | 66.52 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.08 | 66.57 | 16.26 |      | 150.0 |         |
|           |                                                            | Z | 5.20 | 66.47 | 16.16 |      | 150.0 |         |

|           |                                                     |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)   | X | 5.05 | 66.41 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.06 | 66.46 | 16.20 |      | 150.0 |         |
|           |                                                     | Z | 5.17 | 66.33 | 16.08 |      | 150.0 |         |
| 10542-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)   | X | 5.21 | 66.51 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.22 | 66.55 | 16.26 |      | 150.0 |         |
|           |                                                     | Z | 5.33 | 66.41 | 16.13 |      | 150.0 |         |
| 10543-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)   | X | 5.27 | 66.52 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.28 | 66.56 | 16.29 |      | 150.0 |         |
|           |                                                     | Z | 5.41 | 66.45 | 16.18 |      | 150.0 |         |
| 10544-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)   | X | 5.40 | 66.53 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.42 | 66.58 | 16.18 |      | 150.0 |         |
|           |                                                     | Z | 5.49 | 66.45 | 16.06 |      | 150.0 |         |
| 10545-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)   | X | 5.59 | 66.98 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.60 | 67.03 | 16.36 |      | 150.0 |         |
|           |                                                     | Z | 5.69 | 66.88 | 16.22 |      | 150.0 |         |
| 10546-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)   | X | 5.45 | 66.68 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.46 | 66.73 | 16.22 |      | 150.0 |         |
|           |                                                     | Z | 5.56 | 66.67 | 16.13 |      | 150.0 |         |
| 10547-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)   | X | 5.52 | 66.76 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.53 | 66.80 | 16.25 |      | 150.0 |         |
|           |                                                     | Z | 5.63 | 66.71 | 16.14 |      | 150.0 |         |
| 10548-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)   | X | 5.72 | 67.56 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.74 | 67.62 | 16.64 |      | 150.0 |         |
|           |                                                     | Z | 5.92 | 67.73 | 16.62 |      | 150.0 |         |
| 10550-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)   | X | 5.50 | 66.81 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.51 | 66.85 | 16.30 |      | 150.0 |         |
|           |                                                     | Z | 5.59 | 66.68 | 16.14 |      | 150.0 |         |
| 10551-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)   | X | 5.47 | 66.72 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.48 | 66.77 | 16.22 |      | 150.0 |         |
|           |                                                     | Z | 5.59 | 66.72 | 16.13 |      | 150.0 |         |
| 10552-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)   | X | 5.41 | 66.62 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.42 | 66.66 | 16.16 |      | 150.0 |         |
|           |                                                     | Z | 5.50 | 66.51 | 16.03 |      | 150.0 |         |
| 10553-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)   | X | 5.48 | 66.60 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.49 | 66.65 | 16.19 |      | 150.0 |         |
|           |                                                     | Z | 5.59 | 66.56 | 16.08 |      | 150.0 |         |
| 10554-AAA | IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.82 | 66.88 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.83 | 66.92 | 16.26 |      | 150.0 |         |
|           |                                                     | Z | 5.90 | 66.82 | 16.15 |      | 150.0 |         |
| 10555-AAA | IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.94 | 67.15 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.95 | 67.20 | 16.38 |      | 150.0 |         |
|           |                                                     | Z | 6.03 | 67.13 | 16.28 |      | 150.0 |         |
| 10556-AAA | IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.96 | 67.23 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.98 | 67.27 | 16.41 |      | 150.0 |         |
|           |                                                     | Z | 6.05 | 67.17 | 16.30 |      | 150.0 |         |
| 10557-AAA | IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.92 | 67.10 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 5.93 | 67.14 | 16.36 |      | 150.0 |         |
|           |                                                     | Z | 6.02 | 67.08 | 16.27 |      | 150.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10558-AAA | IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle)             | X | 5.96 | 67.24 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.97 | 67.29 | 16.45 |      | 150.0 |         |
|           |                                                                 | Z | 6.07 | 67.25 | 16.37 |      | 150.0 |         |
| 10560-AAA | IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle)             | X | 5.95 | 67.10 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.97 | 67.14 | 16.41 |      | 150.0 |         |
|           |                                                                 | Z | 6.06 | 67.09 | 16.33 |      | 150.0 |         |
| 10561-AAA | IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle)             | X | 5.89 | 67.09 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.90 | 67.14 | 16.45 |      | 150.0 |         |
|           |                                                                 | Z | 5.99 | 67.06 | 16.35 |      | 150.0 |         |
| 10562-AAA | IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle)             | X | 5.97 | 67.34 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.98 | 67.39 | 16.57 |      | 150.0 |         |
|           |                                                                 | Z | 6.12 | 67.47 | 16.55 |      | 150.0 |         |
| 10563-AAA | IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle)             | X | 6.05 | 67.24 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.06 | 67.29 | 16.49 |      | 150.0 |         |
|           |                                                                 | Z | 6.41 | 67.91 | 16.73 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.78 | 66.85 | 16.41 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.80 | 66.93 | 16.49 |      | 150.0 |         |
|           |                                                                 | Z | 4.91 | 66.67 | 16.35 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 4.99 | 67.29 | 16.74 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.01 | 67.35 | 16.80 |      | 150.0 |         |
|           |                                                                 | Z | 5.14 | 67.15 | 16.69 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.83 | 67.11 | 16.54 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.84 | 67.18 | 16.62 |      | 150.0 |         |
|           |                                                                 | Z | 4.98 | 66.99 | 16.50 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.87 | 67.55 | 16.94 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.87 | 67.57 | 16.98 |      | 150.0 |         |
|           |                                                                 | Z | 5.01 | 67.40 | 16.87 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.73 | 66.85 | 16.28 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 66.97 | 16.39 |      | 150.0 |         |
|           |                                                                 | Z | 4.88 | 66.73 | 16.25 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.84 | 67.72 | 17.05 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.85 | 67.73 | 17.08 |      | 150.0 |         |
|           |                                                                 | Z | 4.96 | 67.48 | 16.93 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.86 | 67.53 | 16.95 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.87 | 67.55 | 16.99 |      | 150.0 |         |
|           |                                                                 | Z | 5.00 | 67.32 | 16.86 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.13 | 63.98 | 15.42 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.15 | 64.46 | 15.85 |      | 130.0 |         |
|           |                                                                 | Z | 1.15 | 63.75 | 15.28 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.14 | 64.53 | 15.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.16 | 65.03 | 16.22 |      | 130.0 |         |
|           |                                                                 | Z | 1.16 | 64.27 | 15.61 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 1.37 | 80.51 | 21.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 2.18 | 89.24 | 25.44 |      | 130.0 |         |
|           |                                                                 | Z | 1.24 | 77.68 | 20.60 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.21 | 70.03 | 18.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.26 | 70.93 | 19.36 |      | 130.0 |         |
|           |                                                                 | Z | 1.21 | 69.23 | 18.24 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.55 | 66.59 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.69 | 16.52 |      | 130.0 |         |
|           |                                                                 | Z | 4.69 | 66.45 | 16.40 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.58 | 66.78 | 16.50 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.60 | 66.87 | 16.60 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.62 | 16.47 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.76 | 67.04 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.78 | 67.12 | 16.75 |      | 130.0 |         |
|           |                                                                 | Z | 4.92 | 66.93 | 16.65 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.67 | 67.21 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.68 | 67.27 | 16.85 |      | 130.0 |         |
|           |                                                                 | Z | 4.82 | 67.09 | 16.76 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.41 | 66.37 | 16.00 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.44 | 66.52 | 16.15 |      | 130.0 |         |
|           |                                                                 | Z | 4.58 | 66.34 | 16.04 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.45 | 66.43 | 16.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.49 | 66.59 | 16.18 |      | 130.0 |         |
|           |                                                                 | Z | 4.62 | 66.36 | 16.05 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.57 | 67.26 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.58 | 67.33 | 16.82 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.12 | 16.69 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.34 | 66.11 | 15.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.38 | 66.30 | 15.94 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 66.09 | 15.82 |      | 130.0 |         |
| 10583-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.55 | 66.59 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.57 | 66.69 | 16.52 |      | 130.0 |         |
|           |                                                                 | Z | 4.69 | 66.45 | 16.40 |      | 130.0 |         |
| 10584-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.58 | 66.78 | 16.50 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.60 | 66.87 | 16.60 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 66.62 | 16.47 |      | 130.0 |         |
| 10585-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.76 | 67.04 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.78 | 67.12 | 16.75 |      | 130.0 |         |
|           |                                                                 | Z | 4.92 | 66.93 | 16.65 |      | 130.0 |         |
| 10586-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.67 | 67.21 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.68 | 67.27 | 16.85 |      | 130.0 |         |
|           |                                                                 | Z | 4.82 | 67.09 | 16.76 |      | 130.0 |         |
| 10587-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.41 | 66.37 | 16.00 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.44 | 66.52 | 16.15 |      | 130.0 |         |
|           |                                                                 | Z | 4.58 | 66.34 | 16.04 |      | 130.0 |         |
| 10588-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.45 | 66.43 | 16.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.49 | 66.59 | 16.18 |      | 130.0 |         |
|           |                                                                 | Z | 4.62 | 66.36 | 16.05 |      | 130.0 |         |
| 10589-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.57 | 67.26 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.58 | 67.33 | 16.82 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.12 | 16.69 |      | 130.0 |         |
| 10590-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.34 | 66.11 | 15.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.38 | 66.30 | 15.94 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 66.09 | 15.82 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.71 | 66.67 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.73 | 66.75 | 16.62 |      | 130.0 |         |
|           |                                                       | Z | 4.84 | 66.53 | 16.51 |      | 130.0 |         |
| 10592-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.84 | 66.99 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.86 | 67.07 | 16.75 |      | 130.0 |         |
|           |                                                       | Z | 5.00 | 66.87 | 16.64 |      | 130.0 |         |
| 10593-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.76 | 66.86 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.78 | 66.96 | 16.62 |      | 130.0 |         |
|           |                                                       | Z | 4.92 | 66.77 | 16.52 |      | 130.0 |         |
| 10594-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.82 | 67.05 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.84 | 67.13 | 16.78 |      | 130.0 |         |
|           |                                                       | Z | 4.97 | 66.94 | 16.68 |      | 130.0 |         |
| 10595-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.78 | 67.01 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.80 | 67.10 | 16.69 |      | 130.0 |         |
|           |                                                       | Z | 4.94 | 66.89 | 16.57 |      | 130.0 |         |
| 10596-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.71 | 66.98 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.73 | 67.08 | 16.69 |      | 130.0 |         |
|           |                                                       | Z | 4.87 | 66.88 | 16.57 |      | 130.0 |         |
| 10597-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.66 | 66.85 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.69 | 66.96 | 16.56 |      | 130.0 |         |
|           |                                                       | Z | 4.82 | 66.78 | 16.45 |      | 130.0 |         |
| 10598-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.65 | 67.11 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.67 | 67.18 | 16.81 |      | 130.0 |         |
|           |                                                       | Z | 4.81 | 67.03 | 16.73 |      | 130.0 |         |
| 10599-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.39 | 67.16 | 16.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.40 | 67.23 | 16.84 |      | 130.0 |         |
|           |                                                       | Z | 5.52 | 67.11 | 16.73 |      | 130.0 |         |
| 10600-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.51 | 67.57 | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.53 | 67.67 | 17.03 |      | 130.0 |         |
|           |                                                       | Z | 5.67 | 67.58 | 16.94 |      | 130.0 |         |
| 10601-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.40 | 67.32 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.42 | 67.41 | 16.92 |      | 130.0 |         |
|           |                                                       | Z | 5.55 | 67.30 | 16.82 |      | 130.0 |         |
| 10602-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.53 | 67.48 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.55 | 67.58 | 16.92 |      | 130.0 |         |
|           |                                                       | Z | 5.64 | 67.31 | 16.73 |      | 130.0 |         |
| 10603-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.60 | 67.77 | 17.10 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.62 | 67.84 | 17.19 |      | 130.0 |         |
|           |                                                       | Z | 5.72 | 67.63 | 17.03 |      | 130.0 |         |
| 10604-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.48 | 67.44 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.50 | 67.51 | 17.01 |      | 130.0 |         |
|           |                                                       | Z | 5.52 | 67.07 | 16.74 |      | 130.0 |         |
| 10605-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.51 | 67.48 | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.53 | 67.59 | 17.04 |      | 130.0 |         |
|           |                                                       | Z | 5.64 | 67.42 | 16.91 |      | 130.0 |         |
| 10606-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.24 | 66.77 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.27 | 66.88 | 16.54 |      | 130.0 |         |
|           |                                                       | Z | 5.39 | 66.79 | 16.45 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.56 | 66.02 | 16.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.58 | 66.11 | 16.27 |      | 130.0 |         |
|           |                                                   | Z | 4.68 | 65.84 | 16.13 |      | 130.0 |         |
| 10608-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.71 | 66.38 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.74 | 66.48 | 16.43 |      | 130.0 |         |
|           |                                                   | Z | 4.87 | 66.25 | 16.30 |      | 130.0 |         |
| 10609-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.60 | 66.21 | 16.15 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.63 | 66.32 | 16.26 |      | 130.0 |         |
|           |                                                   | Z | 4.75 | 66.09 | 16.13 |      | 130.0 |         |
| 10610-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.66 | 66.38 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.68 | 66.48 | 16.42 |      | 130.0 |         |
|           |                                                   | Z | 4.81 | 66.25 | 16.30 |      | 130.0 |         |
| 10611-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.57 | 66.17 | 16.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.59 | 66.28 | 16.27 |      | 130.0 |         |
|           |                                                   | Z | 4.72 | 66.06 | 16.14 |      | 130.0 |         |
| 10612-AAA | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.57 | 66.31 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.59 | 66.44 | 16.32 |      | 130.0 |         |
|           |                                                   | Z | 4.73 | 66.20 | 16.18 |      | 130.0 |         |
| 10613-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.56 | 66.14 | 16.05 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.59 | 66.27 | 16.18 |      | 130.0 |         |
|           |                                                   | Z | 4.73 | 66.09 | 16.06 |      | 130.0 |         |
| 10614-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.53 | 66.39 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.55 | 66.47 | 16.42 |      | 130.0 |         |
|           |                                                   | Z | 4.68 | 66.29 | 16.31 |      | 130.0 |         |
| 10615-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.56 | 65.98 | 15.91 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.59 | 66.13 | 16.05 |      | 130.0 |         |
|           |                                                   | Z | 4.72 | 65.87 | 15.91 |      | 130.0 |         |
| 10616-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.20 | 66.41 | 16.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.22 | 66.48 | 16.45 |      | 130.0 |         |
|           |                                                   | Z | 5.34 | 66.37 | 16.34 |      | 130.0 |         |
| 10617-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.27 | 66.60 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.29 | 66.69 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 5.41 | 66.54 | 16.40 |      | 130.0 |         |
| 10618-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.17 | 66.64 | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.19 | 66.72 | 16.55 |      | 130.0 |         |
|           |                                                   | Z | 5.29 | 66.54 | 16.42 |      | 130.0 |         |
| 10619-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.17 | 66.40 | 16.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.19 | 66.49 | 16.38 |      | 130.0 |         |
|           |                                                   | Z | 5.31 | 66.37 | 16.27 |      | 130.0 |         |
| 10620-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.25 | 66.42 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.27 | 66.52 | 16.44 |      | 130.0 |         |
|           |                                                   | Z | 5.40 | 66.41 | 16.34 |      | 130.0 |         |
| 10621-AAA | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.27 | 66.59 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.28 | 66.65 | 16.62 |      | 130.0 |         |
|           |                                                   | Z | 5.40 | 66.53 | 16.52 |      | 130.0 |         |
| 10622-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.27 | 66.70 | 16.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.28 | 66.78 | 16.68 |      | 130.0 |         |
|           |                                                   | Z | 5.41 | 66.70 | 16.60 |      | 130.0 |         |

|           |                                                     |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)   | X | 5.14 | 66.21 | 16.21 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.16 | 66.31 | 16.32 |      | 130.0 |         |
|           |                                                     | Z | 5.28 | 66.20 | 16.22 |      | 130.0 |         |
| 10624-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)   | X | 5.34 | 66.45 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.36 | 66.54 | 16.49 |      | 130.0 |         |
|           |                                                     | Z | 5.48 | 66.42 | 16.39 |      | 130.0 |         |
| 10625-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)   | X | 5.55 | 66.97 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.57 | 67.07 | 16.81 |      | 130.0 |         |
|           |                                                     | Z | 5.88 | 67.48 | 16.97 |      | 130.0 |         |
| 10626-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)   | X | 5.53 | 66.46 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.54 | 66.54 | 16.40 |      | 130.0 |         |
|           |                                                     | Z | 5.63 | 66.43 | 16.30 |      | 130.0 |         |
| 10627-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)   | X | 5.77 | 67.07 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.79 | 67.16 | 16.68 |      | 130.0 |         |
|           |                                                     | Z | 5.88 | 67.02 | 16.56 |      | 130.0 |         |
| 10628-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)   | X | 5.53 | 66.46 | 16.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.55 | 66.56 | 16.32 |      | 130.0 |         |
|           |                                                     | Z | 5.67 | 66.54 | 16.25 |      | 130.0 |         |
| 10629-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)   | X | 5.62 | 66.57 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.64 | 66.67 | 16.37 |      | 130.0 |         |
|           |                                                     | Z | 5.76 | 66.64 | 16.29 |      | 130.0 |         |
| 10630-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)   | X | 5.96 | 67.80 | 16.88 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.98 | 67.92 | 17.00 |      | 130.0 |         |
|           |                                                     | Z | 6.25 | 68.26 | 17.09 |      | 130.0 |         |
| 10631-AAA | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)   | X | 5.89 | 67.74 | 17.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.91 | 67.78 | 17.11 |      | 130.0 |         |
|           |                                                     | Z | 6.11 | 67.97 | 17.16 |      | 130.0 |         |
| 10632-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)   | X | 5.75 | 67.20 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.76 | 67.24 | 16.86 |      | 130.0 |         |
|           |                                                     | Z | 5.85 | 67.08 | 16.73 |      | 130.0 |         |
| 10633-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)   | X | 5.60 | 66.69 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.62 | 66.77 | 16.45 |      | 130.0 |         |
|           |                                                     | Z | 5.73 | 66.69 | 16.36 |      | 130.0 |         |
| 10634-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)   | X | 5.58 | 66.71 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.60 | 66.78 | 16.51 |      | 130.0 |         |
|           |                                                     | Z | 5.72 | 66.73 | 16.44 |      | 130.0 |         |
| 10635-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)   | X | 5.44 | 65.95 | 15.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.47 | 66.09 | 15.91 |      | 130.0 |         |
|           |                                                     | Z | 5.60 | 66.05 | 15.82 |      | 130.0 |         |
| 10636-AAA | IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.96 | 66.83 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 5.97 | 66.90 | 16.49 |      | 130.0 |         |
|           |                                                     | Z | 6.05 | 66.82 | 16.40 |      | 130.0 |         |
| 10637-AAA | IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.10 | 67.19 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 6.12 | 67.27 | 16.66 |      | 130.0 |         |
|           |                                                     | Z | 6.21 | 67.21 | 16.58 |      | 130.0 |         |
| 10638-AAA | IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.10 | 67.17 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                     | Y | 6.12 | 67.25 | 16.63 |      | 130.0 |         |
|           |                                                     | Z | 6.21 | 67.17 | 16.54 |      | 130.0 |         |

|           |                                                        |   |       |        |       |      |       |         |
|-----------|--------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10639-AAA | IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle)    | X | 6.07  | 67.09  | 16.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.09  | 67.17  | 16.63 |      | 130.0 |         |
|           |                                                        | Z | 6.19  | 67.14  | 16.56 |      | 130.0 |         |
| 10640-AAA | IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle)    | X | 6.06  | 67.06  | 16.47 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.08  | 67.16  | 16.57 |      | 130.0 |         |
|           |                                                        | Z | 6.19  | 67.15  | 16.51 |      | 130.0 |         |
| 10641-AAA | IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle)    | X | 6.13  | 67.06  | 16.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.15  | 67.15  | 16.59 |      | 130.0 |         |
|           |                                                        | Z | 6.23  | 67.02  | 16.46 |      | 130.0 |         |
| 10642-AAA | IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle)    | X | 6.16  | 67.29  | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.17  | 67.34  | 16.84 |      | 130.0 |         |
|           |                                                        | Z | 6.28  | 67.31  | 16.78 |      | 130.0 |         |
| 10643-AAA | IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle)    | X | 6.00  | 66.97  | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.02  | 67.06  | 16.61 |      | 130.0 |         |
|           |                                                        | Z | 6.11  | 66.97  | 16.50 |      | 130.0 |         |
| 10644-AAA | IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle)    | X | 6.09  | 67.26  | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.12  | 67.36  | 16.77 |      | 130.0 |         |
|           |                                                        | Z | 6.29  | 67.52  | 16.80 |      | 130.0 |         |
| 10645-AAA | IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle)    | X | 6.23  | 67.33  | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.26  | 67.42  | 16.77 |      | 130.0 |         |
|           |                                                        | Z | 6.72  | 68.38  | 17.18 |      | 130.0 |         |
| 10646-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 7.97  | 91.85  | 31.39 | 9.30 | 60.0  | ± 9.6 % |
|           |                                                        | Y | 11.74 | 104.28 | 36.86 |      | 60.0  |         |
|           |                                                        | Z | 11.88 | 99.49  | 34.28 |      | 60.0  |         |
| 10647-AAB | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 7.13  | 89.84  | 30.79 | 9.30 | 60.0  | ± 9.6 % |
|           |                                                        | Y | 9.93  | 100.75 | 35.82 |      | 60.0  |         |
|           |                                                        | Z | 10.62 | 97.47  | 33.72 |      | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.64  | 63.39  | 10.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.67  | 63.88  | 10.62 |      | 150.0 |         |
|           |                                                        | Z | 0.72  | 63.48  | 11.02 |      | 150.0 |         |

<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: **ES3-3332\_Aug17**

## CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3332**

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

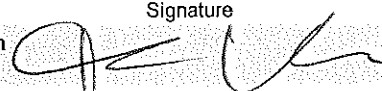
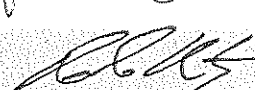
Calibration date: **August 14, 2017**

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         | 31-Dec-16 (No. ES3-3013_Dec16)    | Dec-17                 |
| DAE4                       | SN: 660          | 7-Dec-16 (No. DAE4-660_Dec16)     | Dec-17                 |
| 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-16) | In house check: Oct-17 |

|                |                               |                                          |                                                                                                    |
|----------------|-------------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------|
| Calibrated by: | Name<br><b>Jeton Kastrati</b> | Function<br><b>Laboratory Technician</b> | Signature<br> |
| Approved by:   | Name<br><b>Katja Pokovic</b>  | Function<br><b>Technical Manager</b>     | Signature<br> |
|                |                               |                                          | Issued: August 16, 2017                                                                            |

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



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Accreditation No.: **SCS 0108**

The Swiss Accreditation Service is one of the signatories to the EA  
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<sup>2</sup>-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.
- DCPx,y,z**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- 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 ES3DV3

## SN:3332

Manufactured: January 24, 2012  
Calibrated: August 14, 2017

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

## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3332

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 1.00     | 0.93     | 0.88     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 104.0    | 103.0    | 103.0    |               |

### 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    | 192.0    | $\pm 3.5 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 194.3    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 179.9    |                           |

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 | 76.72    | 548.9    | 35.46                       | 56.44                               | 4.600                               | 5.1      | 0.000                 | 0.903                 | 1.011 |
| Y | 44.78    | 323.3    | 35.85                       | 29.01                               | 2.529                               | 5.1      | 0.000                 | 0.546                 | 1.009 |
| Z | 38.01    | 268.3    | 34.56                       | 26.38                               | 1.777                               | 5.1      | 0.096                 | 0.424                 | 1.004 |

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: ES3DV3 - SN:3332

### 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                            | 6.81    | 6.81    | 6.81    | 0.72               | 1.31                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 6.64    | 6.64    | 6.64    | 0.80               | 1.21                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 5.56    | 5.56    | 5.56    | 0.80               | 1.20                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 5.33    | 5.33    | 5.33    | 0.76               | 1.26                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 4.99    | 4.99    | 4.99    | 0.70               | 1.36                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 4.68    | 4.68    | 4.68    | 0.63               | 1.48                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 4.56    | 4.56    | 4.56    | 0.80               | 1.23                    | ± 12.0 %  |

<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: ES3DV3 - SN:3332

### 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                            | 6.54    | 6.54    | 6.54    | 0.55               | 1.43                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 6.47    | 6.47    | 6.47    | 0.71               | 1.27                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 5.16    | 5.16    | 5.16    | 0.80               | 1.22                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 4.95    | 4.95    | 4.95    | 0.54               | 1.56                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 4.74    | 4.74    | 4.74    | 0.80               | 1.30                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 4.55    | 4.55    | 4.55    | 0.80               | 1.17                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 4.43    | 4.43    | 4.43    | 0.80               | 1.12                    | ± 12.0 %  |

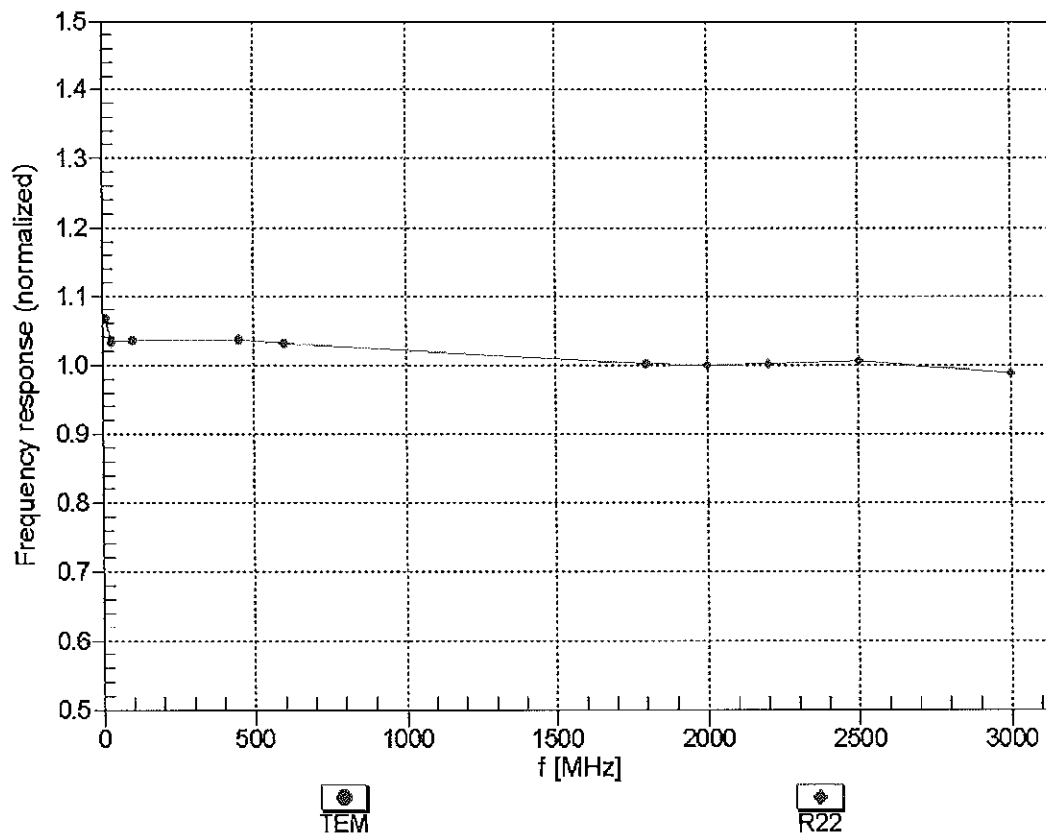
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below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

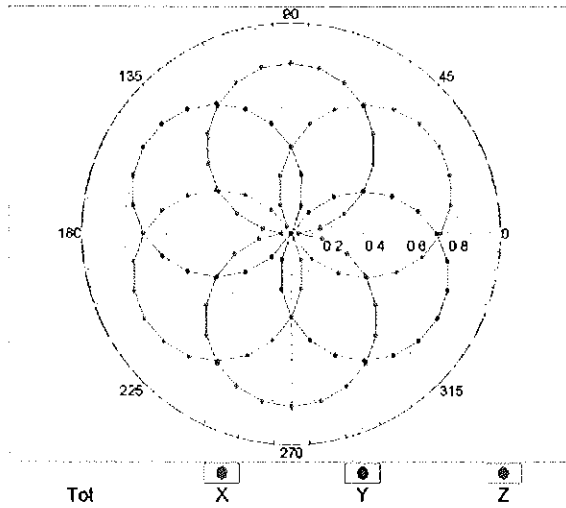
(TEM-Cell:ifi110 EXX, Waveguide: R22)



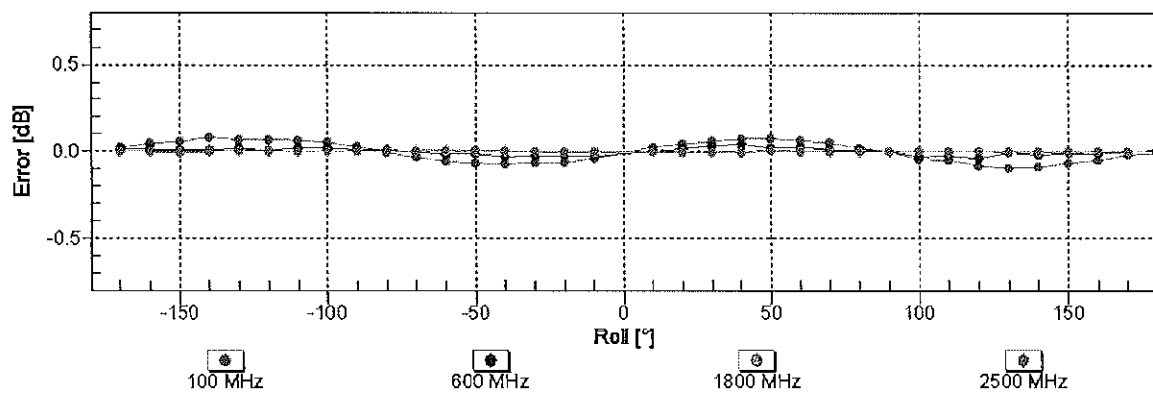
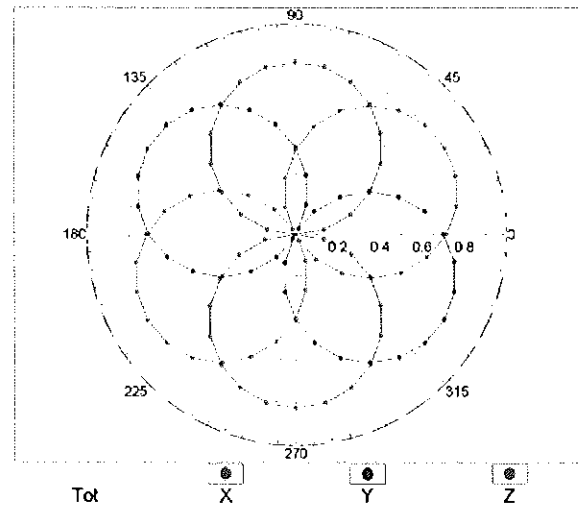
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

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

$f=600$  MHz, TEM

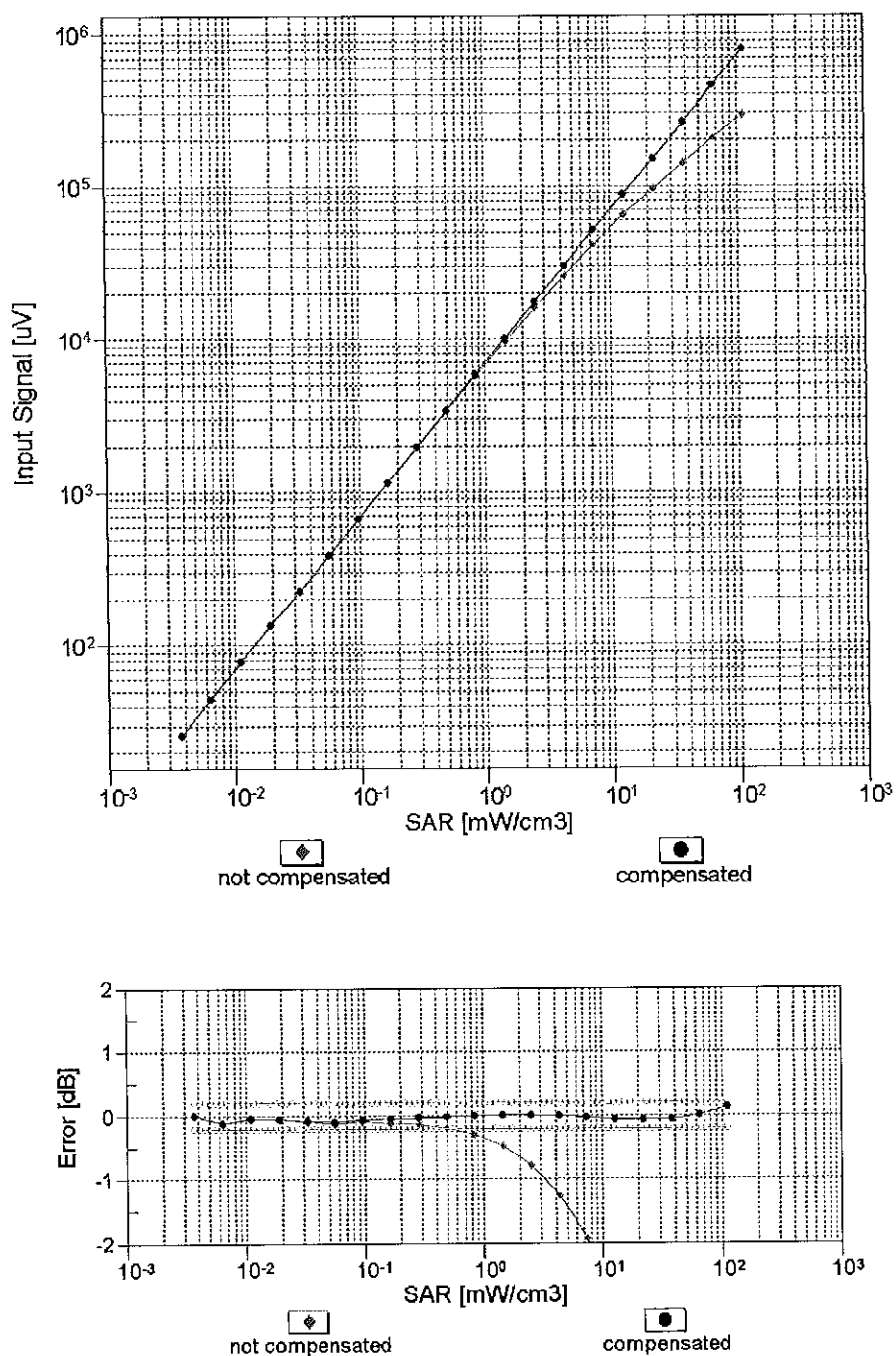


$f=1800$  MHz, R22



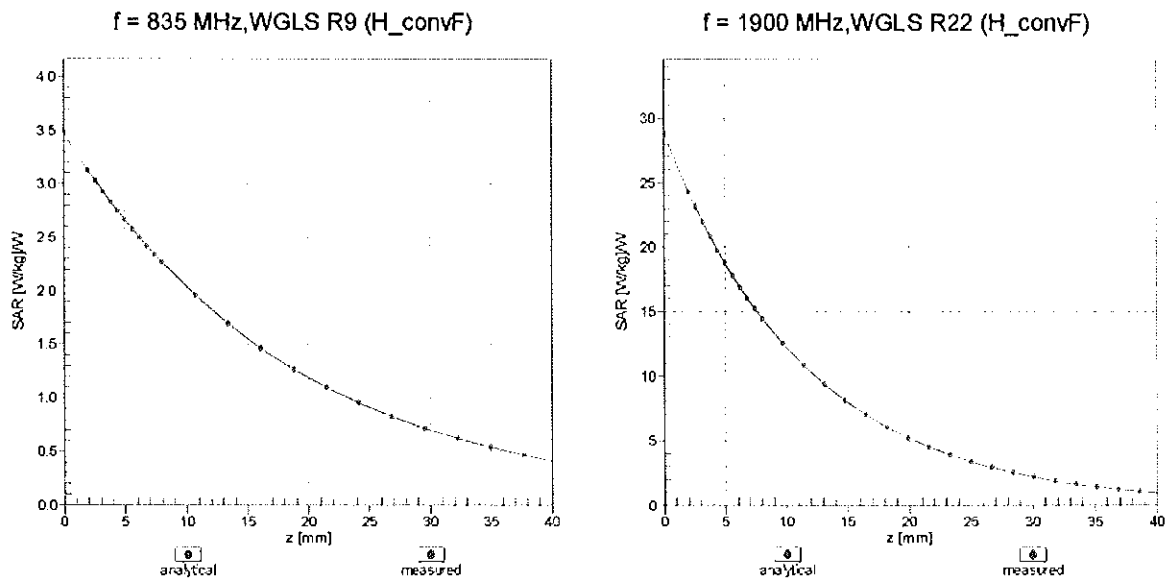
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

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



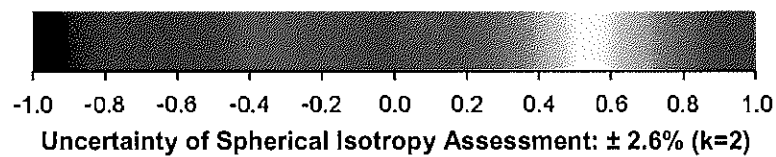
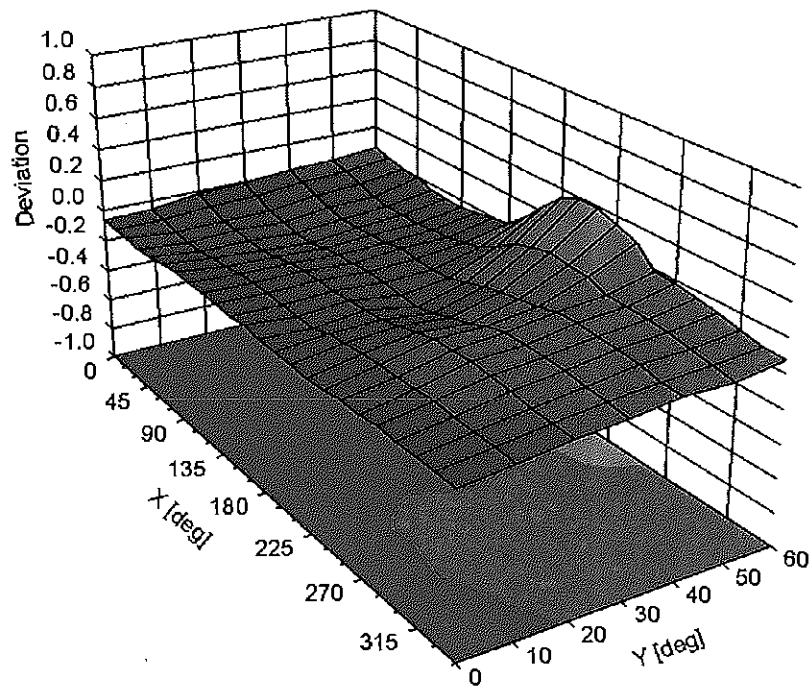
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3332

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 50         |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 10 mm      |
| Tip Diameter                                  | 4 mm       |
| Probe Tip to Sensor X Calibration Point       | 2 mm       |
| Probe Tip to Sensor Y Calibration Point       | 2 mm       |
| Probe Tip to Sensor Z Calibration Point       | 2 mm       |
| Recommended Measurement Distance from Surface | 3 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    | 192.0    | ± 3.5 %                          |
|               |                                               | Y | 0.00    | 0.00       | 1.00  |         | 194.3    |                                  |
|               |                                               | Z | 0.00    | 0.00       | 1.00  |         | 179.9    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 9.02    | 77.08      | 18.94 | 10.00   | 25.0     | ± 9.6 %                          |
|               |                                               | Y | 12.19   | 85.73      | 21.41 |         | 25.0     |                                  |
|               |                                               | Z | 23.02   | 95.31      | 23.86 |         | 25.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.60    | 76.05      | 19.77 | 0.00    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 1.08    | 68.15      | 15.73 |         | 150.0    |                                  |
|               |                                               | Z | 1.25    | 71.36      | 17.60 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.52    | 68.53      | 17.98 | 0.41    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 1.33    | 65.39      | 16.06 |         | 150.0    |                                  |
|               |                                               | Z | 1.37    | 66.35      | 16.79 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 5.37    | 67.71      | 17.82 | 1.46    | 150.0    | ± 9.6 %                          |
|               |                                               | Y | 5.07    | 67.50      | 17.57 |         | 150.0    |                                  |
|               |                                               | Z | 4.99    | 67.81      | 17.71 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 11.16   | 81.48      | 22.11 | 9.39    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 61.59   | 115.23     | 32.13 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 122.78     | 33.35 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 11.07   | 81.20      | 22.06 | 9.57    | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 43.11   | 109.07     | 30.52 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 122.63     | 33.33 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 12.88   | 85.34      | 22.06 | 6.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 120.15     | 31.36 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 120.25     | 30.99 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 19.49   | 99.22      | 36.41 | 12.57   | 50.0     | ± 9.6 %                          |
|               |                                               | Y | 15.67   | 100.74     | 38.44 |         | 50.0     |                                  |
|               |                                               | Z | 29.43   | 124.69     | 47.97 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 18.92   | 96.32      | 32.19 | 9.56    | 60.0     | ± 9.6 %                          |
|               |                                               | Y | 17.33   | 101.02     | 35.08 |         | 60.0     |                                  |
|               |                                               | Z | 24.89   | 113.23     | 39.81 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 24.19   | 95.70      | 24.33 | 4.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 119.30     | 30.03 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 120.36     | 30.17 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 115.36     | 28.49 | 3.55    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 119.83     | 29.45 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 122.10     | 30.18 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 16.27   | 93.78      | 30.32 | 7.80    | 80.0     | ± 9.6 %                          |
|               |                                               | Y | 11.67   | 92.24      | 30.90 |         | 80.0     |                                  |
|               |                                               | Z | 13.37   | 97.80      | 33.46 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 15.68   | 88.86      | 22.54 | 5.30    | 70.0     | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 118.49     | 29.99 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 118.88     | 29.80 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 116.01     | 27.12 | 1.88    | 100.0    | ± 9.6 %                          |
|               |                                               | Y | 100.00  | 121.13     | 28.42 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 126.03     | 30.32 |         | 100.0    |                                  |

|           |                                                     |   |        |        |        |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|--------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 119.38 | 27.36  | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 126.54 | 29.58  |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 136.16 | 33.43  |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 13.27  | 88.21  | 24.10  | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 20.91  | 99.02  | 27.13  |       | 70.0  |         |
|           |                                                     | Z | 58.05  | 115.59 | 31.27  |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 16.18  | 96.67  | 25.44  | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 10.83  | 91.57  | 22.94  |       | 100.0 |         |
|           |                                                     | Z | 52.78  | 113.06 | 28.24  |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 12.45  | 95.04  | 24.79  | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 5.49   | 83.70  | 20.10  |       | 100.0 |         |
|           |                                                     | Z | 18.62  | 100.06 | 24.56  |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 14.34  | 89.63  | 24.62  | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 26.79  | 103.24 | 28.41  |       | 70.0  |         |
|           |                                                     | Z | 95.10  | 123.67 | 33.30  |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 15.98  | 96.45  | 25.32  | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 9.62   | 89.98  | 22.43  |       | 100.0 |         |
|           |                                                     | Z | 37.04  | 108.35 | 27.08  |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 13.91  | 96.94  | 25.41  | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 5.69   | 84.50  | 20.47  |       | 100.0 |         |
|           |                                                     | Z | 19.52  | 101.18 | 25.01  |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 3.28   | 80.46  | 20.53  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.92   | 73.09  | 15.89  |       | 150.0 |         |
|           |                                                     | Z | 3.08   | 80.13  | 18.22  |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 11.60  | 82.51  | 21.10  | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 118.83 | 31.00  |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 118.47 | 30.39  |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.02   | 128.88 | 9.05   | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.00   | 96.92  | 0.26   |       | 150.0 |         |
|           |                                                     | Z | 0.02   | 60.00  | 140.78 |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 10.75  | 78.30  | 22.86  | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 15.61  | 90.30  | 26.65  |       | 25.0  |         |
|           |                                                     | Z | 32.75  | 104.57 | 30.45  |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 10.92  | 80.23  | 22.15  | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 20.87  | 96.36  | 27.22  |       | 40.0  |         |
|           |                                                     | Z | 64.62  | 115.72 | 32.06  |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 11.51  | 81.76  | 22.84  | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 15.28  | 90.93  | 25.77  |       | 50.0  |         |
|           |                                                     | Z | 25.94  | 101.11 | 28.65  |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 14.19  | 91.88  | 29.00  | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 8.68   | 86.53  | 28.09  |       | 100.0 |         |
|           |                                                     | Z | 9.12   | 89.51  | 29.70  |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 2.01   | 72.72  | 19.70  | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.51   | 67.62  | 17.16  |       | 110.0 |         |
|           |                                                     | Z | 1.56   | 68.78  | 17.99  |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 126.29 | 32.07  | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 132.71 | 34.39  |       | 110.0 |         |
|           |                                                     | Z | 100.00 | 137.07 | 36.21  |       | 110.0 |         |

|           |                                                |   |       |        |       |      |       |         |
|-----------|------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 36.66 | 112.50 | 30.92 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 11.07 | 98.15  | 27.76 |      | 110.0 |         |
|           |                                                | Z | 22.12 | 112.16 | 32.18 |      | 110.0 |         |
| 10062-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 5.03  | 67.33  | 17.05 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.77  | 67.19  | 16.82 |      | 100.0 |         |
|           |                                                | Z | 4.70  | 67.51  | 16.97 |      | 100.0 |         |
| 10063-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 5.09  | 67.56  | 17.23 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.81  | 67.36  | 16.96 |      | 100.0 |         |
|           |                                                | Z | 4.74  | 67.68  | 17.11 |      | 100.0 |         |
| 10064-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 5.47  | 67.93  | 17.49 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.10  | 67.63  | 17.20 |      | 100.0 |         |
|           |                                                | Z | 5.00  | 67.90  | 17.32 |      | 100.0 |         |
| 10065-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 5.40  | 68.08  | 17.70 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.02  | 67.68  | 17.39 |      | 100.0 |         |
|           |                                                | Z | 4.92  | 67.92  | 17.50 |      | 100.0 |         |
| 10066-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 5.49  | 68.31  | 17.98 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.08  | 67.82  | 17.62 |      | 100.0 |         |
|           |                                                | Z | 4.97  | 68.04  | 17.73 |      | 100.0 |         |
| 10067-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.84  | 68.47  | 18.45 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.42  | 68.13  | 18.14 |      | 100.0 |         |
|           |                                                | Z | 5.31  | 68.42  | 18.28 |      | 100.0 |         |
| 10068-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 6.07  | 69.08  | 18.91 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.53  | 68.32  | 18.44 |      | 100.0 |         |
|           |                                                | Z | 5.39  | 68.51  | 18.54 |      | 100.0 |         |
| 10069-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 6.13  | 68.90  | 19.06 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.61  | 68.37  | 18.66 |      | 100.0 |         |
|           |                                                | Z | 5.48  | 68.58  | 18.76 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 5.56  | 68.08  | 18.26 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.22  | 67.75  | 17.96 |      | 100.0 |         |
|           |                                                | Z | 5.14  | 68.03  | 18.10 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.71  | 68.87  | 18.66 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.28  | 68.28  | 18.29 |      | 100.0 |         |
|           |                                                | Z | 5.18  | 68.53  | 18.42 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.93  | 69.43  | 19.17 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.43  | 68.68  | 18.74 |      | 100.0 |         |
|           |                                                | Z | 5.32  | 68.95  | 18.89 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 6.04  | 69.75  | 19.56 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.49  | 68.80  | 18.99 |      | 100.0 |         |
|           |                                                | Z | 5.38  | 69.07  | 19.15 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 6.35  | 70.65  | 20.23 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.63  | 69.18  | 19.44 |      | 90.0  |         |
|           |                                                | Z | 5.49  | 69.37  | 19.56 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 6.37  | 70.50  | 20.38 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.68  | 69.10  | 19.63 |      | 90.0  |         |
|           |                                                | Z | 5.56  | 69.34  | 19.78 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 6.43  | 70.65  | 20.50 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.73  | 69.22  | 19.75 |      | 90.0  |         |
|           |                                                | Z | 5.61  | 69.48  | 19.91 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 1.62   | 75.66  | 18.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.87   | 66.71  | 12.69 |      | 150.0 |         |
|           |                                                     | Z | 1.13   | 71.02  | 14.45 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 3.53   | 66.20  | 10.93 | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 2.19   | 64.40  | 9.18  |      | 80.0  |         |
|           |                                                     | Z | 1.96   | 64.15  | 8.74  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 12.79  | 85.25  | 22.06 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 120.23 | 31.42 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 120.31 | 31.04 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 2.06   | 70.06  | 17.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.88   | 68.31  | 15.96 |      | 150.0 |         |
|           |                                                     | Z | 2.04   | 70.38  | 16.98 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 2.02   | 70.12  | 17.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.84   | 68.27  | 15.94 |      | 150.0 |         |
|           |                                                     | Z | 2.00   | 70.37  | 16.98 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 18.80  | 96.14  | 32.13 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 17.28  | 100.91 | 35.04 |      | 60.0  |         |
|           |                                                     | Z | 24.81  | 113.10 | 39.77 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.84   | 73.61  | 18.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.15   | 70.58  | 16.91 |      | 150.0 |         |
|           |                                                     | Z | 3.25   | 71.69  | 17.61 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.58   | 69.11  | 16.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.26   | 67.74  | 16.10 |      | 150.0 |         |
|           |                                                     | Z | 3.26   | 68.29  | 16.47 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.66   | 68.88  | 16.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.36   | 67.71  | 16.19 |      | 150.0 |         |
|           |                                                     | Z | 3.36   | 68.23  | 16.52 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 9.75   | 77.78  | 20.81 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.78   | 79.16  | 21.83 |      | 65.0  |         |
|           |                                                     | Z | 9.34   | 81.38  | 22.82 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 9.87   | 77.22  | 21.49 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.42   | 77.09  | 21.77 |      | 65.0  |         |
|           |                                                     | Z | 8.44   | 78.16  | 22.31 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 9.19   | 75.82  | 21.15 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.07   | 76.20  | 21.66 |      | 65.0  |         |
|           |                                                     | Z | 8.27   | 77.70  | 22.41 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 3.37   | 72.69  | 18.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.75   | 69.90  | 16.77 |      | 150.0 |         |
|           |                                                     | Z | 2.82   | 71.09  | 17.51 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 3.26   | 68.97  | 16.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.91   | 67.66  | 16.01 |      | 150.0 |         |
|           |                                                     | Z | 2.92   | 68.36  | 16.42 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.79   | 71.81  | 17.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.23   | 69.12  | 16.39 |      | 150.0 |         |
|           |                                                     | Z | 2.31   | 70.62  | 17.23 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.96   | 69.58  | 17.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.63   | 68.64  | 16.31 |      | 150.0 |         |
|           |                                                     | Z | 2.69   | 69.84  | 16.85 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.36 | 68.71 | 16.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.03 | 67.66 | 16.06 |      | 150.0 |         |
|           |                                                | Z | 3.04 | 68.35 | 16.45 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 3.10 | 69.46 | 17.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.78 | 68.78 | 16.44 |      | 150.0 |         |
|           |                                                | Z | 2.83 | 69.92 | 16.93 |      | 150.0 |         |
| 10114-CAB | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.34 | 67.65 | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.17 | 67.50 | 16.64 |      | 150.0 |         |
|           |                                                | Z | 5.08 | 67.64 | 16.74 |      | 150.0 |         |
| 10115-CAB | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.80 | 68.17 | 17.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.44 | 67.60 | 16.69 |      | 150.0 |         |
|           |                                                | Z | 5.33 | 67.71 | 16.77 |      | 150.0 |         |
| 10116-CAB | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.47 | 67.90 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.25 | 67.68 | 16.65 |      | 150.0 |         |
|           |                                                | Z | 5.17 | 67.85 | 16.77 |      | 150.0 |         |
| 10117-CAB | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.34 | 67.65 | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.12 | 67.32 | 16.56 |      | 150.0 |         |
|           |                                                | Z | 5.07 | 67.59 | 16.73 |      | 150.0 |         |
| 10118-CAB | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.79 | 68.04 | 16.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.52 | 67.82 | 16.81 |      | 150.0 |         |
|           |                                                | Z | 5.42 | 67.93 | 16.89 |      | 150.0 |         |
| 10119-CAB | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.44 | 67.84 | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.24 | 67.66 | 16.65 |      | 150.0 |         |
|           |                                                | Z | 5.17 | 67.84 | 16.77 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.72 | 68.86 | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.39 | 67.72 | 16.10 |      | 150.0 |         |
|           |                                                | Z | 3.39 | 68.26 | 16.45 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.82 | 68.79 | 16.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.51 | 67.83 | 16.27 |      | 150.0 |         |
|           |                                                | Z | 3.51 | 68.36 | 16.60 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.57 | 71.96 | 17.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.01 | 69.21 | 16.02 |      | 150.0 |         |
|           |                                                | Z | 2.13 | 71.18 | 16.95 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.89 | 70.53 | 17.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.49 | 69.45 | 15.95 |      | 150.0 |         |
|           |                                                | Z | 2.62 | 71.11 | 16.52 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.69 | 68.52 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.23 | 66.92 | 14.20 |      | 150.0 |         |
|           |                                                | Z | 2.23 | 67.85 | 14.42 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 2.07 | 72.06 | 16.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.17 | 64.90 | 11.31 |      | 150.0 |         |
|           |                                                | Z | 1.08 | 64.84 | 10.72 |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 4.64 | 77.66 | 18.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.89 | 66.33 | 11.57 |      | 150.0 |         |
|           |                                                | Z | 1.28 | 62.78 | 8.70  |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 5.86 | 81.36 | 20.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.26 | 68.50 | 12.73 |      | 150.0 |         |
|           |                                                | Z | 1.39 | 63.59 | 9.24  |      | 150.0 |         |

|           |                                            |   |       |       |       |      |       |         |
|-----------|--------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 3.27  | 69.03 | 16.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.92  | 67.72 | 16.06 |      | 150.0 |         |
|           |                                            | Z | 2.93  | 68.43 | 16.47 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.37  | 68.76 | 16.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.04  | 67.71 | 16.11 |      | 150.0 |         |
|           |                                            | Z | 3.05  | 68.41 | 16.50 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 9.88  | 78.98 | 21.39 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 9.54  | 82.00 | 22.98 |      | 65.0  |         |
|           |                                            | Z | 10.52 | 85.01 | 24.21 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 9.59  | 77.49 | 21.44 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.05  | 77.33 | 21.53 |      | 65.0  |         |
|           |                                            | Z | 8.15  | 78.63 | 22.11 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 9.88  | 78.01 | 21.96 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.51  | 78.32 | 22.28 |      | 65.0  |         |
|           |                                            | Z | 8.64  | 79.68 | 22.87 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.88  | 72.43 | 18.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.28  | 69.53 | 16.65 |      | 150.0 |         |
|           |                                            | Z | 2.36  | 71.01 | 17.47 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.96  | 69.57 | 17.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.63  | 68.66 | 16.33 |      | 150.0 |         |
|           |                                            | Z | 2.70  | 69.87 | 16.88 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 2.50  | 72.75 | 18.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.86  | 69.32 | 15.77 |      | 150.0 |         |
|           |                                            | Z | 2.00  | 71.53 | 16.72 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.58  | 69.56 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.07  | 67.52 | 14.21 |      | 150.0 |         |
|           |                                            | Z | 2.11  | 68.66 | 14.46 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 3.11  | 69.51 | 17.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.79  | 68.85 | 16.49 |      | 150.0 |         |
|           |                                            | Z | 2.84  | 70.00 | 16.99 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.70  | 69.94 | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.17  | 67.94 | 14.47 |      | 150.0 |         |
|           |                                            | Z | 2.21  | 69.05 | 14.68 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 3.17  | 70.70 | 17.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.80  | 69.22 | 16.63 |      | 150.0 |         |
|           |                                            | Z | 2.84  | 70.27 | 17.24 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 3.25  | 68.62 | 16.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.93  | 67.68 | 16.03 |      | 150.0 |         |
|           |                                            | Z | 2.94  | 68.43 | 16.42 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.34  | 68.54 | 16.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.04  | 67.85 | 16.15 |      | 150.0 |         |
|           |                                            | Z | 3.05  | 68.62 | 16.54 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 4.29  | 71.19 | 20.11 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 69.86 | 19.45 |      | 150.0 |         |
|           |                                            | Z | 3.34  | 69.55 | 19.26 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 5.65  | 74.34 | 20.64 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.34  | 72.64 | 19.86 |      | 150.0 |         |
|           |                                            | Z | 3.97  | 72.28 | 19.65 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 6.08  | 75.90  | 21.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.83  | 75.01  | 21.26 |      | 150.0 |         |
|           |                                            | Z | 4.38  | 74.50  | 20.98 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 4.41  | 74.54  | 21.42 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.96  | 68.83  | 19.02 |      | 150.0 |         |
|           |                                            | Z | 2.72  | 67.99  | 18.57 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 6.70  | 80.82  | 23.44 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.91  | 74.17  | 21.18 |      | 150.0 |         |
|           |                                            | Z | 3.42  | 72.70  | 20.49 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 5.50  | 76.54  | 20.93 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.29  | 70.45  | 18.57 |      | 150.0 |         |
|           |                                            | Z | 2.94  | 69.58  | 18.14 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 25.76 | 101.07 | 30.32 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 18.45 | 102.75 | 32.10 |      | 65.0  |         |
|           |                                            | Z | 20.86 | 107.70 | 33.85 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 19.21 | 92.24  | 26.33 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 26.29 | 105.14 | 31.12 |      | 65.0  |         |
|           |                                            | Z | 28.49 | 108.55 | 32.12 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 17.46 | 89.68  | 25.13 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 21.35 | 100.13 | 29.12 |      | 65.0  |         |
|           |                                            | Z | 22.92 | 103.28 | 30.05 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 4.34  | 74.12  | 21.15 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.93  | 68.55  | 18.79 |      | 150.0 |         |
|           |                                            | Z | 2.70  | 67.77  | 18.36 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 6.71  | 80.84  | 23.45 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.92  | 74.20  | 21.19 |      | 150.0 |         |
|           |                                            | Z | 3.42  | 72.72  | 20.50 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 4.38  | 74.32  | 21.26 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.95  | 68.69  | 18.87 |      | 150.0 |         |
|           |                                            | Z | 2.71  | 67.87  | 18.43 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 6.59  | 80.50  | 23.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.89  | 74.02  | 21.09 |      | 150.0 |         |
|           |                                            | Z | 3.41  | 72.61  | 20.43 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 6.03  | 78.45  | 22.01 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.58  | 72.24  | 19.76 |      | 150.0 |         |
|           |                                            | Z | 3.16  | 71.11  | 19.23 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 5.47  | 76.42  | 20.86 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.28  | 70.40  | 18.53 |      | 150.0 |         |
|           |                                            | Z | 2.94  | 69.55  | 18.12 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 4.38  | 74.30  | 21.25 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.95  | 68.67  | 18.87 |      | 150.0 |         |
|           |                                            | Z | 2.71  | 67.86  | 18.43 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 6.58  | 80.48  | 23.29 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.88  | 74.00  | 21.08 |      | 150.0 |         |
|           |                                            | Z | 3.40  | 72.59  | 20.42 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 5.46  | 76.40  | 20.85 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.28  | 70.38  | 18.52 |      | 150.0 |         |
|           |                                            | Z | 2.93  | 69.53  | 18.11 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 4.39 | 74.34 | 21.27 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.96 | 68.71 | 18.89 |      | 150.0 |         |
|           |                                               | Z | 2.72 | 67.89 | 18.44 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 6.61 | 80.55 | 23.32 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.90 | 74.06 | 21.11 |      | 150.0 |         |
|           |                                               | Z | 3.42 | 72.64 | 20.45 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 5.49 | 76.46 | 20.88 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.29 | 70.44 | 18.55 |      | 150.0 |         |
|           |                                               | Z | 2.95 | 69.59 | 18.14 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 4.40 | 74.38 | 21.31 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 2.97 | 68.77 | 18.95 |      | 150.0 |         |
|           |                                               | Z | 2.73 | 67.95 | 18.51 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 6.86 | 81.30 | 23.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.01 | 74.64 | 21.46 |      | 150.0 |         |
|           |                                               | Z | 3.49 | 73.09 | 20.74 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 5.63 | 76.95 | 21.16 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.36 | 70.82 | 18.81 |      | 150.0 |         |
|           |                                               | Z | 3.00 | 69.90 | 18.37 |      | 150.0 |         |
| 10193-CAB | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.76 | 66.98 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.53 | 66.89 | 16.29 |      | 150.0 |         |
|           |                                               | Z | 4.48 | 67.27 | 16.46 |      | 150.0 |         |
| 10194-CAB | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.98 | 67.40 | 16.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.70 | 67.19 | 16.42 |      | 150.0 |         |
|           |                                               | Z | 4.63 | 67.53 | 16.59 |      | 150.0 |         |
| 10195-CAB | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 5.02 | 67.38 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.74 | 67.22 | 16.44 |      | 150.0 |         |
|           |                                               | Z | 4.67 | 67.55 | 16.61 |      | 150.0 |         |
| 10196-CAB | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.79 | 67.12 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.53 | 66.94 | 16.30 |      | 150.0 |         |
|           |                                               | Z | 4.47 | 67.29 | 16.46 |      | 150.0 |         |
| 10197-CAB | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 5.00 | 67.41 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.71 | 67.21 | 16.43 |      | 150.0 |         |
|           |                                               | Z | 4.64 | 67.54 | 16.60 |      | 150.0 |         |
| 10198-CAB | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 5.02 | 67.39 | 16.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.74 | 67.23 | 16.45 |      | 150.0 |         |
|           |                                               | Z | 4.67 | 67.55 | 16.61 |      | 150.0 |         |
| 10219-CAB | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.75 | 67.15 | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.48 | 66.96 | 16.27 |      | 150.0 |         |
|           |                                               | Z | 4.43 | 67.33 | 16.43 |      | 150.0 |         |
| 10220-CAB | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 5.00 | 67.42 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.70 | 67.17 | 16.42 |      | 150.0 |         |
|           |                                               | Z | 4.63 | 67.50 | 16.58 |      | 150.0 |         |
| 10221-CAB | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 5.03 | 67.33 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.75 | 67.16 | 16.44 |      | 150.0 |         |
|           |                                               | Z | 4.68 | 67.49 | 16.60 |      | 150.0 |         |
| 10222-CAB | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.32 | 67.70 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.10 | 67.32 | 16.56 |      | 150.0 |         |
|           |                                               | Z | 5.04 | 67.57 | 16.71 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAB | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.69  | 67.90  | 16.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.41  | 67.62  | 16.73 |      | 150.0 |         |
|           |                                           | Z | 5.32  | 67.79  | 16.83 |      | 150.0 |         |
| 10224-CAB | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.40  | 67.86  | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.14  | 67.44  | 16.54 |      | 150.0 |         |
|           |                                           | Z | 5.08  | 67.68  | 16.69 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 3.04  | 66.91  | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.80  | 66.45  | 15.40 |      | 150.0 |         |
|           |                                           | Z | 2.79  | 67.13  | 15.62 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 19.62 | 92.68  | 26.54 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 28.14 | 106.53 | 31.60 |      | 65.0  |         |
|           |                                           | Z | 30.74 | 110.09 | 32.63 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 17.31 | 89.65  | 25.20 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 25.62 | 103.45 | 30.17 |      | 65.0  |         |
|           |                                           | Z | 27.71 | 106.63 | 31.05 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 25.12 | 101.14 | 30.46 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 22.85 | 107.40 | 33.58 |      | 65.0  |         |
|           |                                           | Z | 23.56 | 110.42 | 34.69 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 19.21 | 92.22  | 26.33 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 26.37 | 105.18 | 31.14 |      | 65.0  |         |
|           |                                           | Z | 28.56 | 108.58 | 32.13 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 16.99 | 89.27  | 25.02 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 24.08 | 102.25 | 29.76 |      | 65.0  |         |
|           |                                           | Z | 25.76 | 105.25 | 30.60 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 24.47 | 100.57 | 30.23 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.54 | 106.10 | 33.13 |      | 65.0  |         |
|           |                                           | Z | 22.10 | 109.02 | 34.22 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 19.21 | 92.23  | 26.33 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 26.35 | 105.17 | 31.13 |      | 65.0  |         |
|           |                                           | Z | 28.56 | 108.59 | 32.14 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 16.99 | 89.29  | 25.03 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 24.05 | 102.24 | 29.76 |      | 65.0  |         |
|           |                                           | Z | 25.73 | 105.25 | 30.60 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 23.75 | 99.87  | 29.94 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 20.44 | 104.88 | 32.66 |      | 65.0  |         |
|           |                                           | Z | 20.94 | 107.73 | 33.73 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 19.23 | 92.26  | 26.34 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 26.43 | 105.24 | 31.16 |      | 65.0  |         |
|           |                                           | Z | 28.68 | 108.68 | 32.16 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 17.05 | 89.34  | 25.04 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 24.28 | 102.38 | 29.79 |      | 65.0  |         |
|           |                                           | Z | 26.05 | 105.43 | 30.64 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 24.65 | 100.72 | 30.28 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 21.67 | 106.26 | 33.17 |      | 65.0  |         |
|           |                                           | Z | 22.28 | 109.22 | 34.28 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 19.21 | 92.24  | 26.33 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 26.34 | 105.18 | 31.13 |      | 65.0  |         |
|           |                                           | Z | 28.55 | 108.60 | 32.14 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 17.00 | 89.31  | 25.04 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 24.00 | 102.22 | 29.75 |      | 65.0 |         |
|           |                                            | Z | 25.68 | 105.23 | 30.60 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 24.60 | 100.69 | 30.26 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 21.61 | 106.21 | 33.16 |      | 65.0 |         |
|           |                                            | Z | 22.24 | 109.18 | 34.27 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 14.83 | 87.15  | 27.43 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 11.87 | 87.25  | 27.69 |      | 65.0 |         |
|           |                                            | Z | 12.27 | 89.81  | 28.71 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 14.03 | 85.86  | 26.85 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 11.07 | 85.73  | 27.03 |      | 65.0 |         |
|           |                                            | Z | 11.88 | 89.15  | 28.39 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 12.50 | 85.61  | 27.61 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.91  | 82.53  | 26.67 |      | 65.0 |         |
|           |                                            | Z | 9.40  | 85.62  | 28.06 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 10.84 | 80.28  | 21.46 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.60  | 79.06  | 19.82 |      | 65.0 |         |
|           |                                            | Z | 7.30  | 76.79  | 18.14 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 10.80 | 80.00  | 21.33 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.32  | 78.30  | 19.47 |      | 65.0 |         |
|           |                                            | Z | 7.01  | 75.95  | 17.75 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 10.19 | 81.67  | 21.72 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.19  | 82.92  | 21.40 |      | 65.0 |         |
|           |                                            | Z | 10.28 | 85.26  | 21.82 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 9.24  | 78.33  | 20.99 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.42  | 77.41  | 19.87 |      | 65.0 |         |
|           |                                            | Z | 7.44  | 78.18  | 19.81 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 9.29  | 78.02  | 20.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.28  | 76.69  | 19.57 |      | 65.0 |         |
|           |                                            | Z | 7.17  | 77.21  | 19.40 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 10.52 | 82.18  | 22.29 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.94 | 86.37  | 23.51 |      | 65.0 |         |
|           |                                            | Z | 13.59 | 90.89  | 24.82 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 9.84  | 79.38  | 22.27 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.59  | 80.24  | 22.59 |      | 65.0 |         |
|           |                                            | Z | 8.91  | 81.95  | 23.17 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 9.48  | 77.77  | 21.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.96  | 77.76  | 21.28 |      | 65.0 |         |
|           |                                            | Z | 8.06  | 79.03  | 21.69 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 10.35 | 81.23  | 22.32 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.67 | 85.75  | 24.25 |      | 65.0 |         |
|           |                                            | Z | 12.80 | 90.26  | 25.85 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 9.41  | 77.10  | 21.37 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.89  | 76.83  | 21.30 |      | 65.0 |         |
|           |                                            | Z | 7.98  | 78.11  | 21.82 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 9.73  | 77.64  | 21.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.31  | 77.74  | 21.96 |      | 65.0 |         |
|           |                                            | Z | 8.42  | 79.03  | 22.48 |      | 65.0 |         |

|           |                                             |   |       |       |       |      |      |         |
|-----------|---------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 9.76  | 78.98 | 21.63 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.21  | 81.58 | 22.99 |      | 65.0 |         |
|           |                                             | Z | 10.10 | 84.50 | 24.17 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 10.36 | 79.33 | 20.55 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.89  | 75.10 | 17.29 |      | 65.0 |         |
|           |                                             | Z | 5.38  | 71.84 | 15.02 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 10.33 | 78.98 | 20.36 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.60  | 74.15 | 16.79 |      | 65.0 |         |
|           |                                             | Z | 5.14  | 70.90 | 14.50 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 9.84  | 80.89 | 21.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.93  | 77.80 | 18.67 |      | 65.0 |         |
|           |                                             | Z | 6.67  | 77.68 | 18.06 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 9.48  | 78.65 | 21.42 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.89  | 78.48 | 20.85 |      | 65.0 |         |
|           |                                             | Z | 8.05  | 79.67 | 21.05 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 9.52  | 78.48 | 21.39 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.84  | 78.08 | 20.70 |      | 65.0 |         |
|           |                                             | Z | 7.93  | 79.11 | 20.83 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 10.28 | 81.56 | 22.27 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 10.28 | 85.25 | 23.51 |      | 65.0 |         |
|           |                                             | Z | 12.40 | 89.51 | 24.85 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 9.83  | 79.35 | 22.25 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.56  | 80.18 | 22.55 |      | 65.0 |         |
|           |                                             | Z | 8.88  | 81.87 | 23.12 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 9.48  | 77.78 | 21.46 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.94  | 77.74 | 21.28 |      | 65.0 |         |
|           |                                             | Z | 8.05  | 79.01 | 21.68 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 10.32 | 81.15 | 22.28 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 10.57 | 85.55 | 24.15 |      | 65.0 |         |
|           |                                             | Z | 12.63 | 90.00 | 25.74 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 9.59  | 77.50 | 21.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.04  | 77.33 | 21.54 |      | 65.0 |         |
|           |                                             | Z | 8.14  | 78.63 | 22.11 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 9.89  | 78.01 | 21.96 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.50  | 78.31 | 22.27 |      | 65.0 |         |
|           |                                             | Z | 8.64  | 79.67 | 22.86 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 9.88  | 78.96 | 21.38 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.52  | 81.96 | 22.96 |      | 65.0 |         |
|           |                                             | Z | 10.50 | 84.95 | 24.19 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 9.95  | 76.96 | 21.54 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.52  | 76.88 | 21.79 |      | 65.0 |         |
|           |                                             | Z | 8.53  | 77.92 | 22.30 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 9.89  | 76.68 | 21.52 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.46  | 76.46 | 21.67 |      | 65.0 |         |
|           |                                             | Z | 8.45  | 77.44 | 22.15 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 9.66  | 77.24 | 20.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.81  | 78.78 | 21.90 |      | 65.0 |         |
|           |                                             | Z | 9.16  | 80.58 | 22.73 |      | 65.0 |         |

|           |                                                                    |   |       |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.74  | 67.26  | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.61  | 66.92  | 15.38 |      | 150.0 |         |
|           |                                                                    | Z | 2.66  | 67.94  | 15.80 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 2.05  | 72.21  | 18.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.65  | 68.50  | 15.87 |      | 150.0 |         |
|           |                                                                    | Z | 1.80  | 70.74  | 17.08 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 8.03  | 72.61  | 16.76 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.31  | 69.07  | 13.45 |      | 50.0  |         |
|           |                                                                    | Z | 4.52  | 67.70  | 12.08 |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 10.53 | 79.27  | 21.29 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 8.21  | 77.64  | 19.35 |      | 50.0  |         |
|           |                                                                    | Z | 7.62  | 76.93  | 18.36 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 10.71 | 79.48  | 21.37 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 8.29  | 77.74  | 19.41 |      | 50.0  |         |
|           |                                                                    | Z | 7.68  | 77.01  | 18.42 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 2.46  | 75.92  | 18.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.45  | 69.17  | 13.90 |      | 150.0 |         |
|           |                                                                    | Z | 1.74  | 72.52  | 15.01 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 1.54  | 75.02  | 18.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.85  | 66.46  | 12.55 |      | 150.0 |         |
|           |                                                                    | Z | 1.09  | 70.54  | 14.22 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 2.85  | 86.00  | 22.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.20  | 72.00  | 15.52 |      | 150.0 |         |
|           |                                                                    | Z | 3.37  | 86.48  | 20.58 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 6.08  | 98.98  | 27.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.38  | 81.80  | 19.81 |      | 150.0 |         |
|           |                                                                    | Z | 91.77 | 132.75 | 32.89 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 11.42 | 82.00  | 23.75 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 13.54 | 88.04  | 25.23 |      | 50.0  |         |
|           |                                                                    | Z | 20.14 | 95.71  | 27.34 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 3.39  | 72.81  | 18.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.76  | 70.00  | 16.84 |      | 150.0 |         |
|           |                                                                    | Z | 2.84  | 71.20  | 17.58 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 2.33  | 72.89  | 17.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.54  | 67.89  | 13.96 |      | 150.0 |         |
|           |                                                                    | Z | 1.61  | 69.51  | 14.40 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 4.61  | 76.96  | 19.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.70  | 70.48  | 14.61 |      | 150.0 |         |
|           |                                                                    | Z | 1.96  | 66.96  | 12.10 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 3.49  | 71.59  | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.91  | 65.24  | 11.36 |      | 150.0 |         |
|           |                                                                    | Z | 1.47  | 63.13  | 9.40  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 6.59  | 70.34  | 20.04 | 4.17 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 5.68  | 68.74  | 18.85 |      | 80.0  |         |
|           |                                                                    | Z | 5.70  | 69.67  | 19.26 |      | 80.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 7.28  | 71.73  | 21.22 | 4.96 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 6.10  | 69.04  | 19.43 |      | 80.0  |         |
|           |                                                                    | Z | 6.04  | 69.77  | 19.77 |      | 80.0  |         |

|           |                                                                     |   |       |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 7.35  | 72.51 | 21.62 | 4.96  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.94  | 69.06 | 19.41 |       | 80.0  |         |
|           |                                                                     | Z | 5.89  | 69.82 | 19.76 |       | 80.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 6.69  | 70.97 | 20.39 | 4.17  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.59  | 68.42 | 18.66 |       | 80.0  |         |
|           |                                                                     | Z | 5.56  | 69.20 | 19.00 |       | 80.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 14.75 | 90.64 | 29.58 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 10.18 | 84.38 | 26.41 |       | 50.0  |         |
|           |                                                                     | Z | 10.30 | 85.54 | 26.72 |       | 50.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 9.44  | 79.58 | 25.56 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 7.33  | 75.98 | 23.40 |       | 50.0  |         |
|           |                                                                     | Z | 6.44  | 73.04 | 21.64 |       | 50.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 10.22 | 81.50 | 26.08 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 7.67  | 77.32 | 23.80 |       | 50.0  |         |
|           |                                                                     | Z | 7.49  | 77.77 | 23.93 |       | 50.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 10.67 | 82.66 | 26.55 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 7.93  | 78.29 | 24.23 |       | 50.0  |         |
|           |                                                                     | Z | 7.77  | 78.85 | 24.42 |       | 50.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 9.59  | 79.83 | 25.67 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 7.43  | 76.26 | 23.57 |       | 50.0  |         |
|           |                                                                     | Z | 6.50  | 73.23 | 21.79 |       | 50.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 9.69  | 80.24 | 25.70 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 7.48  | 76.59 | 23.59 |       | 50.0  |         |
|           |                                                                     | Z | 7.35  | 77.19 | 23.79 |       | 50.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.76  | 71.88 | 17.62 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.12  | 69.22 | 16.46 |       | 150.0 |         |
|           |                                                                     | Z | 3.20  | 70.27 | 17.11 |       | 150.0 |         |
| 10313-AAA | IDEN 1:3                                                            | X | 8.04  | 75.55 | 17.71 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 8.89  | 81.65 | 20.17 |       | 70.0  |         |
|           |                                                                     | Z | 12.54 | 87.83 | 22.26 |       | 70.0  |         |
| 10314-AAA | IDEN 1:6                                                            | X | 10.06 | 79.94 | 21.38 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 12.66 | 89.89 | 25.48 |       | 30.0  |         |
|           |                                                                     | Z | 20.06 | 99.62 | 28.65 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.30  | 67.68 | 17.69 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.18  | 64.90 | 15.80 |       | 150.0 |         |
|           |                                                                     | Z | 1.23  | 65.94 | 16.59 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.90  | 67.26 | 16.78 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.64  | 67.10 | 16.54 |       | 150.0 |         |
|           |                                                                     | Z | 4.58  | 67.43 | 16.69 |       | 150.0 |         |
| 10317-AAB | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.90  | 67.26 | 16.78 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.64  | 67.10 | 16.54 |       | 150.0 |         |
|           |                                                                     | Z | 4.58  | 67.43 | 16.69 |       | 150.0 |         |
| 10400-AAC | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 5.01  | 67.47 | 16.66 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.68  | 67.24 | 16.42 |       | 150.0 |         |
|           |                                                                     | Z | 4.61  | 67.58 | 16.60 |       | 150.0 |         |
| 10401-AAC | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.58  | 67.43 | 16.66 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.46  | 67.62 | 16.70 |       | 150.0 |         |
|           |                                                                     | Z | 5.29  | 67.47 | 16.64 |       | 150.0 |         |

|           |                                                                                |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAC | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                            | X | 5.90   | 68.07  | 16.80 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.66   | 67.67  | 16.59 |      | 150.0 |         |
|           |                                                                                | Z | 5.60   | 67.87  | 16.71 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                     | X | 2.46   | 75.92  | 18.53 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.45   | 69.17  | 13.90 |      | 115.0 |         |
|           |                                                                                | Z | 1.74   | 72.52  | 15.01 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                     | X | 2.46   | 75.92  | 18.53 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.45   | 69.17  | 13.90 |      | 115.0 |         |
|           |                                                                                | Z | 1.74   | 72.52  | 15.01 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                           | X | 38.96  | 111.40 | 30.01 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                | Y | 96.63  | 125.46 | 32.24 |      | 100.0 |         |
|           |                                                                                | Z | 100.00 | 123.89 | 30.87 |      | 100.0 |         |
| 10410-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                 | X | 79.33  | 113.95 | 29.40 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                | Y | 100.00 | 123.80 | 32.02 |      | 80.0  |         |
|           |                                                                                | Z | 100.00 | 124.20 | 31.74 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                      | X | 1.01   | 64.64  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 1.03   | 63.36  | 14.90 |      | 150.0 |         |
|           |                                                                                | Z | 1.08   | 64.37  | 15.69 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                  | X | 4.76   | 67.00  | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.53   | 66.92  | 16.37 |      | 150.0 |         |
|           |                                                                                | Z | 4.48   | 67.28  | 16.53 |      | 150.0 |         |
| 10417-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                      | X | 4.76   | 67.00  | 16.58 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.53   | 66.92  | 16.37 |      | 150.0 |         |
|           |                                                                                | Z | 4.48   | 67.28  | 16.53 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)  | X | 4.74   | 67.14  | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.53   | 67.10  | 16.40 |      | 150.0 |         |
|           |                                                                                | Z | 4.48   | 67.49  | 16.59 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble) | X | 4.77   | 67.10  | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.55   | 67.04  | 16.39 |      | 150.0 |         |
|           |                                                                                | Z | 4.49   | 67.42  | 16.58 |      | 150.0 |         |
| 10422-AAA | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                   | X | 4.90   | 67.10  | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.66   | 67.03  | 16.41 |      | 150.0 |         |
|           |                                                                                | Z | 4.60   | 67.38  | 16.58 |      | 150.0 |         |
| 10423-AAA | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                | X | 5.14   | 67.54  | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.81   | 67.33  | 16.51 |      | 150.0 |         |
|           |                                                                                | Z | 4.74   | 67.65  | 16.67 |      | 150.0 |         |
| 10424-AAA | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                | X | 5.04   | 67.47  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.74   | 67.28  | 16.49 |      | 150.0 |         |
|           |                                                                                | Z | 4.66   | 67.61  | 16.65 |      | 150.0 |         |
| 10425-AAA | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                    | X | 5.61   | 67.86  | 16.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.36   | 67.59  | 16.69 |      | 150.0 |         |
|           |                                                                                | Z | 5.29   | 67.80  | 16.81 |      | 150.0 |         |
| 10426-AAA | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                  | X | 5.62   | 67.87  | 16.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.40   | 67.74  | 16.76 |      | 150.0 |         |
|           |                                                                                | Z | 5.31   | 67.91  | 16.86 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAA | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.65   | 67.92  | 16.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.39   | 67.63  | 16.70 |      | 150.0 |         |
|           |                                                                | Z | 5.28   | 67.70  | 16.75 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.50   | 70.33  | 18.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.28   | 71.46  | 18.38 |      | 150.0 |         |
|           |                                                                | Z | 4.28   | 72.32  | 18.56 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.56   | 67.66  | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.19   | 67.51  | 16.33 |      | 150.0 |         |
|           |                                                                | Z | 4.12   | 67.97  | 16.50 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.83   | 67.55  | 16.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.50   | 67.35  | 16.43 |      | 150.0 |         |
|           |                                                                | Z | 4.43   | 67.74  | 16.61 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 5.06   | 67.54  | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.75   | 67.32  | 16.51 |      | 150.0 |         |
|           |                                                                | Z | 4.68   | 67.64  | 16.67 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.58   | 70.97  | 18.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.39   | 72.38  | 18.32 |      | 150.0 |         |
|           |                                                                | Z | 4.42   | 73.36  | 18.48 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 73.07  | 112.66 | 29.06 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 123.60 | 31.93 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 123.98 | 31.64 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.91   | 67.87  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.47   | 67.50  | 15.53 |      | 150.0 |         |
|           |                                                                | Z | 3.41   | 68.08  | 15.62 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.36   | 67.43  | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.04   | 67.29  | 16.20 |      | 150.0 |         |
|           |                                                                | Z | 3.99   | 67.77  | 16.38 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.59   | 67.37  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.32   | 67.18  | 16.33 |      | 150.0 |         |
|           |                                                                | Z | 4.27   | 67.58  | 16.51 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.75   | 67.29  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.52   | 67.08  | 16.36 |      | 150.0 |         |
|           |                                                                | Z | 4.47   | 67.43  | 16.54 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.88   | 68.25  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.34   | 67.60  | 15.06 |      | 150.0 |         |
|           |                                                                | Z | 3.25   | 68.08  | 15.03 |      | 150.0 |         |
| 10456-AAA | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.45   | 68.48  | 17.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.28   | 68.20  | 16.88 |      | 150.0 |         |
|           |                                                                | Z | 6.24   | 68.43  | 17.01 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.87   | 65.68  | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.81   | 65.57  | 16.07 |      | 150.0 |         |
|           |                                                                | Z | 3.81   | 65.98  | 16.26 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.63   | 67.17  | 15.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.13   | 66.82  | 14.32 |      | 150.0 |         |
|           |                                                                | Z | 2.97   | 66.93  | 13.99 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.79   | 65.36  | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.24   | 65.27  | 15.46 |      | 150.0 |         |
|           |                                                                | Z | 4.13   | 65.72  | 15.38 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.54   | 79.74  | 21.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.95   | 69.06  | 16.64 |      | 150.0 |         |
|           |                                                                   | Z | 1.16   | 73.20  | 19.00 |      | 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 | 118.00 | 30.59 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 127.27 | 33.69 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 128.13 | 33.61 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 108.76 | 26.18 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.69 | 26.26 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 109.78 | 24.92 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 61.06  | 101.21 | 23.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 108.45 | 24.70 |      | 80.0  |         |
|           |                                                                   | Z | 9.38   | 82.48  | 17.38 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 116.66 | 29.84 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 125.35 | 32.64 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 125.94 | 32.43 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 108.47 | 26.02 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.17 | 26.01 |      | 80.0  |         |
|           |                                                                   | Z | 44.16  | 100.58 | 22.73 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 42.58  | 96.75  | 22.75 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 42.99  | 98.93  | 22.41 |      | 80.0  |         |
|           |                                                                   | Z | 5.89   | 77.61  | 15.84 |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 116.79 | 29.90 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 125.60 | 32.75 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 126.22 | 32.56 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 108.56 | 26.07 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.35 | 26.09 |      | 80.0  |         |
|           |                                                                   | Z | 61.74  | 104.33 | 23.64 |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 43.83  | 97.08  | 22.83 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 46.06  | 99.70  | 22.59 |      | 80.0  |         |
|           |                                                                   | Z | 6.04   | 77.89  | 15.93 |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 116.81 | 29.90 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 125.63 | 32.76 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 126.25 | 32.56 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 108.53 | 26.05 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.31 | 26.07 |      | 80.0  |         |
|           |                                                                   | Z | 61.64  | 104.26 | 23.61 |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 44.10  | 97.14  | 22.84 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 46.39  | 99.73  | 22.59 |      | 80.0  |         |
|           |                                                                   | Z | 6.02   | 77.83  | 15.90 |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 116.79 | 29.89 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 125.60 | 32.74 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 126.23 | 32.55 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 108.54 | 26.05 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 111.32 | 26.07 |      | 80.0  |         |
|           |                                                                   | Z | 60.20  | 104.02 | 23.55 |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 43.66  | 97.03  | 22.81 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 44.87  | 99.39  | 22.51 |      | 80.0  |         |
|           |                                                                   | Z | 5.94   | 77.72  | 15.87 |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 108.43 | 26.00 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 100.00 | 111.14 | 25.99 |      | 80.0 |         |
|           |                                                                     | Z | 48.11  | 101.47 | 22.92 |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 43.04  | 96.84  | 22.76 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 43.24  | 98.94  | 22.39 |      | 80.0 |         |
|           |                                                                     | Z | 5.86   | 77.55  | 15.80 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 18.43  | 95.26  | 26.62 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 47.63  | 113.17 | 30.89 |      | 80.0 |         |
|           |                                                                     | Z | 79.42  | 120.84 | 32.18 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 15.38  | 87.90  | 23.16 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 35.80  | 101.51 | 25.84 |      | 80.0 |         |
|           |                                                                     | Z | 33.10  | 99.76  | 24.57 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 14.20  | 86.14  | 22.35 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 23.64  | 94.76  | 23.60 |      | 80.0 |         |
|           |                                                                     | Z | 17.83  | 90.68  | 21.64 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 11.00  | 86.13  | 22.59 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.54   | 80.66  | 19.81 |      | 80.0 |         |
|           |                                                                     | Z | 10.00  | 86.91  | 21.46 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 11.81  | 84.53  | 22.26 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.59   | 82.56  | 20.08 |      | 80.0 |         |
|           |                                                                     | Z | 5.79   | 75.74  | 16.81 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 11.16  | 83.50  | 21.93 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.15   | 80.18  | 19.27 |      | 80.0 |         |
|           |                                                                     | Z | 5.05   | 73.86  | 16.10 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 11.03  | 86.44  | 23.15 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.87   | 82.16  | 21.41 |      | 80.0 |         |
|           |                                                                     | Z | 9.87   | 88.59  | 23.41 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.95   | 77.02  | 19.85 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.98   | 74.27  | 17.96 |      | 80.0 |         |
|           |                                                                     | Z | 5.53   | 76.50  | 18.48 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.82   | 76.43  | 19.65 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.85   | 73.54  | 17.65 |      | 80.0 |         |
|           |                                                                     | Z | 5.25   | 75.41  | 18.04 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 9.46   | 82.96  | 22.30 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.99   | 78.96  | 21.12 |      | 80.0 |         |
|           |                                                                     | Z | 6.82   | 82.33  | 22.47 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 6.62   | 75.52  | 19.96 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.91   | 73.20  | 18.90 |      | 80.0 |         |
|           |                                                                     | Z | 5.11   | 74.84  | 19.54 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 6.56   | 74.88  | 19.76 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.94   | 72.82  | 18.76 |      | 80.0 |         |
|           |                                                                     | Z | 5.10   | 74.33  | 19.33 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 7.98   | 78.75  | 20.93 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.56   | 75.73  | 20.09 |      | 80.0 |         |
|           |                                                                     | Z | 5.84   | 77.68  | 21.00 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 6.52   | 73.74  | 19.47 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.01   | 71.66  | 18.63 |      | 80.0 |         |
|           |                                                                     | Z | 5.04   | 72.68  | 19.10 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.52 | 73.38 | 19.36 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.05 | 71.42 | 18.55 |      | 80.0 |         |
|           |                                                                      | Z | 5.05 | 72.38 | 18.97 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 9.30 | 81.16 | 21.56 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.19 | 77.55 | 20.65 |      | 80.0 |         |
|           |                                                                      | Z | 6.63 | 79.81 | 21.68 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.75 | 74.54 | 19.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.09 | 72.10 | 18.86 |      | 80.0 |         |
|           |                                                                      | Z | 5.10 | 73.07 | 19.34 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.67 | 73.87 | 19.53 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.11 | 71.66 | 18.72 |      | 80.0 |         |
|           |                                                                      | Z | 5.11 | 72.57 | 19.16 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 9.58 | 84.00 | 21.43 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.27 | 74.12 | 16.39 |      | 80.0 |         |
|           |                                                                      | Z | 5.12 | 76.54 | 16.66 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 6.19 | 75.19 | 17.72 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.33 | 64.39 | 11.23 |      | 80.0 |         |
|           |                                                                      | Z | 1.83 | 62.54 | 9.68  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 6.08 | 74.60 | 17.40 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.20 | 63.55 | 10.68 |      | 80.0 |         |
|           |                                                                      | Z | 1.70 | 61.64 | 9.07  |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 9.69 | 83.97 | 22.50 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.26 | 80.30 | 21.12 |      | 80.0 |         |
|           |                                                                      | Z | 7.99 | 85.23 | 22.80 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.73 | 76.14 | 19.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.97 | 73.89 | 18.33 |      | 80.0 |         |
|           |                                                                      | Z | 5.41 | 76.03 | 18.94 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.66 | 75.65 | 19.59 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.97 | 73.54 | 18.13 |      | 80.0 |         |
|           |                                                                      | Z | 5.36 | 75.51 | 18.67 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 9.33 | 82.74 | 22.21 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.90 | 78.70 | 21.01 |      | 80.0 |         |
|           |                                                                      | Z | 6.71 | 82.03 | 22.35 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.59 | 75.44 | 19.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.88 | 73.08 | 18.84 |      | 80.0 |         |
|           |                                                                      | Z | 5.07 | 74.71 | 19.47 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.52 | 74.79 | 19.72 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.91 | 72.71 | 18.70 |      | 80.0 |         |
|           |                                                                      | Z | 5.07 | 74.21 | 19.27 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 9.21 | 81.00 | 21.50 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.13 | 77.37 | 20.57 |      | 80.0 |         |
|           |                                                                      | Z | 6.56 | 79.62 | 21.60 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 6.72 | 74.48 | 19.71 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.07 | 72.03 | 18.82 |      | 80.0 |         |
|           |                                                                      | Z | 5.08 | 73.01 | 19.31 |      | 80.0 |         |

|           |                                                                     |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 6.65   | 73.80  | 19.50 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.09   | 71.58  | 18.67 |      | 80.0  |         |
|           |                                                                     | Z | 5.09   | 72.48  | 19.12 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 8.15   | 77.43  | 20.26 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.99   | 74.82  | 19.62 |      | 80.0  |         |
|           |                                                                     | Z | 6.17   | 76.24  | 20.35 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 6.94   | 73.36  | 19.32 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.42   | 71.16  | 18.60 |      | 80.0  |         |
|           |                                                                     | Z | 5.37   | 71.81  | 18.97 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 6.87   | 72.87  | 19.19 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.44   | 70.83  | 18.50 |      | 80.0  |         |
|           |                                                                     | Z | 5.39   | 71.45  | 18.85 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 9.41   | 80.22  | 21.09 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.52   | 76.83  | 20.24 |      | 80.0  |         |
|           |                                                                     | Z | 6.84   | 78.58  | 21.10 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 7.03   | 74.19  | 19.61 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.36   | 71.56  | 18.76 |      | 80.0  |         |
|           |                                                                     | Z | 5.31   | 72.21  | 19.14 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 6.85   | 73.42  | 19.39 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.32   | 71.03  | 18.59 |      | 80.0  |         |
|           |                                                                     | Z | 5.27   | 71.61  | 18.94 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.98   | 65.05  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.00   | 63.56  | 14.97 |      | 150.0 |         |
|           |                                                                     | Z | 1.05   | 64.66  | 15.82 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 100.00 | 168.11 | 45.87 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.67   | 71.83  | 18.15 |      | 150.0 |         |
|           |                                                                     | Z | 1.04   | 80.65  | 22.82 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.96   | 70.11  | 18.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.85   | 65.61  | 15.70 |      | 150.0 |         |
|           |                                                                     | Z | 0.93   | 67.57  | 17.12 |      | 150.0 |         |
| 10518-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.76   | 67.10  | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.53   | 67.01  | 16.35 |      | 150.0 |         |
|           |                                                                     | Z | 4.47   | 67.38  | 16.53 |      | 150.0 |         |
| 10519-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 5.02   | 67.44  | 16.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.70   | 67.22  | 16.46 |      | 150.0 |         |
|           |                                                                     | Z | 4.63   | 67.55  | 16.62 |      | 150.0 |         |
| 10520-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.86   | 67.45  | 16.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.55   | 67.17  | 16.38 |      | 150.0 |         |
|           |                                                                     | Z | 4.48   | 67.50  | 16.54 |      | 150.0 |         |
| 10521-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.79   | 67.47  | 16.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.48   | 67.16  | 16.36 |      | 150.0 |         |
|           |                                                                     | Z | 4.42   | 67.48  | 16.53 |      | 150.0 |         |
| 10522-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.82   | 67.32  | 16.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.55   | 67.29  | 16.46 |      | 150.0 |         |
|           |                                                                     | Z | 4.47   | 67.62  | 16.63 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.69 | 67.31 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.44 | 67.17 | 16.32 |      | 150.0 |         |
|           |                                                            | Z | 4.39 | 67.59 | 16.54 |      | 150.0 |         |
| 10524-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.78 | 67.32 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.49 | 67.20 | 16.43 |      | 150.0 |         |
|           |                                                            | Z | 4.42 | 67.57 | 16.62 |      | 150.0 |         |
| 10525-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.72 | 66.35 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.49 | 66.26 | 16.02 |      | 150.0 |         |
|           |                                                            | Z | 4.45 | 66.66 | 16.22 |      | 150.0 |         |
| 10526-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.95 | 66.78 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.64 | 66.60 | 16.16 |      | 150.0 |         |
|           |                                                            | Z | 4.58 | 66.96 | 16.34 |      | 150.0 |         |
| 10527-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.86 | 66.80 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.57 | 66.56 | 16.10 |      | 150.0 |         |
|           |                                                            | Z | 4.51 | 66.93 | 16.29 |      | 150.0 |         |
| 10528-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.89 | 66.82 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.58 | 66.57 | 16.13 |      | 150.0 |         |
|           |                                                            | Z | 4.52 | 66.94 | 16.32 |      | 150.0 |         |
| 10529-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.89 | 66.82 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.58 | 66.57 | 16.13 |      | 150.0 |         |
|           |                                                            | Z | 4.52 | 66.94 | 16.32 |      | 150.0 |         |
| 10531-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.92 | 67.00 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.57 | 66.66 | 16.14 |      | 150.0 |         |
|           |                                                            | Z | 4.49 | 66.99 | 16.31 |      | 150.0 |         |
| 10532-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.76 | 66.93 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.43 | 66.51 | 16.07 |      | 150.0 |         |
|           |                                                            | Z | 4.37 | 66.85 | 16.25 |      | 150.0 |         |
| 10533-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.90 | 66.82 | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.59 | 66.64 | 16.13 |      | 150.0 |         |
|           |                                                            | Z | 4.53 | 67.03 | 16.33 |      | 150.0 |         |
| 10534-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.38 | 66.99 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.14 | 66.65 | 16.20 |      | 150.0 |         |
|           |                                                            | Z | 5.08 | 66.89 | 16.34 |      | 150.0 |         |
| 10535-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.47 | 67.13 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.21 | 66.87 | 16.30 |      | 150.0 |         |
|           |                                                            | Z | 5.13 | 67.05 | 16.42 |      | 150.0 |         |
| 10536-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.32 | 67.12 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.08 | 66.81 | 16.25 |      | 150.0 |         |
|           |                                                            | Z | 5.02 | 67.06 | 16.40 |      | 150.0 |         |
| 10537-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.39 | 67.07 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.13 | 66.76 | 16.23 |      | 150.0 |         |
|           |                                                            | Z | 5.08 | 67.03 | 16.39 |      | 150.0 |         |
| 10538-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.52 | 67.19 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.21 | 66.77 | 16.27 |      | 150.0 |         |
|           |                                                            | Z | 5.14 | 66.99 | 16.41 |      | 150.0 |         |
| 10540-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.40 | 67.10 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.15 | 66.79 | 16.30 |      | 150.0 |         |
|           |                                                            | Z | 5.07 | 66.96 | 16.41 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.41 | 67.10 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.12 | 66.64 | 16.21 |      | 150.0 |         |
|           |                                                    | Z | 5.05 | 66.85 | 16.34 |      | 150.0 |         |
| 10542-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.53 | 67.02 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.28 | 66.73 | 16.27 |      | 150.0 |         |
|           |                                                    | Z | 5.21 | 66.95 | 16.40 |      | 150.0 |         |
| 10543-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.65 | 67.09 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.35 | 66.75 | 16.31 |      | 150.0 |         |
|           |                                                    | Z | 5.28 | 67.01 | 16.46 |      | 150.0 |         |
| 10544-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.63 | 67.05 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.46 | 66.75 | 16.19 |      | 150.0 |         |
|           |                                                    | Z | 5.42 | 66.95 | 16.31 |      | 150.0 |         |
| 10545-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.85 | 67.43 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 67.24 | 16.39 |      | 150.0 |         |
|           |                                                    | Z | 5.61 | 67.44 | 16.52 |      | 150.0 |         |
| 10546-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.76 | 67.40 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.52 | 66.93 | 16.25 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 67.09 | 16.35 |      | 150.0 |         |
| 10547-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.86 | 67.50 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.59 | 67.00 | 16.28 |      | 150.0 |         |
|           |                                                    | Z | 5.54 | 67.20 | 16.40 |      | 150.0 |         |
| 10548-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 6.21 | 68.68 | 17.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.87 | 68.02 | 16.76 |      | 150.0 |         |
|           |                                                    | Z | 5.72 | 67.95 | 16.76 |      | 150.0 |         |
| 10550-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.77 | 67.31 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.57 | 67.05 | 16.32 |      | 150.0 |         |
|           |                                                    | Z | 5.52 | 67.30 | 16.47 |      | 150.0 |         |
| 10551-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.80 | 67.45 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.55 | 67.00 | 16.26 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 67.07 | 16.32 |      | 150.0 |         |
| 10552-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.69 | 67.19 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.47 | 66.81 | 16.17 |      | 150.0 |         |
|           |                                                    | Z | 5.43 | 67.06 | 16.31 |      | 150.0 |         |
| 10553-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.78 | 67.21 | 16.40 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.54 | 66.82 | 16.20 |      | 150.0 |         |
|           |                                                    | Z | 5.48 | 67.01 | 16.32 |      | 150.0 |         |
| 10554-AAB | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 6.03 | 67.43 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.89 | 67.12 | 16.28 |      | 150.0 |         |
|           |                                                    | Z | 5.84 | 67.28 | 16.38 |      | 150.0 |         |
| 10555-AAB | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.22 | 67.88 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.02 | 67.44 | 16.43 |      | 150.0 |         |
|           |                                                    | Z | 5.95 | 67.54 | 16.50 |      | 150.0 |         |
| 10556-AAB | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.20 | 67.79 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.04 | 67.49 | 16.44 |      | 150.0 |         |
|           |                                                    | Z | 5.99 | 67.66 | 16.55 |      | 150.0 |         |
| 10557-AAB | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.21 | 67.81 | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.99 | 67.35 | 16.39 |      | 150.0 |         |
|           |                                                    | Z | 5.93 | 67.50 | 16.49 |      | 150.0 |         |

|           |                                                                 |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10558-AAB | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.28   | 68.03  | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.04   | 67.52  | 16.49 |      | 150.0 |         |
|           |                                                                 | Z | 5.95   | 67.59  | 16.55 |      | 150.0 |         |
| 10560-AAB | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.28   | 67.87  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.03   | 67.35  | 16.44 |      | 150.0 |         |
|           |                                                                 | Z | 5.96   | 67.49  | 16.53 |      | 150.0 |         |
| 10561-AAB | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 6.18   | 67.80  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.96   | 67.36  | 16.48 |      | 150.0 |         |
|           |                                                                 | Z | 5.90   | 67.49  | 16.57 |      | 150.0 |         |
| 10562-AAB | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.37   | 68.38  | 17.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.06   | 67.66  | 16.63 |      | 150.0 |         |
|           |                                                                 | Z | 5.96   | 67.67  | 16.66 |      | 150.0 |         |
| 10563-AAB | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.58   | 68.54  | 17.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.18   | 67.65  | 16.59 |      | 150.0 |         |
|           |                                                                 | Z | 6.05   | 67.62  | 16.60 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 5.11   | 67.26  | 16.76 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86   | 67.10  | 16.52 |      | 150.0 |         |
|           |                                                                 | Z | 4.80   | 67.44  | 16.68 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.41   | 67.77  | 17.08 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.08   | 67.53  | 16.83 |      | 150.0 |         |
|           |                                                                 | Z | 5.00   | 67.82  | 16.97 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 5.23   | 67.67  | 16.93 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.92   | 67.38  | 16.66 |      | 150.0 |         |
|           |                                                                 | Z | 4.84   | 67.67  | 16.80 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.26   | 68.03  | 17.24 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.95   | 67.77  | 17.01 |      | 150.0 |         |
|           |                                                                 | Z | 4.87   | 68.04  | 17.15 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 5.14   | 67.36  | 16.67 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.84   | 67.19  | 16.45 |      | 150.0 |         |
|           |                                                                 | Z | 4.75   | 67.49  | 16.60 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 5.19   | 68.02  | 17.24 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.92   | 67.92  | 17.11 |      | 150.0 |         |
|           |                                                                 | Z | 4.86   | 68.27  | 17.29 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.23   | 67.81  | 17.17 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.94   | 67.74  | 17.02 |      | 150.0 |         |
|           |                                                                 | Z | 4.86   | 68.06  | 17.18 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.68   | 70.36  | 18.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.37   | 66.32  | 16.49 |      | 130.0 |         |
|           |                                                                 | Z | 1.41   | 67.39  | 17.29 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.75   | 71.47  | 19.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.40   | 67.01  | 16.89 |      | 130.0 |         |
|           |                                                                 | Z | 1.45   | 68.17  | 17.74 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 100.00 | 142.31 | 37.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.69   | 99.12  | 27.30 |      | 130.0 |         |
|           |                                                                 | Z | 66.26  | 143.73 | 39.41 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 3.57   | 87.71  | 25.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.70   | 74.22  | 20.29 |      | 130.0 |         |
|           |                                                                 | Z | 1.88   | 76.94  | 21.86 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.95 | 67.19 | 16.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 67.03 | 16.64 |      | 130.0 |         |
|           |                                                                 | Z | 4.63 | 67.35 | 16.80 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.98 | 67.35 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.72 | 67.20 | 16.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.66 | 67.55 | 16.88 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 5.24 | 67.69 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.90 | 67.46 | 16.87 |      | 130.0 |         |
|           |                                                                 | Z | 4.82 | 67.76 | 17.01 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 5.14 | 67.89 | 17.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 67.63 | 16.98 |      | 130.0 |         |
|           |                                                                 | Z | 4.73 | 67.92 | 17.12 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.94 | 67.39 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.58 | 66.91 | 16.29 |      | 130.0 |         |
|           |                                                                 | Z | 4.50 | 67.21 | 16.45 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.98 | 67.29 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.97 | 16.32 |      | 130.0 |         |
|           |                                                                 | Z | 4.54 | 67.27 | 16.48 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 5.07 | 68.07 | 17.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.72 | 67.70 | 16.95 |      | 130.0 |         |
|           |                                                                 | Z | 4.65 | 68.04 | 17.12 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.90 | 67.13 | 16.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.51 | 66.68 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.43 | 67.00 | 16.24 |      | 130.0 |         |
| 10583-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.95 | 67.19 | 16.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 67.03 | 16.64 |      | 130.0 |         |
|           |                                                                 | Z | 4.63 | 67.35 | 16.80 |      | 130.0 |         |
| 10584-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.98 | 67.35 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.72 | 67.20 | 16.72 |      | 130.0 |         |
|           |                                                                 | Z | 4.66 | 67.55 | 16.88 |      | 130.0 |         |
| 10585-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 5.24 | 67.69 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.90 | 67.46 | 16.87 |      | 130.0 |         |
|           |                                                                 | Z | 4.82 | 67.76 | 17.01 |      | 130.0 |         |
| 10586-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 5.14 | 67.89 | 17.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 67.63 | 16.98 |      | 130.0 |         |
|           |                                                                 | Z | 4.73 | 67.92 | 17.12 |      | 130.0 |         |
| 10587-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.94 | 67.39 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.58 | 66.91 | 16.29 |      | 130.0 |         |
|           |                                                                 | Z | 4.50 | 67.21 | 16.45 |      | 130.0 |         |
| 10588-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.98 | 67.29 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.62 | 66.97 | 16.32 |      | 130.0 |         |
|           |                                                                 | Z | 4.54 | 67.27 | 16.48 |      | 130.0 |         |
| 10589-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 5.07 | 68.07 | 17.23 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.72 | 67.70 | 16.95 |      | 130.0 |         |
|           |                                                                 | Z | 4.65 | 68.04 | 17.12 |      | 130.0 |         |
| 10590-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.90 | 67.13 | 16.49 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.51 | 66.68 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.43 | 67.00 | 16.24 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 5.10 | 67.21 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.84 | 67.07 | 16.74 |      | 130.0 |         |
|           |                                                       | Z | 4.77 | 67.39 | 16.89 |      | 130.0 |         |
| 10592-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.29 | 67.56 | 17.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.98 | 67.40 | 16.87 |      | 130.0 |         |
|           |                                                       | Z | 4.90 | 67.69 | 17.01 |      | 130.0 |         |
| 10593-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 5.23 | 67.57 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.90 | 67.30 | 16.75 |      | 130.0 |         |
|           |                                                       | Z | 4.82 | 67.59 | 16.88 |      | 130.0 |         |
| 10594-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.28 | 67.68 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.96 | 67.47 | 16.91 |      | 130.0 |         |
|           |                                                       | Z | 4.88 | 67.75 | 17.04 |      | 130.0 |         |
| 10595-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.27 | 67.71 | 17.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.93 | 67.44 | 16.81 |      | 130.0 |         |
|           |                                                       | Z | 4.85 | 67.75 | 16.96 |      | 130.0 |         |
| 10596-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 5.21 | 67.70 | 17.06 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.86 | 67.44 | 16.81 |      | 130.0 |         |
|           |                                                       | Z | 4.78 | 67.74 | 16.97 |      | 130.0 |         |
| 10597-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 5.16 | 67.68 | 17.00 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.81 | 67.32 | 16.68 |      | 130.0 |         |
|           |                                                       | Z | 4.73 | 67.61 | 16.83 |      | 130.0 |         |
| 10598-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 5.15 | 67.96 | 17.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.80 | 67.55 | 16.95 |      | 130.0 |         |
|           |                                                       | Z | 4.72 | 67.82 | 17.08 |      | 130.0 |         |
| 10599-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.77 | 67.84 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.52 | 67.58 | 16.96 |      | 130.0 |         |
|           |                                                       | Z | 5.45 | 67.81 | 17.10 |      | 130.0 |         |
| 10600-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 6.05 | 68.67 | 17.52 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.68 | 68.13 | 17.21 |      | 130.0 |         |
|           |                                                       | Z | 5.58 | 68.26 | 17.30 |      | 130.0 |         |
| 10601-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.85 | 68.16 | 17.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.55 | 67.80 | 17.06 |      | 130.0 |         |
|           |                                                       | Z | 5.46 | 67.98 | 17.17 |      | 130.0 |         |
| 10602-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.99 | 68.30 | 17.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.68 | 67.95 | 17.06 |      | 130.0 |         |
|           |                                                       | Z | 5.60 | 68.17 | 17.19 |      | 130.0 |         |
| 10603-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 6.09 | 68.64 | 17.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.74 | 68.19 | 17.31 |      | 130.0 |         |
|           |                                                       | Z | 5.66 | 68.42 | 17.44 |      | 130.0 |         |
| 10604-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.79 | 67.86 | 17.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.59 | 67.76 | 17.08 |      | 130.0 |         |
|           |                                                       | Z | 5.54 | 68.06 | 17.25 |      | 130.0 |         |
| 10605-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.90 | 68.15 | 17.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.67 | 68.01 | 17.21 |      | 130.0 |         |
|           |                                                       | Z | 5.56 | 68.12 | 17.28 |      | 130.0 |         |
| 10606-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.65 | 67.59 | 16.91 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.37 | 67.19 | 16.65 |      | 130.0 |         |
|           |                                                       | Z | 5.33 | 67.51 | 16.83 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.92 | 66.49 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.68 | 66.39 | 16.37 |      | 130.0 |         |
|           |                                                   | Z | 4.62 | 66.76 | 16.54 |      | 130.0 |         |
| 10608-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 5.16 | 66.93 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.85 | 66.77 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 4.77 | 67.10 | 16.69 |      | 130.0 |         |
| 10609-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 5.06 | 66.87 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.74 | 66.62 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 4.67 | 66.96 | 16.53 |      | 130.0 |         |
| 10610-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 5.11 | 67.01 | 16.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.79 | 66.78 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 4.72 | 67.11 | 16.69 |      | 130.0 |         |
| 10611-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 5.05 | 66.92 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.71 | 66.59 | 16.38 |      | 130.0 |         |
|           |                                                   | Z | 4.64 | 66.93 | 16.55 |      | 130.0 |         |
| 10612-AAA | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 5.07 | 67.04 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.72 | 66.76 | 16.43 |      | 130.0 |         |
|           |                                                   | Z | 4.64 | 67.09 | 16.61 |      | 130.0 |         |
| 10613-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 5.09 | 66.98 | 16.60 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.71 | 66.61 | 16.29 |      | 130.0 |         |
|           |                                                   | Z | 4.63 | 66.91 | 16.45 |      | 130.0 |         |
| 10614-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 5.02 | 67.21 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.67 | 66.81 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 4.59 | 67.11 | 16.69 |      | 130.0 |         |
| 10615-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 5.05 | 66.70 | 16.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.71 | 66.43 | 16.16 |      | 130.0 |         |
|           |                                                   | Z | 4.64 | 66.79 | 16.34 |      | 130.0 |         |
| 10616-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.58 | 67.10 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.33 | 66.79 | 16.55 |      | 130.0 |         |
|           |                                                   | Z | 5.25 | 67.00 | 16.67 |      | 130.0 |         |
| 10617-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.66 | 67.25 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.41 | 67.04 | 16.65 |      | 130.0 |         |
|           |                                                   | Z | 5.31 | 67.19 | 16.74 |      | 130.0 |         |
| 10618-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.54 | 67.29 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.29 | 67.03 | 16.66 |      | 130.0 |         |
|           |                                                   | Z | 5.22 | 67.24 | 16.78 |      | 130.0 |         |
| 10619-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.56 | 67.09 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.30 | 66.81 | 16.48 |      | 130.0 |         |
|           |                                                   | Z | 5.23 | 67.05 | 16.63 |      | 130.0 |         |
| 10620-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.71 | 67.30 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.38 | 66.84 | 16.54 |      | 130.0 |         |
|           |                                                   | Z | 5.30 | 67.04 | 16.67 |      | 130.0 |         |
| 10621-AAA | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.66 | 67.28 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.39 | 66.98 | 16.73 |      | 130.0 |         |
|           |                                                   | Z | 5.30 | 67.12 | 16.82 |      | 130.0 |         |
| 10622-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.65 | 67.37 | 16.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.40 | 67.13 | 16.80 |      | 130.0 |         |
|           |                                                   | Z | 5.30 | 67.22 | 16.87 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.58 | 67.14 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.28 | 66.65 | 16.43 |      | 130.0 |         |
|           |                                                    | Z | 5.18 | 66.78 | 16.52 |      | 130.0 |         |
| 10624-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.72 | 67.10 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.47 | 66.85 | 16.60 |      | 130.0 |         |
|           |                                                    | Z | 5.38 | 67.03 | 16.70 |      | 130.0 |         |
| 10625-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 6.05 | 67.87 | 17.19 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.77 | 67.66 | 17.06 |      | 130.0 |         |
|           |                                                    | Z | 5.49 | 67.24 | 16.87 |      | 130.0 |         |
| 10626-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.80 | 67.08 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.63 | 66.82 | 16.50 |      | 130.0 |         |
|           |                                                    | Z | 5.57 | 66.99 | 16.60 |      | 130.0 |         |
| 10627-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 6.05 | 67.56 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.90 | 67.51 | 16.81 |      | 130.0 |         |
|           |                                                    | Z | 5.83 | 67.67 | 16.91 |      | 130.0 |         |
| 10628-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.89 | 67.33 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.66 | 66.90 | 16.43 |      | 130.0 |         |
|           |                                                    | Z | 5.58 | 67.01 | 16.51 |      | 130.0 |         |
| 10629-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 6.01 | 67.46 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 67.00 | 16.48 |      | 130.0 |         |
|           |                                                    | Z | 5.68 | 67.19 | 16.60 |      | 130.0 |         |
| 10630-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.66 | 69.52 | 17.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.23 | 68.64 | 17.29 |      | 130.0 |         |
|           |                                                    | Z | 5.99 | 68.32 | 17.17 |      | 130.0 |         |
| 10631-AAA | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.51 | 69.16 | 17.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.05 | 68.21 | 17.27 |      | 130.0 |         |
|           |                                                    | Z | 5.91 | 68.16 | 17.27 |      | 130.0 |         |
| 10632-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 6.07 | 67.76 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.87 | 67.57 | 16.97 |      | 130.0 |         |
|           |                                                    | Z | 5.81 | 67.79 | 17.10 |      | 130.0 |         |
| 10633-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 6.04 | 67.71 | 16.86 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.71 | 67.04 | 16.54 |      | 130.0 |         |
|           |                                                    | Z | 5.62 | 67.14 | 16.61 |      | 130.0 |         |
| 10634-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 6.01 | 67.64 | 16.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 67.06 | 16.60 |      | 130.0 |         |
|           |                                                    | Z | 5.63 | 67.23 | 16.71 |      | 130.0 |         |
| 10635-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.88 | 66.99 | 16.33 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.57 | 66.39 | 16.00 |      | 130.0 |         |
|           |                                                    | Z | 5.49 | 66.55 | 16.11 |      | 130.0 |         |
| 10636-AAB | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.20 | 67.47 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.06 | 67.19 | 16.58 |      | 130.0 |         |
|           |                                                    | Z | 6.01 | 67.33 | 16.67 |      | 130.0 |         |
| 10637-AAB | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.43 | 68.00 | 16.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.23 | 67.63 | 16.79 |      | 130.0 |         |
|           |                                                    | Z | 6.14 | 67.69 | 16.84 |      | 130.0 |         |
| 10638-AAB | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.38 | 67.82 | 16.85 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.23 | 67.59 | 16.75 |      | 130.0 |         |
|           |                                                    | Z | 6.16 | 67.71 | 16.83 |      | 130.0 |         |

|           |                                                        |   |       |        |       |      |       |         |
|-----------|--------------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10639-AAB | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.40  | 67.91  | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.18  | 67.47  | 16.73 |      | 130.0 |         |
|           |                                                        | Z | 6.11  | 67.58  | 16.80 |      | 130.0 |         |
| 10640-AAB | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.45  | 68.06  | 16.97 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.19  | 67.49  | 16.68 |      | 130.0 |         |
|           |                                                        | Z | 6.09  | 67.54  | 16.73 |      | 130.0 |         |
| 10641-AAB | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.42  | 67.72  | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.26  | 67.48  | 16.70 |      | 130.0 |         |
|           |                                                        | Z | 6.18  | 67.60  | 16.78 |      | 130.0 |         |
| 10642-AAB | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.51  | 68.09  | 17.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.27  | 67.64  | 16.94 |      | 130.0 |         |
|           |                                                        | Z | 6.19  | 67.74  | 17.01 |      | 130.0 |         |
| 10643-AAB | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.33  | 67.78  | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.13  | 67.39  | 16.71 |      | 130.0 |         |
|           |                                                        | Z | 6.05  | 67.49  | 16.79 |      | 130.0 |         |
| 10644-AAB | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.62  | 68.66  | 17.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.24  | 67.74  | 16.91 |      | 130.0 |         |
|           |                                                        | Z | 6.11  | 67.69  | 16.91 |      | 130.0 |         |
| 10645-AAB | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.82  | 68.76  | 17.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.42  | 67.94  | 16.97 |      | 130.0 |         |
|           |                                                        | Z | 6.29  | 67.89  | 16.97 |      | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 22.37 | 99.45  | 32.18 | 9.30 | 60.0  | ± 9.6 % |
|           |                                                        | Y | 34.93 | 118.52 | 39.50 |      | 60.0  |         |
|           |                                                        | Z | 65.31 | 137.01 | 45.15 |      | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 23.87 | 101.54 | 32.95 | 9.30 | 60.0  | ± 9.6 % |
|           |                                                        | Y | 35.03 | 119.53 | 39.96 |      | 60.0  |         |
|           |                                                        | Z | 61.92 | 136.93 | 45.35 |      | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 1.11  | 70.04  | 15.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.68  | 63.85  | 10.64 |      | 150.0 |         |
|           |                                                        | Z | 0.72  | 65.39  | 11.21 |      | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 5.43  | 70.91  | 18.53 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.44  | 69.41  | 17.59 |      | 80.0  |         |
|           |                                                        | Z | 4.46  | 70.35  | 17.94 |      | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 5.75  | 69.79  | 18.37 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.85  | 68.29  | 17.59 |      | 80.0  |         |
|           |                                                        | Z | 4.80  | 68.81  | 17.83 |      | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 5.63  | 69.47  | 18.36 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.81  | 67.88  | 17.59 |      | 80.0  |         |
|           |                                                        | Z | 4.76  | 68.31  | 17.81 |      | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 5.69  | 69.55  | 18.41 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.87  | 67.81  | 17.62 |      | 80.0  |         |
|           |                                                        | Z | 4.82  | 68.18  | 17.82 |      | 80.0  |         |

<sup>F</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)  
The Swiss Accreditation Service is one of the signatories to the EA  
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **EX3-3589\_Jan18**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3589**

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

*BNV*  
*01-24-2018*

Calibration date: **January 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  $(22 \pm 3)^{\circ}\text{C}$  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><b>Jeton Kastrati</b> | Function<br>Laboratory Technician | Signature<br>            |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b>  | Technical Manager                 |                          |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                               |                                   | Issued: January 16, 2018 |



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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<sup>2</sup>-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).

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# Probe EX3DV4

## SN:3589

Manufactured: March 30, 2006  
Calibrated: January 16, 2018

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:3589

### 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     | 0.40     | 0.38     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 101.9    | 98.2     | 100.6    |               |

### 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    | 145.6    | $\pm 3.0 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 149.6    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 140.9    |                           |

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 | 54.53    | 405.9    | 35.45                       | 27.61                               | 1.364                               | 5.100    | 0.831                 | 0.591                 | 1.009 |
| Y | 48.12    | 366.5    | 36.73                       | 22.62                               | 1.695                               | 5.057    | 0.000                 | 0.758                 | 1.010 |
| Z | 46.44    | 344.4    | 35.16                       | 24.05                               | 1.187                               | 5.077    | 1.521                 | 0.435                 | 1.010 |

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:3589

### 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) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 5250                 | 35.9                               | 4.71                            | 4.69    | 4.69    | 4.69    | 0.35               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.17    | 4.17    | 4.17    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 4.42    | 4.42    | 4.42    | 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:3589

### 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                            | 4.22    | 4.22    | 4.22    | 0.35               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 3.69    | 3.69    | 3.69    | 0.40               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 3.97    | 3.97    | 3.97    | 0.40               | 1.90                    | ± 13.1 %  |

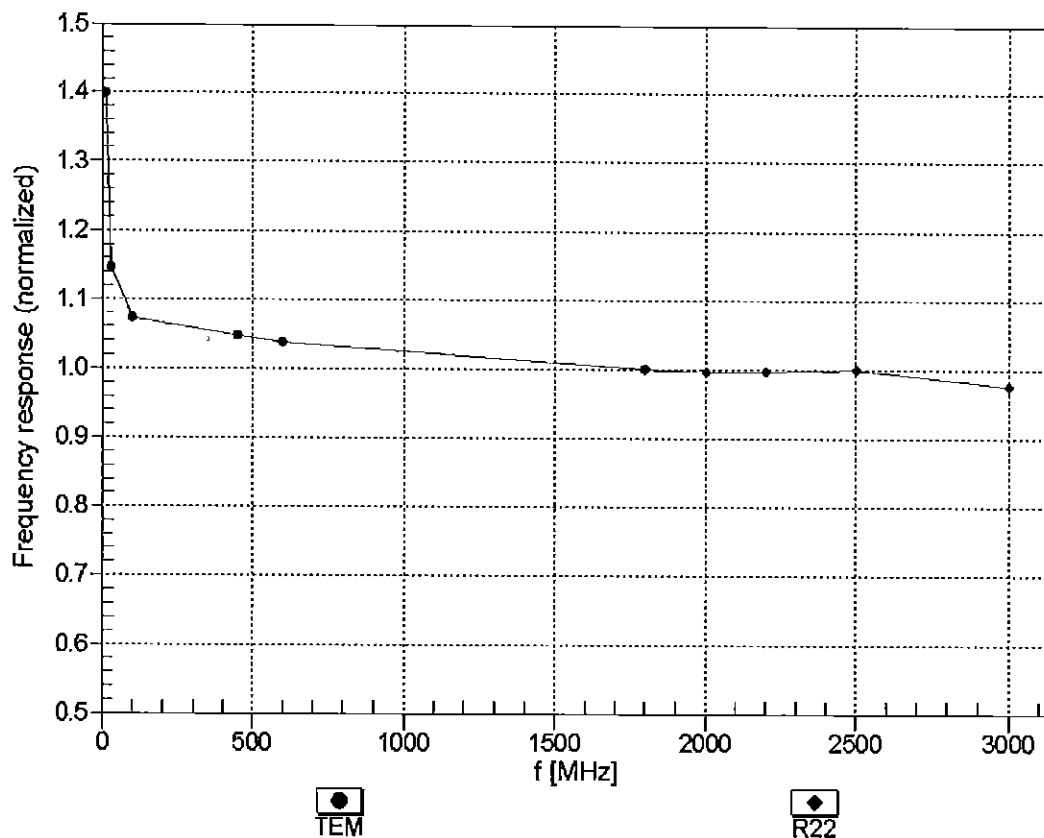
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below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

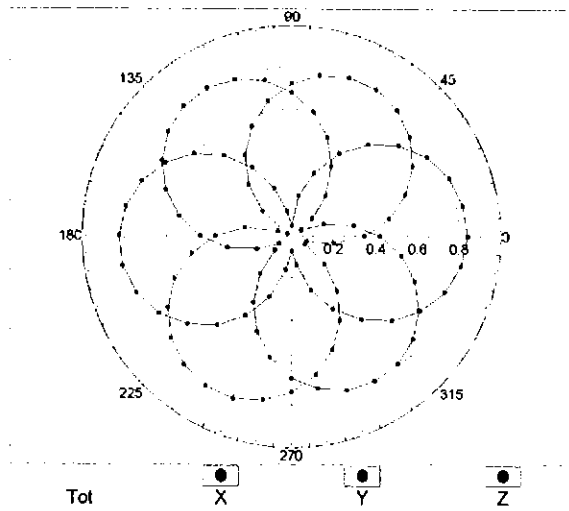
(TEM-Cell:ifi110 EXX, Waveguide: R22)



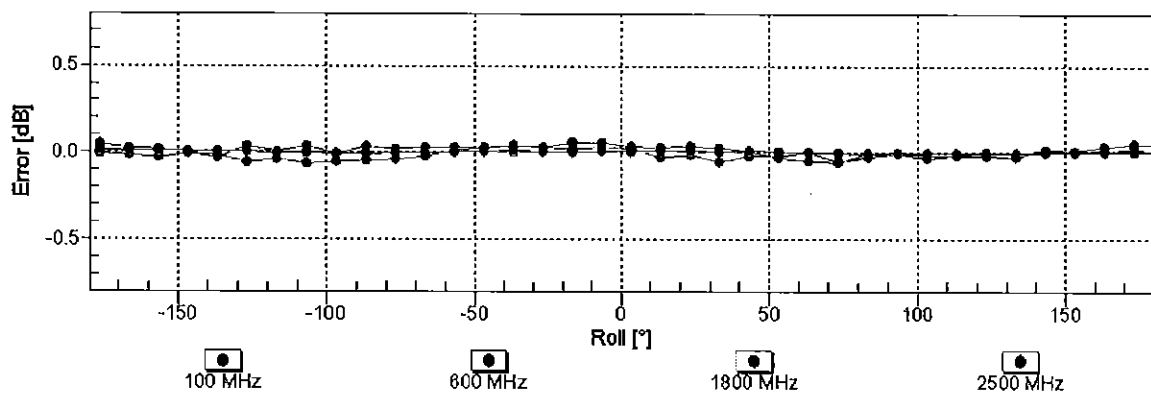
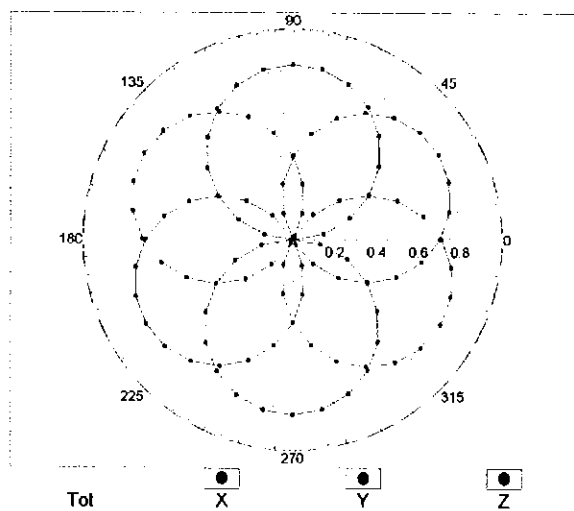
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

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

f=600 MHz,TEM

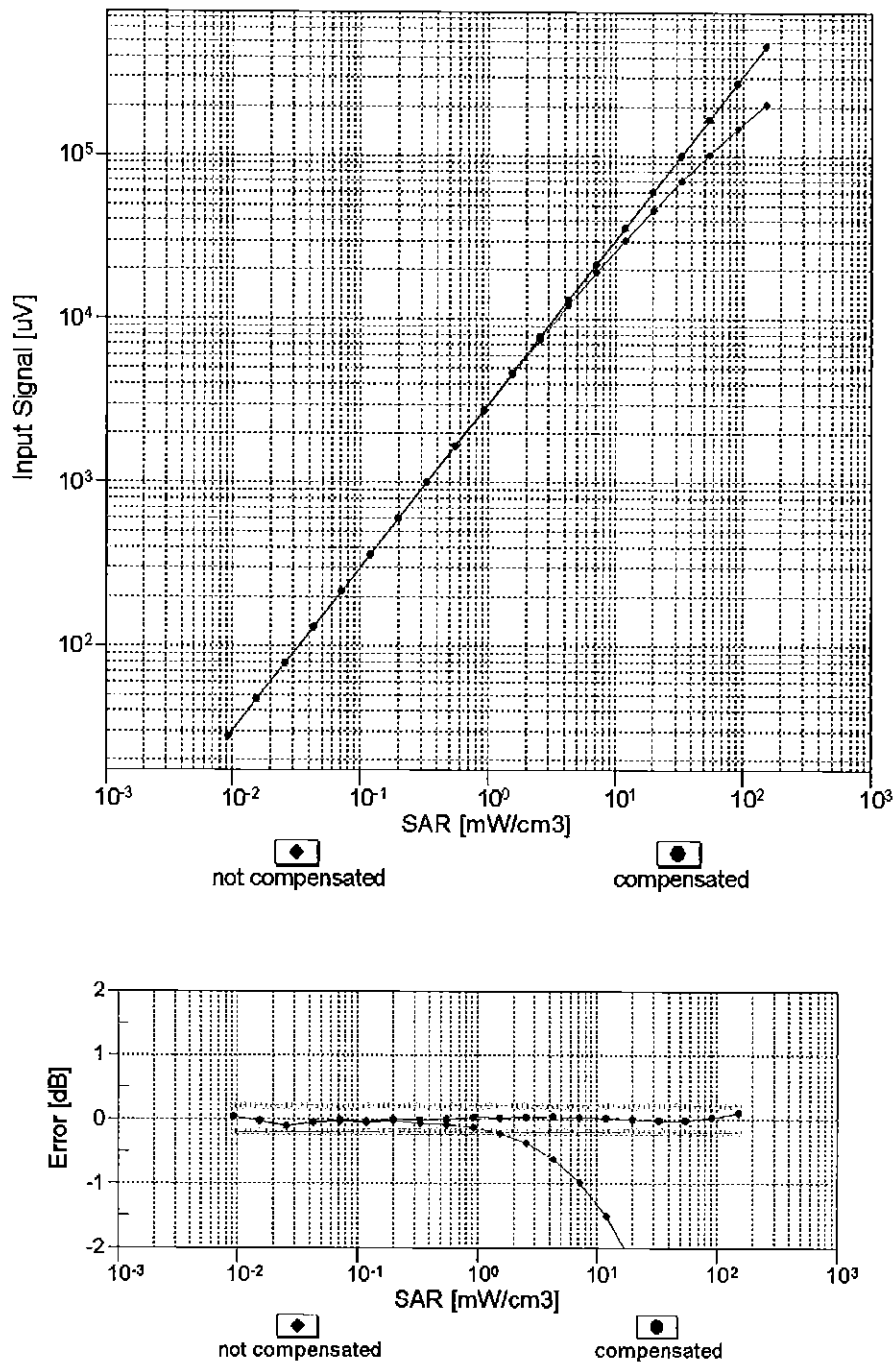


f=1800 MHz,R22



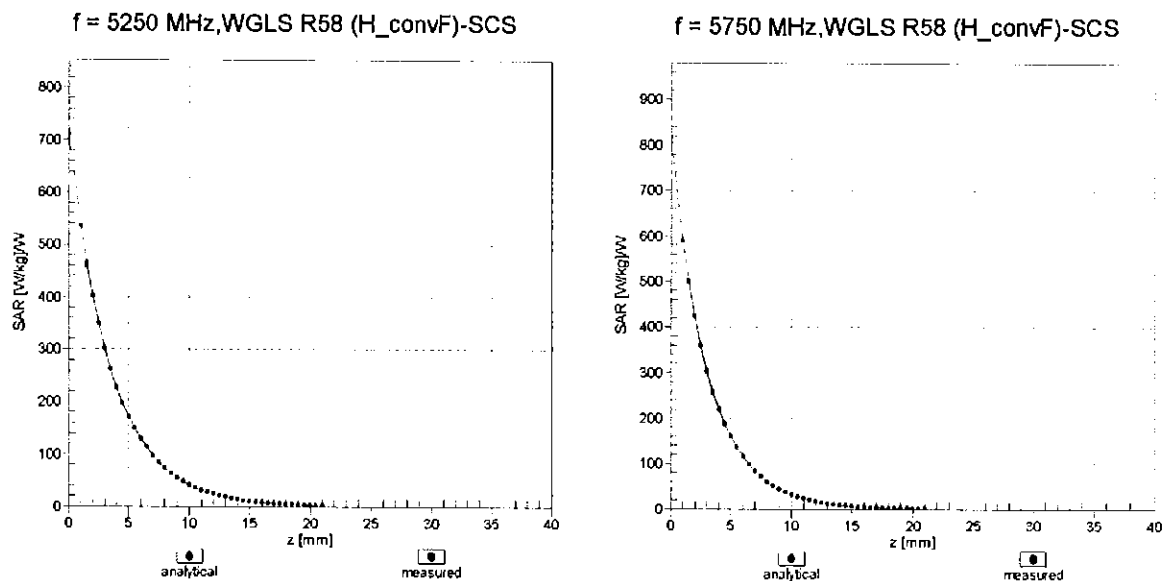
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

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



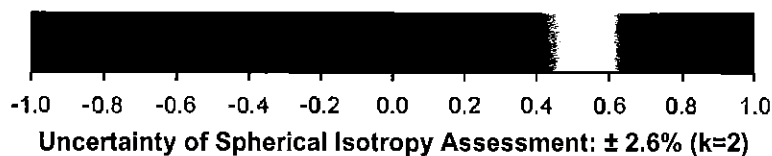
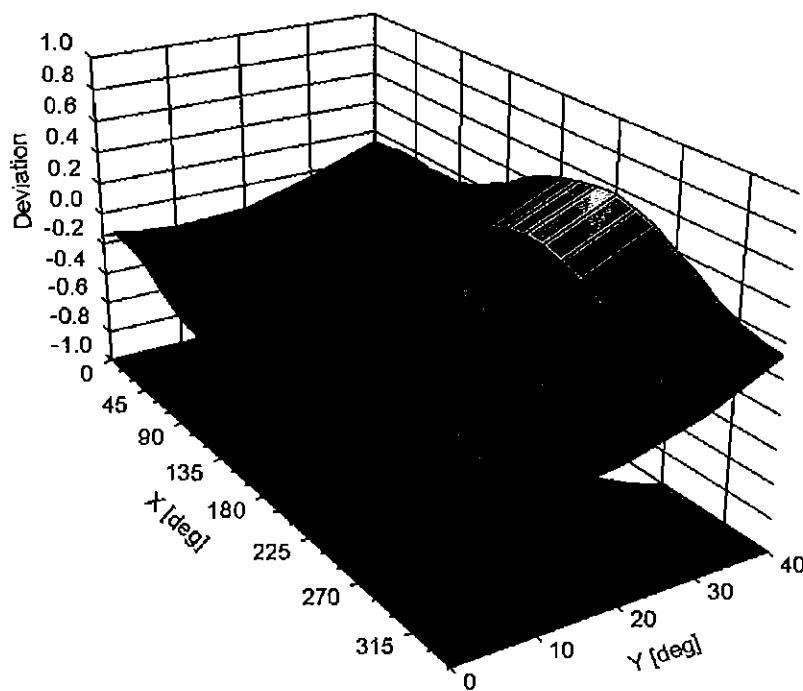
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



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**DASY/EASY - Parameters of Probe: EX3DV4 - SN:3589****Other Probe Parameters**

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | -36.7      |
| 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 $\mu$ 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    | 145.6    | $\pm 3.0 \%$                     |
|               |                                               | Y | 0.00    | 0.00            | 1.00  |         | 149.6    |                                  |
|               |                                               | Z | 0.00    | 0.00            | 1.00  |         | 140.9    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 9.99    | 82.03           | 18.50 | 10.00   | 20.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 3.61    | 68.62           | 12.70 |         | 20.0     |                                  |
|               |                                               | Z | 6.12    | 76.04           | 15.89 |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.07    | 68.14           | 15.72 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 0.81    | 64.60           | 12.95 |         | 150.0    |                                  |
|               |                                               | Z | 0.96    | 66.53           | 14.61 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.26    | 64.97           | 15.89 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.09    | 63.16           | 14.28 |         | 150.0    |                                  |
|               |                                               | Z | 1.20    | 64.25           | 15.26 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 5.02    | 66.95           | 17.30 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 4.84    | 66.53           | 16.88 |         | 150.0    |                                  |
|               |                                               | Z | 4.90    | 66.87           | 17.12 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 118.58          | 30.90 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 26.12   | 96.77           | 24.34 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 117.35          | 29.93 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 118.53          | 30.93 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 18.86   | 92.09           | 23.00 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 117.23          | 29.92 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 115.85          | 28.57 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 111.10          | 26.02 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 114.31          | 27.50 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 15.59   | 105.48          | 41.04 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 4.26    | 66.41           | 22.61 |         | 50.0     |                                  |
|               |                                               | Z | 6.75    | 80.99           | 30.81 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 26.87   | 114.05          | 39.53 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 12.16   | 93.46           | 31.76 |         | 60.0     |                                  |
|               |                                               | Z | 17.01   | 103.53          | 36.03 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 115.28          | 27.52 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 108.67          | 24.10 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 113.48          | 26.36 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 115.90          | 27.07 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 106.89          | 22.60 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 113.76          | 25.79 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 13.97   | 98.08           | 33.11 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 8.37    | 85.77           | 27.91 |         | 80.0     |                                  |
|               |                                               | Z | 9.97    | 90.97           | 30.48 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 114.41          | 27.43 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 87.04   | 107.07          | 24.03 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 112.49          | 26.20 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 116.58          | 25.91 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 6.32    | 79.53           | 13.62 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 112.45          | 23.86 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 121.24 | 26.80 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 0.57   | 63.68  | 7.10  |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 115.03 | 23.96 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 100.00 | 126.01 | 34.21 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 9.48   | 86.17  | 21.89 |       | 70.0  |         |
|           |                                                     | Z | 36.97  | 108.65 | 29.12 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 12.93  | 96.17  | 24.85 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.97   | 73.87  | 15.92 |       | 100.0 |         |
|           |                                                     | Z | 6.70   | 85.72  | 20.80 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 5.17   | 84.55  | 21.02 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.93   | 70.01  | 14.08 |       | 100.0 |         |
|           |                                                     | Z | 3.33   | 77.79  | 17.83 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 100.00 | 126.30 | 34.35 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 11.77  | 89.53  | 23.03 |       | 70.0  |         |
|           |                                                     | Z | 64.78  | 117.54 | 31.43 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 11.80  | 94.89  | 24.44 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.82   | 73.30  | 15.67 |       | 100.0 |         |
|           |                                                     | Z | 6.03   | 84.36  | 20.32 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 5.40   | 85.48  | 21.44 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 1.96   | 70.41  | 14.34 |       | 100.0 |         |
|           |                                                     | Z | 3.42   | 78.42  | 18.17 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 2.08   | 73.52  | 16.75 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.21   | 66.59  | 12.35 |       | 150.0 |         |
|           |                                                     | Z | 1.63   | 70.60  | 14.79 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 114.16 | 27.98 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 18.08  | 89.51  | 20.47 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 112.63 | 26.92 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 107.14 | 5.87  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.21   | 123.93 | 6.31  |       | 150.0 |         |
|           |                                                     | Z | 0.01   | 111.19 | 11.86 |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 69.67  | 114.61 | 31.81 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 9.51   | 81.03  | 21.19 |       | 25.0  |         |
|           |                                                     | Z | 70.93  | 113.80 | 30.88 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 100.00 | 119.03 | 31.49 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 11.04  | 84.08  | 20.83 |       | 40.0  |         |
|           |                                                     | Z | 100.00 | 117.60 | 30.41 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 34.83  | 106.19 | 29.98 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 10.33  | 84.00  | 22.00 |       | 50.0  |         |
|           |                                                     | Z | 26.35  | 100.92 | 27.85 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 9.27   | 89.32  | 29.23 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 6.37   | 80.89  | 25.35 |       | 100.0 |         |
|           |                                                     | Z | 7.13   | 84.12  | 27.15 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.41   | 67.11  | 16.98 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.18   | 64.62  | 14.99 |       | 110.0 |         |
|           |                                                     | Z | 1.31   | 65.99  | 16.14 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 132.86 | 34.11 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 8.12   | 92.52  | 22.19 |       | 110.0 |         |
|           |                                                     | Z | 100.00 | 131.22 | 33.18 |       | 110.0 |         |

|           |                                                |   |       |        |       |      |       |         |
|-----------|------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 16.26 | 106.04 | 30.06 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 4.18  | 82.31  | 21.49 |      | 110.0 |         |
|           |                                                | Z | 7.27  | 92.62  | 25.78 |      | 110.0 |         |
| 10062-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.78  | 66.80  | 16.63 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.59  | 66.36  | 16.23 |      | 100.0 |         |
|           |                                                | Z | 4.66  | 66.72  | 16.47 |      | 100.0 |         |
| 10063-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.81  | 66.94  | 16.76 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.62  | 66.48  | 16.34 |      | 100.0 |         |
|           |                                                | Z | 4.69  | 66.85  | 16.59 |      | 100.0 |         |
| 10064-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 5.12  | 67.25  | 17.01 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.91  | 66.78  | 16.59 |      | 100.0 |         |
|           |                                                | Z | 4.97  | 67.11  | 16.82 |      | 100.0 |         |
| 10065-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 5.01  | 67.24  | 17.17 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.80  | 66.73  | 16.70 |      | 100.0 |         |
|           |                                                | Z | 4.87  | 67.07  | 16.96 |      | 100.0 |         |
| 10066-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 5.05  | 67.33  | 17.38 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.84  | 66.81  | 16.90 |      | 100.0 |         |
|           |                                                | Z | 4.90  | 67.15  | 17.15 |      | 100.0 |         |
| 10067-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.36  | 67.48  | 17.83 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.15  | 67.05  | 17.38 |      | 100.0 |         |
|           |                                                | Z | 5.21  | 67.38  | 17.63 |      | 100.0 |         |
| 10068-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.46  | 67.74  | 18.16 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.24  | 67.20  | 17.64 |      | 100.0 |         |
|           |                                                | Z | 5.29  | 67.50  | 17.90 |      | 100.0 |         |
| 10069-CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.54  | 67.67  | 18.33 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.32  | 67.21  | 17.84 |      | 100.0 |         |
|           |                                                | Z | 5.37  | 67.50  | 18.08 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 5.14  | 67.13  | 17.66 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.96  | 66.70  | 17.22 |      | 100.0 |         |
|           |                                                | Z | 5.02  | 67.03  | 17.47 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.18  | 67.63  | 17.97 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.97  | 67.11  | 17.46 |      | 100.0 |         |
|           |                                                | Z | 5.03  | 67.45  | 17.74 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.28  | 67.91  | 18.36 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.07  | 67.38  | 17.83 |      | 100.0 |         |
|           |                                                | Z | 5.13  | 67.72  | 18.12 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.29  | 67.91  | 18.59 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.09  | 67.38  | 18.02 |      | 100.0 |         |
|           |                                                | Z | 5.15  | 67.72  | 18.32 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.40  | 68.27  | 19.03 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.18  | 67.65  | 18.40 |      | 90.0  |         |
|           |                                                | Z | 5.23  | 67.97  | 18.70 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.40  | 68.04  | 19.14 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.21  | 67.49  | 18.53 |      | 90.0  |         |
|           |                                                | Z | 5.25  | 67.79  | 18.84 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.43  | 68.12  | 19.24 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.24  | 67.58  | 18.64 |      | 90.0  |         |
|           |                                                | Z | 5.29  | 67.89  | 18.95 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.92   | 67.03  | 13.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.59   | 62.42  | 9.51  |      | 150.0 |         |
|           |                                                     | Z | 0.75   | 64.90  | 11.66 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 1.45   | 61.55  | 6.80  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 1.13   | 60.00  | 5.38  |      | 80.0  |         |
|           |                                                     | Z | 1.17   | 60.40  | 5.80  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 115.92 | 28.63 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 111.20 | 26.09 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 114.38 | 27.55 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.85   | 67.86  | 15.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.59   | 65.86  | 14.27 |      | 150.0 |         |
|           |                                                     | Z | 1.76   | 67.30  | 15.32 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.82   | 67.83  | 15.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.56   | 65.79  | 14.21 |      | 150.0 |         |
|           |                                                     | Z | 1.73   | 67.24  | 15.29 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 26.88  | 114.00 | 39.51 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 12.18  | 93.46  | 31.75 |      | 60.0  |         |
|           |                                                     | Z | 17.07  | 103.56 | 36.04 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.25   | 70.85  | 16.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.82   | 68.69  | 15.58 |      | 150.0 |         |
|           |                                                     | Z | 3.04   | 69.96  | 16.42 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.31   | 67.75  | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.05   | 66.63  | 15.24 |      | 150.0 |         |
|           |                                                     | Z | 3.18   | 67.32  | 15.73 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.41   | 67.69  | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.17   | 66.67  | 15.38 |      | 150.0 |         |
|           |                                                     | Z | 3.28   | 67.31  | 15.84 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 8.79   | 79.64  | 21.90 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 6.79   | 75.26  | 19.82 |      | 65.0  |         |
|           |                                                     | Z | 8.10   | 78.75  | 21.47 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 8.30   | 77.30  | 21.84 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.10   | 74.52  | 20.35 |      | 65.0  |         |
|           |                                                     | Z | 7.59   | 76.13  | 21.24 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 8.21   | 77.11  | 22.09 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 6.30   | 72.23  | 19.66 |      | 65.0  |         |
|           |                                                     | Z | 7.24   | 75.16  | 21.14 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.85   | 70.02  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.45   | 67.95  | 15.38 |      | 150.0 |         |
|           |                                                     | Z | 2.64   | 69.18  | 16.23 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.97   | 67.58  | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.71   | 66.39  | 15.06 |      | 150.0 |         |
|           |                                                     | Z | 2.83   | 67.15  | 15.62 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.32   | 69.07  | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.96   | 66.93  | 14.84 |      | 150.0 |         |
|           |                                                     | Z | 2.13   | 68.23  | 15.78 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.68   | 68.33  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.39   | 66.94  | 15.16 |      | 150.0 |         |
|           |                                                     | Z | 2.55   | 67.98  | 15.88 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.09 | 67.53 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.84 | 66.45 | 15.17 |      | 150.0 |         |
|           |                                                | Z | 2.96 | 67.17 | 15.69 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.84 | 68.42 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.55 | 67.17 | 15.36 |      | 150.0 |         |
|           |                                                | Z | 2.70 | 68.15 | 16.04 |      | 150.0 |         |
| 10114-CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.16 | 67.17 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.01 | 66.82 | 16.13 |      | 150.0 |         |
|           |                                                | Z | 5.07 | 67.12 | 16.32 |      | 150.0 |         |
| 10115-CAC | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.50 | 67.45 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.30 | 66.98 | 16.23 |      | 150.0 |         |
|           |                                                | Z | 5.35 | 67.23 | 16.39 |      | 150.0 |         |
| 10116-CAC | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.27 | 67.41 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.10 | 67.01 | 16.16 |      | 150.0 |         |
|           |                                                | Z | 5.16 | 67.30 | 16.34 |      | 150.0 |         |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.14 | 67.12 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 4.97 | 66.67 | 16.08 |      | 150.0 |         |
|           |                                                | Z | 5.04 | 66.98 | 16.27 |      | 150.0 |         |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.57 | 67.61 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.39 | 67.20 | 16.35 |      | 150.0 |         |
|           |                                                | Z | 5.43 | 67.42 | 16.49 |      | 150.0 |         |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.24 | 67.35 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.08 | 66.96 | 16.14 |      | 150.0 |         |
|           |                                                | Z | 5.14 | 67.25 | 16.33 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.45 | 67.69 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.20 | 66.67 | 15.30 |      | 150.0 |         |
|           |                                                | Z | 3.32 | 67.31 | 15.76 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.57 | 67.75 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.33 | 66.82 | 15.50 |      | 150.0 |         |
|           |                                                | Z | 3.44 | 67.44 | 15.94 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.10 | 69.09 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.72 | 66.61 | 14.28 |      | 150.0 |         |
|           |                                                | Z | 1.90 | 68.15 | 15.38 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.57 | 69.15 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.19 | 67.18 | 14.56 |      | 150.0 |         |
|           |                                                | Z | 2.40 | 68.64 | 15.52 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.35 | 66.96 | 14.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.01 | 65.20 | 13.08 |      | 150.0 |         |
|           |                                                | Z | 2.16 | 66.27 | 13.86 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.41 | 66.68 | 13.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 0.96 | 62.51 | 9.67  |      | 150.0 |         |
|           |                                                | Z | 1.12 | 64.29 | 11.10 |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 3.10 | 71.59 | 14.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.79 | 64.92 | 10.83 |      | 150.0 |         |
|           |                                                | Z | 2.43 | 68.48 | 12.61 |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 4.18 | 75.64 | 16.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.03 | 66.39 | 11.70 |      | 150.0 |         |
|           |                                                | Z | 3.22 | 71.87 | 14.21 |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.98 | 67.64 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.71 | 66.45 | 15.11 |      | 150.0 |         |
|           |                                            | Z | 2.84 | 67.21 | 15.66 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.10 | 67.58 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.84 | 66.51 | 15.21 |      | 150.0 |         |
|           |                                            | Z | 2.97 | 67.23 | 15.73 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 9.77 | 82.83 | 23.21 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 7.53 | 78.32 | 21.06 |      | 65.0  |         |
|           |                                            | Z | 8.80 | 81.58 | 22.62 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 7.95 | 77.63 | 21.74 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.62 | 74.40 | 19.97 |      | 65.0  |         |
|           |                                            | Z | 7.17 | 76.26 | 20.98 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 8.37 | 78.52 | 22.46 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 7.08 | 75.55 | 20.84 |      | 65.0  |         |
|           |                                            | Z | 7.65 | 77.37 | 21.81 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.37 | 69.54 | 16.64 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.00 | 67.32 | 15.10 |      | 150.0 |         |
|           |                                            | Z | 2.18 | 68.65 | 16.05 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.69 | 68.33 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.39 | 66.95 | 15.18 |      | 150.0 |         |
|           |                                            | Z | 2.55 | 67.99 | 15.90 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.96 | 69.34 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.55 | 66.39 | 13.86 |      | 150.0 |         |
|           |                                            | Z | 1.74 | 68.16 | 15.11 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.20 | 67.66 | 14.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.81 | 65.37 | 12.85 |      | 150.0 |         |
|           |                                            | Z | 1.99 | 66.75 | 13.83 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.84 | 68.47 | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.55 | 67.23 | 15.41 |      | 150.0 |         |
|           |                                            | Z | 2.71 | 68.22 | 16.08 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.32 | 68.16 | 15.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.90 | 65.77 | 13.13 |      | 150.0 |         |
|           |                                            | Z | 2.10 | 67.23 | 14.13 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.81 | 68.83 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.51 | 67.36 | 15.34 |      | 150.0 |         |
|           |                                            | Z | 2.66 | 68.30 | 16.03 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.99 | 67.51 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.74 | 66.42 | 15.12 |      | 150.0 |         |
|           |                                            | Z | 2.86 | 67.17 | 15.66 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.10 | 67.61 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.85 | 66.59 | 15.25 |      | 150.0 |         |
|           |                                            | Z | 2.97 | 67.33 | 15.78 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.94 | 70.56 | 19.62 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.62 | 69.51 | 18.92 |      | 150.0 |         |
|           |                                            | Z | 3.88 | 71.03 | 19.81 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 5.13 | 74.04 | 20.28 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.50 | 72.11 | 19.19 |      | 150.0 |         |
|           |                                            | Z | 5.19 | 75.12 | 20.64 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 5.71  | 76.34  | 21.57 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.08  | 74.75  | 20.72 |      | 150.0 |         |
|           |                                            | Z | 5.99  | 78.20  | 22.27 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.58  | 71.57  | 20.04 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.13  | 69.16  | 18.69 |      | 150.0 |         |
|           |                                            | Z | 3.49  | 71.65  | 20.05 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 5.52  | 78.92  | 22.69 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.42  | 74.92  | 20.91 |      | 150.0 |         |
|           |                                            | Z | 5.83  | 80.69  | 23.36 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 4.37  | 73.98  | 19.76 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.54  | 70.32  | 17.92 |      | 150.0 |         |
|           |                                            | Z | 4.35  | 74.54  | 19.90 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 31.66 | 113.22 | 34.95 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 9.38  | 89.05  | 26.85 |      | 65.0  |         |
|           |                                            | Z | 27.88 | 112.00 | 34.58 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 63.77 | 119.68 | 34.61 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 15.75 | 94.23  | 26.84 |      | 65.0  |         |
|           |                                            | Z | 78.46 | 124.11 | 35.52 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 43.93 | 111.32 | 31.85 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 9.41  | 84.90  | 23.38 |      | 65.0  |         |
|           |                                            | Z | 45.51 | 112.81 | 32.05 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 3.52  | 71.19  | 19.77 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.08  | 68.79  | 18.41 |      | 150.0 |         |
|           |                                            | Z | 3.43  | 71.23  | 19.76 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 5.53  | 78.94  | 22.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.42  | 74.94  | 20.92 |      | 150.0 |         |
|           |                                            | Z | 5.84  | 80.72  | 23.37 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.56  | 71.37  | 19.87 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.11  | 68.97  | 18.52 |      | 150.0 |         |
|           |                                            | Z | 3.47  | 71.42  | 19.87 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 5.45  | 78.64  | 22.56 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.37  | 74.68  | 20.78 |      | 150.0 |         |
|           |                                            | Z | 5.75  | 80.40  | 23.22 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 4.88  | 76.27  | 21.07 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.91  | 72.36  | 19.22 |      | 150.0 |         |
|           |                                            | Z | 5.00  | 77.35  | 21.45 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 4.35  | 73.89  | 19.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.53  | 70.24  | 17.87 |      | 150.0 |         |
|           |                                            | Z | 4.34  | 74.43  | 19.84 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.55  | 71.35  | 19.86 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.11  | 68.95  | 18.51 |      | 150.0 |         |
|           |                                            | Z | 3.46  | 71.40  | 19.86 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 5.44  | 78.62  | 22.55 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.36  | 74.65  | 20.76 |      | 150.0 |         |
|           |                                            | Z | 5.74  | 80.37  | 23.20 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 4.34  | 73.86  | 19.69 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.53  | 70.21  | 17.86 |      | 150.0 |         |
|           |                                            | Z | 4.33  | 74.40  | 19.83 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.57 | 71.40 | 19.89 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.12 | 69.00 | 18.54 |      | 150.0 |         |
|           |                                               | Z | 3.48 | 71.45 | 19.88 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 5.46 | 78.70 | 22.58 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.38 | 74.73 | 20.80 |      | 150.0 |         |
|           |                                               | Z | 5.78 | 80.46 | 23.25 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 4.37 | 73.93 | 19.73 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.54 | 70.28 | 17.89 |      | 150.0 |         |
|           |                                               | Z | 4.35 | 74.48 | 19.86 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.57 | 71.45 | 19.95 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.13 | 69.05 | 18.60 |      | 150.0 |         |
|           |                                               | Z | 3.49 | 71.53 | 19.95 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 5.68 | 79.51 | 23.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.55 | 75.50 | 21.23 |      | 150.0 |         |
|           |                                               | Z | 6.06 | 81.46 | 23.73 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 4.48 | 74.44 | 20.02 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.62 | 70.71 | 18.18 |      | 150.0 |         |
|           |                                               | Z | 4.49 | 75.08 | 20.20 |      | 150.0 |         |
| 10193-CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.58 | 66.61 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.39 | 66.18 | 15.79 |      | 150.0 |         |
|           |                                               | Z | 4.47 | 66.55 | 16.02 |      | 150.0 |         |
| 10194-CAC | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.76 | 66.95 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.56 | 66.50 | 15.92 |      | 150.0 |         |
|           |                                               | Z | 4.64 | 66.85 | 16.15 |      | 150.0 |         |
| 10195-CAC | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.80 | 66.97 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.60 | 66.53 | 15.94 |      | 150.0 |         |
|           |                                               | Z | 4.68 | 66.88 | 16.17 |      | 150.0 |         |
| 10196-CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.59 | 66.69 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.40 | 66.24 | 15.81 |      | 150.0 |         |
|           |                                               | Z | 4.47 | 66.60 | 16.04 |      | 150.0 |         |
| 10197-CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.78 | 66.97 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.58 | 66.52 | 15.93 |      | 150.0 |         |
|           |                                               | Z | 4.65 | 66.87 | 16.16 |      | 150.0 |         |
| 10198-CAC | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.81 | 66.99 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.61 | 66.55 | 15.95 |      | 150.0 |         |
|           |                                               | Z | 4.68 | 66.90 | 16.18 |      | 150.0 |         |
| 10219-CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.54 | 66.70 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.34 | 66.24 | 15.76 |      | 150.0 |         |
|           |                                               | Z | 4.42 | 66.61 | 16.00 |      | 150.0 |         |
| 10220-CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.77 | 66.95 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.57 | 66.49 | 15.92 |      | 150.0 |         |
|           |                                               | Z | 4.64 | 66.84 | 16.15 |      | 150.0 |         |
| 10221-CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.81 | 66.92 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.62 | 66.48 | 15.94 |      | 150.0 |         |
|           |                                               | Z | 4.69 | 66.83 | 16.16 |      | 150.0 |         |
| 10222-CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.12 | 67.14 | 16.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.95 | 66.68 | 16.07 |      | 150.0 |         |
|           |                                               | Z | 5.01 | 66.99 | 16.27 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAC | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.44  | 67.33  | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.25  | 66.92  | 16.22 |      | 150.0 |         |
|           |                                           | Z | 5.31  | 67.18  | 16.39 |      | 150.0 |         |
| 10224-CAC | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.17  | 67.24  | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 4.99  | 66.79  | 16.05 |      | 150.0 |         |
|           |                                           | Z | 5.06  | 67.10  | 16.25 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.86  | 66.19  | 15.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.63  | 65.32  | 14.64 |      | 150.0 |         |
|           |                                           | Z | 2.74  | 65.98  | 15.11 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 71.24 | 121.88 | 35.27 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 16.91 | 95.59  | 27.35 |      | 65.0  |         |
|           |                                           | Z | 92.42 | 127.27 | 36.40 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 50.30 | 113.83 | 32.60 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.15 | 92.51  | 25.87 |      | 65.0  |         |
|           |                                           | Z | 68.30 | 119.77 | 33.89 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 55.50 | 124.73 | 38.12 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 14.70 | 97.88  | 29.79 |      | 65.0  |         |
|           |                                           | Z | 38.30 | 118.72 | 36.53 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 63.93 | 119.72 | 34.63 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.85 | 94.32  | 26.88 |      | 65.0  |         |
|           |                                           | Z | 79.00 | 124.23 | 35.56 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 46.15 | 112.18 | 32.09 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 14.25 | 91.41  | 25.45 |      | 65.0  |         |
|           |                                           | Z | 59.72 | 117.30 | 33.19 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 50.49 | 122.68 | 37.51 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 13.80 | 96.56  | 29.30 |      | 65.0  |         |
|           |                                           | Z | 34.60 | 116.55 | 35.86 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 64.00 | 119.75 | 34.64 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.83 | 94.31  | 26.87 |      | 65.0  |         |
|           |                                           | Z | 79.03 | 124.24 | 35.57 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 46.17 | 112.21 | 32.10 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 14.23 | 91.39  | 25.44 |      | 65.0  |         |
|           |                                           | Z | 59.65 | 117.30 | 33.19 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 46.07 | 120.60 | 36.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 13.04 | 95.31  | 28.79 |      | 65.0  |         |
|           |                                           | Z | 31.63 | 114.51 | 35.18 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 64.33 | 119.85 | 34.67 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.85 | 94.34  | 26.88 |      | 65.0  |         |
|           |                                           | Z | 79.51 | 124.37 | 35.60 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 46.79 | 112.40 | 32.14 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 14.34 | 91.49  | 25.47 |      | 65.0  |         |
|           |                                           | Z | 60.62 | 117.54 | 33.24 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 51.22 | 123.00 | 37.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 13.84 | 96.65  | 29.32 |      | 65.0  |         |
|           |                                           | Z | 34.93 | 116.77 | 35.92 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 64.07 | 119.77 | 34.64 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 15.80 | 94.29  | 26.87 |      | 65.0  |         |
|           |                                           | Z | 79.05 | 124.26 | 35.57 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 46.17 | 112.22 | 32.10 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 14.20 | 91.37  | 25.44 |      | 65.0 |         |
|           |                                            | Z | 59.56 | 117.29 | 33.19 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 51.02 | 122.93 | 37.57 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 13.80 | 96.60  | 29.31 |      | 65.0 |         |
|           |                                            | Z | 34.81 | 116.71 | 35.90 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 12.30 | 87.67  | 27.92 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.73  | 82.62  | 25.44 |      | 65.0 |         |
|           |                                            | Z | 11.99 | 88.11  | 27.90 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 12.00 | 87.14  | 27.64 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.11  | 78.88  | 23.86 |      | 65.0 |         |
|           |                                            | Z | 10.85 | 86.00  | 27.03 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 9.42  | 83.90  | 27.37 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.64  | 76.16  | 23.58 |      | 65.0 |         |
|           |                                            | Z | 8.16  | 81.56  | 26.26 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 10.44 | 82.93  | 21.79 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.79  | 75.71  | 18.18 |      | 65.0 |         |
|           |                                            | Z | 9.21  | 80.92  | 20.37 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 10.08 | 82.11  | 21.44 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.62  | 75.11  | 17.89 |      | 65.0 |         |
|           |                                            | Z | 8.78  | 79.92  | 19.95 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 11.42 | 87.52  | 23.40 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.98  | 76.83  | 18.54 |      | 65.0 |         |
|           |                                            | Z | 8.49  | 82.82  | 21.13 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 7.75  | 79.05  | 20.99 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.69  | 73.82  | 18.06 |      | 65.0 |         |
|           |                                            | Z | 6.60  | 76.66  | 19.49 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 7.60  | 78.24  | 20.65 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 5.66  | 73.30  | 17.84 |      | 65.0 |         |
|           |                                            | Z | 6.46  | 75.86  | 19.15 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 12.84 | 89.97  | 24.97 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.45  | 80.54  | 20.84 |      | 65.0 |         |
|           |                                            | Z | 10.45 | 86.75  | 23.43 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 8.59  | 80.97  | 23.10 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.88  | 77.02  | 21.00 |      | 65.0 |         |
|           |                                            | Z | 7.71  | 79.50  | 22.24 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 7.91  | 78.24  | 21.71 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.42  | 74.62  | 19.67 |      | 65.0 |         |
|           |                                            | Z | 7.08  | 76.75  | 20.80 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 11.43 | 87.56  | 24.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.91  | 81.04  | 22.00 |      | 65.0 |         |
|           |                                            | Z | 9.97  | 85.71  | 24.05 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 7.70  | 76.94  | 21.48 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.48  | 73.90  | 19.75 |      | 65.0 |         |
|           |                                            | Z | 7.00  | 75.70  | 20.74 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 8.12  | 77.80  | 22.14 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.90  | 74.95  | 20.52 |      | 65.0 |         |
|           |                                            | Z | 7.44  | 76.71  | 21.47 |      | 65.0 |         |

|           |                                             |   |       |       |       |      |      |         |
|-----------|---------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 9.27  | 82.17 | 23.21 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.25  | 77.88 | 21.10 |      | 65.0 |         |
|           |                                             | Z | 8.37  | 80.94 | 22.58 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 8.78  | 79.64 | 19.68 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.26  | 71.61 | 15.48 |      | 65.0 |         |
|           |                                             | Z | 6.86  | 75.83 | 17.39 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 8.34  | 78.50 | 19.16 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 5.12  | 70.92 | 15.09 |      | 65.0 |         |
|           |                                             | Z | 6.46  | 74.63 | 16.81 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 8.92  | 82.95 | 21.11 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 4.50  | 72.26 | 15.88 |      | 65.0 |         |
|           |                                             | Z | 6.02  | 76.94 | 18.10 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 8.07  | 79.69 | 21.71 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.15  | 75.00 | 19.12 |      | 65.0 |         |
|           |                                             | Z | 7.04  | 77.72 | 20.48 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 8.02  | 79.27 | 21.57 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.17  | 74.75 | 19.03 |      | 65.0 |         |
|           |                                             | Z | 7.00  | 77.32 | 20.33 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 11.37 | 87.81 | 24.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.29  | 80.02 | 21.07 |      | 65.0 |         |
|           |                                             | Z | 9.57  | 85.23 | 23.32 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 8.58  | 80.91 | 23.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.86  | 76.94 | 20.95 |      | 65.0 |         |
|           |                                             | Z | 7.69  | 79.43 | 22.19 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 7.90  | 78.22 | 21.71 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.41  | 74.61 | 19.67 |      | 65.0 |         |
|           |                                             | Z | 7.06  | 76.73 | 20.79 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 11.30 | 87.33 | 24.83 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.82  | 80.82 | 21.90 |      | 65.0 |         |
|           |                                             | Z | 9.85  | 85.46 | 23.94 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 7.95  | 77.63 | 21.74 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.61  | 74.40 | 19.97 |      | 65.0 |         |
|           |                                             | Z | 7.17  | 76.26 | 20.99 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 8.37  | 78.51 | 22.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.07  | 75.53 | 20.83 |      | 65.0 |         |
|           |                                             | Z | 7.65  | 77.35 | 21.80 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 9.74  | 82.78 | 23.19 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.51  | 78.28 | 21.05 |      | 65.0 |         |
|           |                                             | Z | 8.78  | 81.53 | 22.59 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 8.35  | 76.91 | 21.81 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.25  | 74.40 | 20.43 |      | 65.0 |         |
|           |                                             | Z | 7.70  | 75.89 | 21.26 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 8.25  | 76.41 | 21.67 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.21  | 74.02 | 20.34 |      | 65.0 |         |
|           |                                             | Z | 7.64  | 75.43 | 21.12 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 8.73  | 79.00 | 21.90 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.29  | 75.91 | 20.32 |      | 65.0 |         |
|           |                                             | Z | 8.05  | 78.09 | 21.45 |      | 65.0 |         |

|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.62  | 66.51 | 15.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.40  | 65.49 | 14.41 |      | 150.0 |         |
|           |                                                                    | Z | 2.53  | 66.32 | 15.01 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.66  | 68.37 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.36  | 65.72 | 13.86 |      | 150.0 |         |
|           |                                                                    | Z | 1.53  | 67.34 | 15.09 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 4.01  | 66.28 | 11.28 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 3.27  | 63.73 | 9.40  |      | 50.0  |         |
|           |                                                                    | Z | 3.24  | 64.17 | 9.56  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 10.72 | 83.49 | 21.29 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.37  | 71.76 | 15.68 |      | 50.0  |         |
|           |                                                                    | Z | 6.95  | 76.49 | 17.84 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 10.91 | 83.69 | 21.40 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.48  | 71.97 | 15.81 |      | 50.0  |         |
|           |                                                                    | Z | 7.09  | 76.71 | 17.97 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.63  | 69.96 | 14.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.04  | 64.71 | 11.14 |      | 150.0 |         |
|           |                                                                    | Z | 1.29  | 67.48 | 13.09 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.90  | 66.75 | 13.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.58  | 62.29 | 9.42  |      | 150.0 |         |
|           |                                                                    | Z | 0.74  | 64.70 | 11.54 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 1.21  | 71.81 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.65  | 64.19 | 10.77 |      | 150.0 |         |
|           |                                                                    | Z | 0.93  | 68.53 | 13.82 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 1.97  | 79.16 | 19.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.85  | 67.30 | 12.80 |      | 150.0 |         |
|           |                                                                    | Z | 1.50  | 75.07 | 17.10 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 12.27 | 88.66 | 25.82 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 8.75  | 80.85 | 21.80 |      | 50.0  |         |
|           |                                                                    | Z | 11.52 | 87.13 | 24.56 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.86  | 70.12 | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.47  | 68.04 | 15.44 |      | 150.0 |         |
|           |                                                                    | Z | 2.66  | 69.28 | 16.30 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.72  | 68.67 | 14.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.25  | 64.84 | 11.99 |      | 150.0 |         |
|           |                                                                    | Z | 1.45  | 66.83 | 13.43 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 3.76  | 73.98 | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.44  | 68.23 | 13.44 |      | 150.0 |         |
|           |                                                                    | Z | 3.56  | 73.19 | 15.68 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 2.57  | 67.80 | 13.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.89  | 64.33 | 10.83 |      | 150.0 |         |
|           |                                                                    | Z | 2.25  | 66.42 | 11.95 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 5.34  | 67.21 | 18.36 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.92  | 66.04 | 17.49 |      | 50.0  |         |
|           |                                                                    | Z | 5.00  | 66.39 | 17.73 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.75  | 67.51 | 18.91 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.39  | 66.46 | 18.07 |      | 50.0  |         |
|           |                                                                    | Z | 5.48  | 66.98 | 18.44 |      | 50.0  |         |

|           |                                                                     |   |       |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.55  | 67.40 | 18.88 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 5.18  | 66.25 | 17.96 |       | 50.0  |         |
|           |                                                                     | Z | 5.26  | 66.77 | 18.34 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.27  | 66.95 | 18.19 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.92  | 65.91 | 17.36 |       | 50.0  |         |
|           |                                                                     | Z | 5.02  | 66.46 | 17.74 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 6.02  | 73.68 | 22.76 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.62  | 72.10 | 21.29 |       | 35.0  |         |
|           |                                                                     | Z | 5.50  | 71.99 | 21.48 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 5.71  | 70.24 | 21.22 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.41  | 69.23 | 20.17 |       | 35.0  |         |
|           |                                                                     | Z | 5.36  | 69.27 | 20.36 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 5.75  | 70.97 | 21.43 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.41  | 69.78 | 20.28 |       | 35.0  |         |
|           |                                                                     | Z | 5.34  | 69.76 | 20.46 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 5.78  | 71.40 | 21.67 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.44  | 70.16 | 20.49 |       | 35.0  |         |
|           |                                                                     | Z | 5.37  | 70.16 | 20.68 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 5.81  | 70.57 | 21.41 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.47  | 69.45 | 20.31 |       | 35.0  |         |
|           |                                                                     | Z | 5.42  | 69.49 | 20.51 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 5.71  | 70.51 | 21.28 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 5.40  | 69.46 | 20.21 |       | 35.0  |         |
|           |                                                                     | Z | 5.35  | 69.48 | 20.40 |       | 35.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.22  | 69.41 | 16.42 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 2.80  | 67.40 | 15.19 |       | 150.0 |         |
|           |                                                                     | Z | 3.01  | 68.61 | 15.98 |       | 150.0 |         |
| 10313-AAA | IDEN 1:3                                                            | X | 8.72  | 81.59 | 19.46 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 4.16  | 71.30 | 14.92 |       | 70.0  |         |
|           |                                                                     | Z | 6.60  | 78.28 | 18.09 |       | 70.0  |         |
| 10314-AAA | IDEN 1:6                                                            | X | 16.37 | 95.12 | 26.54 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 5.55  | 77.14 | 19.77 |       | 30.0  |         |
|           |                                                                     | Z | 11.38 | 90.04 | 24.85 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.13  | 64.52 | 15.64 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.98  | 62.76 | 14.03 |       | 150.0 |         |
|           |                                                                     | Z | 1.08  | 63.88 | 15.03 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.66  | 66.76 | 16.37 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.47  | 66.30 | 15.96 |       | 150.0 |         |
|           |                                                                     | Z | 4.54  | 66.67 | 16.21 |       | 150.0 |         |
| 10317-AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.66  | 66.76 | 16.37 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.47  | 66.30 | 15.96 |       | 150.0 |         |
|           |                                                                     | Z | 4.54  | 66.67 | 16.21 |       | 150.0 |         |
| 10400-AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.76  | 67.01 | 16.29 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.55  | 66.53 | 15.90 |       | 150.0 |         |
|           |                                                                     | Z | 4.62  | 66.89 | 16.13 |       | 150.0 |         |
| 10401-AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.41  | 67.10 | 16.39 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.28  | 66.83 | 16.15 |       | 150.0 |         |
|           |                                                                     | Z | 5.32  | 67.06 | 16.30 |       | 150.0 |         |

|           |                                                                                 |   |        |        |       |      |       |         |
|-----------|---------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                             | X | 5.69   | 67.55  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.51   | 67.10  | 16.14 |      | 150.0 |         |
|           |                                                                                 | Z | 5.58   | 67.39  | 16.32 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | X | 1.63   | 69.96  | 14.95 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.04   | 64.71  | 11.14 |      | 115.0 |         |
|           |                                                                                 | Z | 1.29   | 67.48  | 13.09 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | X | 1.63   | 69.96  | 14.95 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                 | Y | 1.04   | 64.71  | 11.14 |      | 115.0 |         |
|           |                                                                                 | Z | 1.29   | 67.48  | 13.09 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | X | 100.00 | 121.60 | 30.91 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                 | Y | 14.90  | 94.78  | 23.76 |      | 100.0 |         |
|           |                                                                                 | Z | 100.00 | 118.00 | 28.98 |      | 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 | 120.72 | 30.61 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                 | Y | 52.68  | 109.61 | 27.00 |      | 80.0  |         |
|           |                                                                                 | Z | 100.00 | 120.47 | 30.13 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                       | X | 1.00   | 63.11  | 14.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 0.88   | 61.69  | 13.34 |      | 150.0 |         |
|           |                                                                                 | Z | 0.97   | 62.68  | 14.28 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                   | X | 4.58   | 66.65  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.40   | 66.22  | 15.86 |      | 150.0 |         |
|           |                                                                                 | Z | 4.47   | 66.58  | 16.09 |      | 150.0 |         |
| 10417-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                       | X | 4.58   | 66.65  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.40   | 66.22  | 15.86 |      | 150.0 |         |
|           |                                                                                 | Z | 4.47   | 66.58  | 16.09 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)   | X | 4.57   | 66.80  | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.38   | 66.37  | 15.87 |      | 150.0 |         |
|           |                                                                                 | Z | 4.46   | 66.75  | 16.11 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)  | X | 4.59   | 66.75  | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.41   | 66.32  | 15.88 |      | 150.0 |         |
|           |                                                                                 | Z | 4.48   | 66.69  | 16.11 |      | 150.0 |         |
| 10422-AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | X | 4.71   | 66.75  | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.52   | 66.34  | 15.90 |      | 150.0 |         |
|           |                                                                                 | Z | 4.60   | 66.69  | 16.13 |      | 150.0 |         |
| 10423-AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | X | 4.89   | 67.10  | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.69   | 66.65  | 16.02 |      | 150.0 |         |
|           |                                                                                 | Z | 4.76   | 67.00  | 16.24 |      | 150.0 |         |
| 10424-AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | X | 4.81   | 67.04  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 4.61   | 66.59  | 15.99 |      | 150.0 |         |
|           |                                                                                 | Z | 4.68   | 66.95  | 16.21 |      | 150.0 |         |
| 10425-AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | X | 5.39   | 67.34  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.22   | 66.97  | 16.22 |      | 150.0 |         |
|           |                                                                                 | Z | 5.27   | 67.22  | 16.38 |      | 150.0 |         |
| 10426-AAB | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | X | 5.39   | 67.34  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                 | Y | 5.23   | 67.01  | 16.23 |      | 150.0 |         |
|           |                                                                                 | Z | 5.28   | 67.26  | 16.39 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.41   | 67.34  | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.24   | 66.97  | 16.22 |      | 150.0 |         |
|           |                                                                | Z | 5.29   | 67.23  | 16.38 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.30   | 70.55  | 18.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.12   | 70.52  | 17.85 |      | 150.0 |         |
|           |                                                                | Z | 4.23   | 71.03  | 18.16 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.29   | 67.21  | 16.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.05   | 66.67  | 15.77 |      | 150.0 |         |
|           |                                                                | Z | 4.14   | 67.11  | 16.06 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.58   | 67.09  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.37   | 66.61  | 15.90 |      | 150.0 |         |
|           |                                                                | Z | 4.44   | 66.99  | 16.15 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.82   | 67.08  | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.62   | 66.63  | 16.01 |      | 150.0 |         |
|           |                                                                | Z | 4.69   | 66.98  | 16.23 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.41   | 71.40  | 18.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.20   | 71.25  | 17.73 |      | 150.0 |         |
|           |                                                                | Z | 4.35   | 71.94  | 18.12 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 120.54 | 30.53 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 46.85  | 107.92 | 26.54 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 120.26 | 30.03 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.60   | 67.27  | 15.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.31   | 66.43  | 14.88 |      | 150.0 |         |
|           |                                                                | Z | 3.42   | 67.06  | 15.30 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.12   | 66.99  | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.90   | 66.44  | 15.61 |      | 150.0 |         |
|           |                                                                | Z | 3.98   | 66.89  | 15.92 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.38   | 66.92  | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.18   | 66.42  | 15.78 |      | 150.0 |         |
|           |                                                                | Z | 4.26   | 66.82  | 16.05 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.57   | 66.85  | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.38   | 66.38  | 15.84 |      | 150.0 |         |
|           |                                                                | Z | 4.46   | 66.75  | 16.09 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.51   | 67.52  | 15.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.17   | 66.45  | 14.38 |      | 150.0 |         |
|           |                                                                | Z | 3.30   | 67.16  | 14.86 |      | 150.0 |         |
| 10456-AAB | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.24   | 67.91  | 16.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.09   | 67.55  | 16.40 |      | 150.0 |         |
|           |                                                                | Z | 6.14   | 67.78  | 16.54 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.80   | 65.28  | 15.95 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.67   | 64.86  | 15.55 |      | 150.0 |         |
|           |                                                                | Z | 3.74   | 65.24  | 15.80 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 4.04   | 70.60  | 17.63 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.78   | 70.18  | 16.90 |      | 150.0 |         |
|           |                                                                | Z | 3.96   | 71.06  | 17.41 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 5.10   | 67.92  | 18.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.04   | 68.55  | 18.14 |      | 150.0 |         |
|           |                                                                | Z | 5.06   | 68.63  | 18.14 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.93   | 69.01  | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.67   | 64.78  | 13.34 |      | 150.0 |         |
|           |                                                                   | Z | 0.83   | 67.12  | 15.33 |      | 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 | 125.37 | 32.80 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.09 | 30.00 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 125.85 | 32.64 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 109.15 | 25.16 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 2.88   | 68.96  | 12.87 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.54 | 23.60 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 105.92 | 23.62 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.89   | 64.22  | 10.46 |      | 80.0  |         |
|           |                                                                   | Z | 16.73  | 86.00  | 17.87 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 123.34 | 31.70 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 117.53 | 28.68 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.49 | 31.39 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 108.60 | 24.90 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 2.49   | 67.43  | 12.20 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 105.93 | 23.31 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 99.93  | 105.40 | 23.38 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.76   | 63.52  | 10.09 |      | 80.0  |         |
|           |                                                                   | Z | 7.76   | 78.49  | 15.68 |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 123.57 | 31.81 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 117.78 | 28.79 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.77 | 31.51 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 108.77 | 24.97 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 2.58   | 67.81  | 12.37 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.13 | 23.39 |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 105.42 | 23.38 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.76   | 63.54  | 10.10 |      | 80.0  |         |
|           |                                                                   | Z | 7.98   | 78.76  | 15.76 |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 123.60 | 31.81 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 117.78 | 28.78 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.80 | 31.51 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 108.72 | 24.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 2.56   | 67.74  | 12.33 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.06 | 23.36 |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 99.99  | 105.37 | 23.35 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.76   | 63.49  | 10.07 |      | 80.0  |         |
|           |                                                                   | Z | 7.85   | 78.59  | 15.70 |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 123.57 | 31.80 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 117.75 | 28.77 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 123.76 | 31.50 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 108.72 | 24.94 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 2.55   | 67.70  | 12.31 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.07 | 23.36 |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 105.38 | 23.36 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 1.75   | 63.48  | 10.06 |      | 80.0  |         |
|           |                                                                   | Z | 7.74   | 78.46  | 15.66 |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 108.56 | 24.86 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.48   | 67.39  | 12.17 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 105.88 | 23.27 |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 99.93  | 105.32 | 23.33 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 1.75   | 63.43  | 10.04 |      | 80.0 |         |
|           |                                                                     | Z | 7.52   | 78.16  | 15.56 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 24.99  | 103.36 | 28.63 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 10.71  | 88.94  | 23.39 |      | 80.0 |         |
|           |                                                                     | Z | 51.18  | 114.04 | 30.82 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 27.08  | 97.74  | 25.20 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.39   | 78.93  | 18.50 |      | 80.0 |         |
|           |                                                                     | Z | 49.11  | 104.52 | 26.12 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 20.64  | 93.00  | 23.51 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.77   | 75.21  | 16.85 |      | 80.0 |         |
|           |                                                                     | Z | 27.39  | 95.68  | 23.40 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.61   | 81.76  | 20.77 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 2.69   | 68.93  | 14.80 |      | 80.0 |         |
|           |                                                                     | Z | 4.28   | 75.68  | 17.93 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 11.30  | 85.70  | 21.82 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.71   | 72.93  | 16.32 |      | 80.0 |         |
|           |                                                                     | Z | 10.22  | 83.74  | 20.39 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 9.81   | 83.50  | 21.12 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.39   | 71.84  | 15.90 |      | 80.0 |         |
|           |                                                                     | Z | 8.50   | 81.12  | 19.54 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.41   | 81.73  | 21.60 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.29   | 71.60  | 16.89 |      | 80.0 |         |
|           |                                                                     | Z | 4.73   | 77.46  | 19.61 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.82   | 74.22  | 18.45 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.14   | 68.00  | 14.98 |      | 80.0 |         |
|           |                                                                     | Z | 3.94   | 71.61  | 16.84 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.72   | 73.57  | 18.19 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.14   | 67.70  | 14.85 |      | 80.0 |         |
|           |                                                                     | Z | 3.89   | 71.06  | 16.60 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.77   | 78.61  | 21.05 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.74   | 71.84  | 17.80 |      | 80.0 |         |
|           |                                                                     | Z | 4.64   | 75.66  | 19.71 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.63   | 72.48  | 18.80 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.63   | 68.80  | 16.66 |      | 80.0 |         |
|           |                                                                     | Z | 4.11   | 71.03  | 17.91 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.68   | 72.08  | 18.66 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.73   | 68.67  | 16.64 |      | 80.0 |         |
|           |                                                                     | Z | 4.18   | 70.76  | 17.81 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 5.40   | 75.41  | 19.95 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.98   | 70.66  | 17.54 |      | 80.0 |         |
|           |                                                                     | Z | 4.61   | 73.35  | 18.98 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.79   | 71.03  | 18.46 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.01   | 68.31  | 16.84 |      | 80.0 |         |
|           |                                                                     | Z | 4.35   | 69.91  | 17.78 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.84 | 70.78 | 18.38 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.07 | 68.21 | 16.82 |      | 80.0 |         |
|           |                                                                      | Z | 4.41 | 69.73 | 17.72 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 6.18 | 77.69 | 20.63 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.27 | 71.91 | 17.89 |      | 80.0 |         |
|           |                                                                      | Z | 5.10 | 75.11 | 19.51 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.89 | 71.61 | 18.71 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.04 | 68.68 | 17.03 |      | 80.0 |         |
|           |                                                                      | Z | 4.41 | 70.35 | 18.00 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.91 | 71.12 | 18.55 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.12 | 68.46 | 16.98 |      | 80.0 |         |
|           |                                                                      | Z | 4.46 | 69.99 | 17.89 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 5.03 | 77.46 | 18.40 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.85 | 64.41 | 11.81 |      | 80.0 |         |
|           |                                                                      | Z | 2.83 | 69.89 | 14.64 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.04 | 68.00 | 13.73 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.58 | 60.64 | 9.01  |      | 80.0 |         |
|           |                                                                      | Z | 1.87 | 62.71 | 10.38 |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.89 | 67.10 | 13.20 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 1.55 | 60.27 | 8.69  |      | 80.0 |         |
|           |                                                                      | Z | 1.80 | 62.06 | 9.91  |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.85 | 79.67 | 21.13 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.43 | 71.51 | 17.20 |      | 80.0 |         |
|           |                                                                      | Z | 4.56 | 76.29 | 19.51 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.71 | 73.38 | 18.53 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.37 | 68.44 | 15.69 |      | 80.0 |         |
|           |                                                                      | Z | 4.04 | 71.45 | 17.28 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.74 | 73.07 | 18.35 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.42 | 68.30 | 15.58 |      | 80.0 |         |
|           |                                                                      | Z | 4.07 | 71.20 | 17.12 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 5.68 | 78.36 | 20.94 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.69 | 71.63 | 17.70 |      | 80.0 |         |
|           |                                                                      | Z | 4.57 | 75.41 | 19.60 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.61 | 72.37 | 18.74 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.61 | 68.70 | 16.60 |      | 80.0 |         |
|           |                                                                      | Z | 4.08 | 70.92 | 17.85 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.65 | 71.98 | 18.60 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.70 | 68.57 | 16.58 |      | 80.0 |         |
|           |                                                                      | Z | 4.15 | 70.65 | 17.75 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 6.12 | 77.51 | 20.55 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.23 | 71.76 | 17.81 |      | 80.0 |         |
|           |                                                                      | Z | 5.05 | 74.93 | 19.43 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 4.87 | 71.54 | 18.67 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.03 | 68.61 | 16.98 |      | 80.0 |         |
|           |                                                                      | Z | 4.39 | 70.28 | 17.95 |      | 80.0 |         |

|           |                                                                     |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.89 | 71.05 | 18.50 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.11 | 68.38 | 16.94 |      | 80.0  |         |
|           |                                                                     | Z | 4.44 | 69.91 | 17.84 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 5.96 | 74.88 | 19.56 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.57 | 70.72 | 17.48 |      | 80.0  |         |
|           |                                                                     | Z | 5.19 | 73.07 | 18.73 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.27 | 70.82 | 18.44 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.52 | 68.43 | 17.07 |      | 80.0  |         |
|           |                                                                     | Z | 4.83 | 69.75 | 17.85 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.27 | 70.43 | 18.33 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.58 | 68.22 | 17.03 |      | 80.0  |         |
|           |                                                                     | Z | 4.86 | 69.45 | 17.77 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 6.66 | 77.38 | 20.34 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.73 | 71.97 | 17.80 |      | 80.0  |         |
|           |                                                                     | Z | 5.58 | 74.94 | 19.30 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.21 | 71.34 | 18.64 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.41 | 68.67 | 17.14 |      | 80.0  |         |
|           |                                                                     | Z | 4.74 | 70.10 | 17.99 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.16 | 70.71 | 18.44 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 4.43 | 68.30 | 17.06 |      | 80.0  |         |
|           |                                                                     | Z | 4.73 | 69.61 | 17.84 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 0.96 | 63.31 | 14.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.84 | 61.78 | 13.32 |      | 150.0 |         |
|           |                                                                     | Z | 0.94 | 62.83 | 14.31 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 0.65 | 72.36 | 18.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.38 | 65.35 | 12.87 |      | 150.0 |         |
|           |                                                                     | Z | 0.52 | 68.34 | 15.90 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 0.82 | 65.48 | 15.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.66 | 62.90 | 13.28 |      | 150.0 |         |
|           |                                                                     | Z | 0.77 | 64.43 | 14.74 |      | 150.0 |         |
| 10518-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.57 | 66.72 | 16.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.39 | 66.29 | 15.83 |      | 150.0 |         |
|           |                                                                     | Z | 4.46 | 66.66 | 16.07 |      | 150.0 |         |
| 10519-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.77 | 66.98 | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.57 | 66.53 | 15.96 |      | 150.0 |         |
|           |                                                                     | Z | 4.64 | 66.88 | 16.18 |      | 150.0 |         |
| 10520-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.62 | 66.95 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.42 | 66.47 | 15.86 |      | 150.0 |         |
|           |                                                                     | Z | 4.49 | 66.83 | 16.10 |      | 150.0 |         |
| 10521-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.56 | 66.96 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.35 | 66.45 | 15.84 |      | 150.0 |         |
|           |                                                                     | Z | 4.43 | 66.82 | 16.08 |      | 150.0 |         |
| 10522-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.61 | 67.00 | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.41 | 66.56 | 15.94 |      | 150.0 |         |
|           |                                                                     | Z | 4.49 | 66.93 | 16.18 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.49 | 66.88 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 66.41 | 15.77 |      | 150.0 |         |
|           |                                                            | Z | 4.37 | 66.81 | 16.03 |      | 150.0 |         |
| 10524-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.56 | 66.93 | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.35 | 66.47 | 15.90 |      | 150.0 |         |
|           |                                                            | Z | 4.43 | 66.84 | 16.14 |      | 150.0 |         |
| 10525-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.53 | 65.97 | 15.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.34 | 65.51 | 15.50 |      | 150.0 |         |
|           |                                                            | Z | 4.42 | 65.91 | 15.75 |      | 150.0 |         |
| 10526-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.72 | 66.36 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.50 | 65.86 | 15.64 |      | 150.0 |         |
|           |                                                            | Z | 4.58 | 66.26 | 15.88 |      | 150.0 |         |
| 10527-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.63 | 66.33 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.42 | 65.81 | 15.57 |      | 150.0 |         |
|           |                                                            | Z | 4.50 | 66.22 | 15.82 |      | 150.0 |         |
| 10528-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.65 | 66.35 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.44 | 65.83 | 15.60 |      | 150.0 |         |
|           |                                                            | Z | 4.52 | 66.23 | 15.85 |      | 150.0 |         |
| 10529-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.65 | 66.35 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.44 | 65.83 | 15.60 |      | 150.0 |         |
|           |                                                            | Z | 4.52 | 66.23 | 15.85 |      | 150.0 |         |
| 10531-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.65 | 66.47 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.43 | 65.92 | 15.60 |      | 150.0 |         |
|           |                                                            | Z | 4.51 | 66.32 | 15.86 |      | 150.0 |         |
| 10532-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.51 | 66.33 | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.29 | 65.76 | 15.53 |      | 150.0 |         |
|           |                                                            | Z | 4.37 | 66.17 | 15.79 |      | 150.0 |         |
| 10533-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.66 | 66.38 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.45 | 65.88 | 15.59 |      | 150.0 |         |
|           |                                                            | Z | 4.53 | 66.29 | 15.85 |      | 150.0 |         |
| 10534-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.17 | 66.46 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.99 | 66.00 | 15.72 |      | 150.0 |         |
|           |                                                            | Z | 5.06 | 66.33 | 15.92 |      | 150.0 |         |
| 10535-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.23 | 66.61 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.05 | 66.18 | 15.80 |      | 150.0 |         |
|           |                                                            | Z | 5.12 | 66.50 | 16.00 |      | 150.0 |         |
| 10536-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.11 | 66.59 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.92 | 66.11 | 15.74 |      | 150.0 |         |
|           |                                                            | Z | 4.99 | 66.46 | 15.96 |      | 150.0 |         |
| 10537-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.17 | 66.55 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.98 | 66.09 | 15.73 |      | 150.0 |         |
|           |                                                            | Z | 5.05 | 66.42 | 15.94 |      | 150.0 |         |
| 10538-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.27 | 66.59 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.07 | 66.11 | 15.79 |      | 150.0 |         |
|           |                                                            | Z | 5.13 | 66.43 | 15.99 |      | 150.0 |         |
| 10540-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.18 | 66.58 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.00 | 66.14 | 15.81 |      | 150.0 |         |
|           |                                                            | Z | 5.06 | 66.43 | 16.00 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.16 | 66.47 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 4.98 | 66.00 | 15.74 |      | 150.0 |         |
|           |                                                    | Z | 5.04 | 66.33 | 15.94 |      | 150.0 |         |
| 10542-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.31 | 66.52 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.13 | 66.08 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.20 | 66.40 | 15.99 |      | 150.0 |         |
| 10543-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.39 | 66.55 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.21 | 66.12 | 15.85 |      | 150.0 |         |
|           |                                                    | Z | 5.27 | 66.42 | 16.03 |      | 150.0 |         |
| 10544-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.46 | 66.58 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.30 | 66.13 | 15.73 |      | 150.0 |         |
|           |                                                    | Z | 5.37 | 66.45 | 15.92 |      | 150.0 |         |
| 10545-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.66 | 66.96 | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.49 | 66.55 | 15.89 |      | 150.0 |         |
|           |                                                    | Z | 5.55 | 66.83 | 16.06 |      | 150.0 |         |
| 10546-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.54 | 66.82 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.36 | 66.33 | 15.79 |      | 150.0 |         |
|           |                                                    | Z | 5.43 | 66.63 | 15.98 |      | 150.0 |         |
| 10547-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.62 | 66.87 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.43 | 66.37 | 15.81 |      | 150.0 |         |
|           |                                                    | Z | 5.50 | 66.68 | 15.99 |      | 150.0 |         |
| 10548-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.86 | 67.74 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 67.27 | 16.23 |      | 150.0 |         |
|           |                                                    | Z | 5.69 | 67.44 | 16.35 |      | 150.0 |         |
| 10550-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.56 | 66.80 | 16.12 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.39 | 66.36 | 15.82 |      | 150.0 |         |
|           |                                                    | Z | 5.46 | 66.66 | 16.01 |      | 150.0 |         |
| 10551-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.57 | 66.85 | 16.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.39 | 15.80 |      | 150.0 |         |
|           |                                                    | Z | 5.46 | 66.70 | 15.98 |      | 150.0 |         |
| 10552-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.49 | 66.65 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.31 | 66.19 | 15.71 |      | 150.0 |         |
|           |                                                    | Z | 5.39 | 66.53 | 15.91 |      | 150.0 |         |
| 10553-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.58 | 66.70 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 66.23 | 15.76 |      | 150.0 |         |
|           |                                                    | Z | 5.46 | 66.55 | 15.95 |      | 150.0 |         |
| 10554-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.86 | 66.94 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.71 | 66.51 | 15.83 |      | 150.0 |         |
|           |                                                    | Z | 5.78 | 66.81 | 16.01 |      | 150.0 |         |
| 10555-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.99 | 67.23 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.84 | 66.80 | 15.96 |      | 150.0 |         |
|           |                                                    | Z | 5.90 | 67.08 | 16.13 |      | 150.0 |         |
| 10556-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.01 | 67.27 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.86 | 66.85 | 15.98 |      | 150.0 |         |
|           |                                                    | Z | 5.92 | 67.13 | 16.14 |      | 150.0 |         |
| 10557-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.99 | 67.21 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.82 | 66.75 | 15.94 |      | 150.0 |         |
|           |                                                    | Z | 5.88 | 67.04 | 16.12 |      | 150.0 |         |

|           |                                                                 |   |      |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|--------|-------|------|-------|---------|
| 10558-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.04 | 67.37  | 16.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.87 | 66.91  | 16.04 |      | 150.0 |         |
|           |                                                                 | Z | 5.93 | 67.19  | 16.21 |      | 150.0 |         |
| 10560-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.04 | 67.24  | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.86 | 66.76  | 16.01 |      | 150.0 |         |
|           |                                                                 | Z | 5.93 | 67.06  | 16.18 |      | 150.0 |         |
| 10561-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 5.96 | 67.19  | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.79 | 66.74  | 16.03 |      | 150.0 |         |
|           |                                                                 | Z | 5.85 | 67.02  | 16.20 |      | 150.0 |         |
| 10562-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.09 | 67.59  | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.90 | 67.09  | 16.20 |      | 150.0 |         |
|           |                                                                 | Z | 5.95 | 67.34  | 16.36 |      | 150.0 |         |
| 10563-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.40 | 68.10  | 16.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.09 | 67.26  | 16.25 |      | 150.0 |         |
|           |                                                                 | Z | 6.10 | 67.40  | 16.34 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.91 | 66.83  | 16.38 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.72 | 66.39  | 16.00 |      | 150.0 |         |
|           |                                                                 | Z | 4.79 | 66.74  | 16.23 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.15 | 67.28  | 16.70 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.95 | 66.86  | 16.35 |      | 150.0 |         |
|           |                                                                 | Z | 5.01 | 67.18  | 16.55 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.98 | 67.15  | 16.53 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.78 | 66.68  | 16.14 |      | 150.0 |         |
|           |                                                                 | Z | 4.85 | 67.02  | 16.37 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.01 | 67.53  | 16.87 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.81 | 67.10  | 16.52 |      | 150.0 |         |
|           |                                                                 | Z | 4.88 | 67.43  | 16.73 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.90 | 66.92  | 16.31 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.69 | 66.43  | 15.89 |      | 150.0 |         |
|           |                                                                 | Z | 4.76 | 66.79  | 16.13 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.96 | 67.60  | 16.92 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.77 | 67.21  | 16.59 |      | 150.0 |         |
|           |                                                                 | Z | 4.85 | 67.56  | 16.82 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.00 | 67.44  | 16.85 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 4.80 | 67.04  | 16.52 |      | 150.0 |         |
|           |                                                                 | Z | 4.87 | 67.38  | 16.73 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.29 | 65.85  | 16.32 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.10 | 63.71  | 14.50 |      | 130.0 |         |
|           |                                                                 | Z | 1.22 | 64.94  | 15.58 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.31 | 66.54  | 16.72 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.11 | 64.23  | 14.81 |      | 130.0 |         |
|           |                                                                 | Z | 1.23 | 65.55  | 15.95 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 9.74 | 108.45 | 29.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.30 | 75.72  | 17.45 |      | 130.0 |         |
|           |                                                                 | Z | 2.64 | 87.43  | 23.09 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 1.61 | 74.07  | 20.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.18 | 69.07  | 17.08 |      | 130.0 |         |
|           |                                                                 | Z | 1.41 | 71.71  | 18.93 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.71 | 66.68 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.52 | 66.23 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.60 | 66.59 | 16.31 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.74 | 66.84 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.55 | 66.40 | 16.14 |      | 130.0 |         |
|           |                                                                 | Z | 4.62 | 66.76 | 16.38 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.95 | 67.14 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 66.69 | 16.32 |      | 130.0 |         |
|           |                                                                 | Z | 4.81 | 67.03 | 16.54 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.85 | 67.32 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.85 | 16.42 |      | 130.0 |         |
|           |                                                                 | Z | 4.72 | 67.20 | 16.65 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.62 | 66.66 | 16.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.40 | 66.07 | 15.67 |      | 130.0 |         |
|           |                                                                 | Z | 4.48 | 66.45 | 15.94 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.67 | 66.65 | 16.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.45 | 66.12 | 15.69 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 66.50 | 15.96 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.76 | 67.38 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.54 | 66.88 | 16.35 |      | 130.0 |         |
|           |                                                                 | Z | 4.62 | 67.26 | 16.61 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.57 | 66.41 | 15.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.35 | 65.82 | 15.45 |      | 130.0 |         |
|           |                                                                 | Z | 4.42 | 66.20 | 15.72 |      | 130.0 |         |
| 10583-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.71 | 66.68 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.52 | 66.23 | 16.07 |      | 130.0 |         |
|           |                                                                 | Z | 4.60 | 66.59 | 16.31 |      | 130.0 |         |
| 10584-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.74 | 66.84 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.55 | 66.40 | 16.14 |      | 130.0 |         |
|           |                                                                 | Z | 4.62 | 66.76 | 16.38 |      | 130.0 |         |
| 10585-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 4.95 | 67.14 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.75 | 66.69 | 16.32 |      | 130.0 |         |
|           |                                                                 | Z | 4.81 | 67.03 | 16.54 |      | 130.0 |         |
| 10586-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.85 | 67.32 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.65 | 66.85 | 16.42 |      | 130.0 |         |
|           |                                                                 | Z | 4.72 | 67.20 | 16.65 |      | 130.0 |         |
| 10587-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.62 | 66.66 | 16.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.40 | 66.07 | 15.67 |      | 130.0 |         |
|           |                                                                 | Z | 4.48 | 66.45 | 15.94 |      | 130.0 |         |
| 10588-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.67 | 66.65 | 16.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.45 | 66.12 | 15.69 |      | 130.0 |         |
|           |                                                                 | Z | 4.52 | 66.50 | 15.96 |      | 130.0 |         |
| 10589-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.76 | 67.38 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.54 | 66.88 | 16.35 |      | 130.0 |         |
|           |                                                                 | Z | 4.62 | 67.26 | 16.61 |      | 130.0 |         |
| 10590-AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.57 | 66.41 | 15.96 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.35 | 65.82 | 15.45 |      | 130.0 |         |
|           |                                                                 | Z | 4.42 | 66.20 | 15.72 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.86 | 66.73 | 16.57 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.68 | 66.31 | 16.19 |      | 130.0 |         |
|           |                                                       | Z | 4.75 | 66.65 | 16.42 |      | 130.0 |         |
| 10592-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.03 | 67.07 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.82 | 66.64 | 16.32 |      | 130.0 |         |
|           |                                                       | Z | 4.89 | 66.98 | 16.55 |      | 130.0 |         |
| 10593-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.95 | 67.01 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.74 | 66.53 | 16.19 |      | 130.0 |         |
|           |                                                       | Z | 4.81 | 66.88 | 16.42 |      | 130.0 |         |
| 10594-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.00 | 67.16 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.80 | 66.71 | 16.35 |      | 130.0 |         |
|           |                                                       | Z | 4.87 | 67.05 | 16.58 |      | 130.0 |         |
| 10595-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.98 | 67.12 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.77 | 66.66 | 16.24 |      | 130.0 |         |
|           |                                                       | Z | 4.84 | 67.01 | 16.48 |      | 130.0 |         |
| 10596-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.91 | 67.13 | 16.65 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.70 | 66.64 | 16.23 |      | 130.0 |         |
|           |                                                       | Z | 4.77 | 67.00 | 16.48 |      | 130.0 |         |
| 10597-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.86 | 67.05 | 16.54 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.65 | 66.53 | 16.11 |      | 130.0 |         |
|           |                                                       | Z | 4.72 | 66.89 | 16.35 |      | 130.0 |         |
| 10598-AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.85 | 67.29 | 16.80 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.64 | 66.79 | 16.39 |      | 130.0 |         |
|           |                                                       | Z | 4.71 | 67.14 | 16.62 |      | 130.0 |         |
| 10599-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.52 | 67.26 | 16.75 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.35 | 66.89 | 16.44 |      | 130.0 |         |
|           |                                                       | Z | 5.40 | 67.12 | 16.60 |      | 130.0 |         |
| 10600-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.66 | 67.69 | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.48 | 67.29 | 16.61 |      | 130.0 |         |
|           |                                                       | Z | 5.51 | 67.49 | 16.75 |      | 130.0 |         |
| 10601-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.55 | 67.44 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.37 | 67.03 | 16.50 |      | 130.0 |         |
|           |                                                       | Z | 5.41 | 67.28 | 16.67 |      | 130.0 |         |
| 10602-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.63 | 67.42 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.47 | 67.07 | 16.43 |      | 130.0 |         |
|           |                                                       | Z | 5.52 | 67.35 | 16.62 |      | 130.0 |         |
| 10603-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.73 | 67.77 | 17.03 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.54 | 67.38 | 16.72 |      | 130.0 |         |
|           |                                                       | Z | 5.59 | 67.61 | 16.88 |      | 130.0 |         |
| 10604-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.52 | 67.21 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.37 | 66.89 | 16.47 |      | 130.0 |         |
|           |                                                       | Z | 5.43 | 67.20 | 16.66 |      | 130.0 |         |
| 10605-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.62 | 67.51 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.47 | 67.18 | 16.61 |      | 130.0 |         |
|           |                                                       | Z | 5.51 | 67.41 | 16.77 |      | 130.0 |         |
| 10606-AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.41 | 67.01 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.20 | 66.48 | 16.11 |      | 130.0 |         |
|           |                                                       | Z | 5.26 | 66.76 | 16.30 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.70 | 66.05 | 16.19 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.50 | 65.58 | 15.79 |      | 130.0 |         |
|           |                                                   | Z | 4.58 | 65.97 | 16.04 |      | 130.0 |         |
| 10608-AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.90 | 66.46 | 16.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.68 | 65.97 | 15.95 |      | 130.0 |         |
|           |                                                   | Z | 4.76 | 66.35 | 16.20 |      | 130.0 |         |
| 10609-AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.79 | 66.33 | 16.21 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.57 | 65.80 | 15.77 |      | 130.0 |         |
|           |                                                   | Z | 4.65 | 66.20 | 16.03 |      | 130.0 |         |
| 10610-AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.84 | 66.49 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.62 | 65.97 | 15.94 |      | 130.0 |         |
|           |                                                   | Z | 4.70 | 66.36 | 16.20 |      | 130.0 |         |
| 10611-AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.76 | 66.30 | 16.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.54 | 65.77 | 15.78 |      | 130.0 |         |
|           |                                                   | Z | 4.62 | 66.16 | 16.05 |      | 130.0 |         |
| 10612-AAB | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.77 | 66.46 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.54 | 65.90 | 15.81 |      | 130.0 |         |
|           |                                                   | Z | 4.62 | 66.31 | 16.09 |      | 130.0 |         |
| 10613-AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.78 | 66.37 | 16.16 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.54 | 65.78 | 15.69 |      | 130.0 |         |
|           |                                                   | Z | 4.62 | 66.17 | 15.96 |      | 130.0 |         |
| 10614-AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.71 | 66.54 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.49 | 65.99 | 15.94 |      | 130.0 |         |
|           |                                                   | Z | 4.57 | 66.38 | 16.21 |      | 130.0 |         |
| 10615-AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.76 | 66.13 | 16.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.53 | 65.58 | 15.54 |      | 130.0 |         |
|           |                                                   | Z | 4.61 | 65.99 | 15.82 |      | 130.0 |         |
| 10616-AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.34 | 66.54 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.15 | 66.08 | 16.02 |      | 130.0 |         |
|           |                                                   | Z | 5.22 | 66.40 | 16.23 |      | 130.0 |         |
| 10617-AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.40 | 66.66 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.22 | 66.26 | 16.08 |      | 130.0 |         |
|           |                                                   | Z | 5.28 | 66.57 | 16.28 |      | 130.0 |         |
| 10618-AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.29 | 66.72 | 16.45 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.11 | 66.26 | 16.09 |      | 130.0 |         |
|           |                                                   | Z | 5.17 | 66.59 | 16.31 |      | 130.0 |         |
| 10619-AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.31 | 66.54 | 16.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.12 | 66.05 | 15.93 |      | 130.0 |         |
|           |                                                   | Z | 5.19 | 66.37 | 16.14 |      | 130.0 |         |
| 10620-AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.42 | 66.61 | 16.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.21 | 66.11 | 16.00 |      | 130.0 |         |
|           |                                                   | Z | 5.27 | 66.42 | 16.21 |      | 130.0 |         |
| 10621-AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.40 | 66.69 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.22 | 66.26 | 16.21 |      | 130.0 |         |
|           |                                                   | Z | 5.28 | 66.57 | 16.40 |      | 130.0 |         |
| 10622-AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.40 | 66.82 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.23 | 66.42 | 16.28 |      | 130.0 |         |
|           |                                                   | Z | 5.29 | 66.72 | 16.47 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.29 | 66.39 | 16.26 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.10 | 65.92 | 15.89 |      | 130.0 |         |
|           |                                                    | Z | 5.17 | 66.24 | 16.10 |      | 130.0 |         |
| 10624-AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.48 | 66.58 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.30 | 66.14 | 16.07 |      | 130.0 |         |
|           |                                                    | Z | 5.36 | 66.44 | 16.27 |      | 130.0 |         |
| 10625-AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.86 | 67.56 | 16.95 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.64 | 67.07 | 16.59 |      | 130.0 |         |
|           |                                                    | Z | 5.66 | 67.24 | 16.72 |      | 130.0 |         |
| 10626-AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.61 | 66.59 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.45 | 66.15 | 15.99 |      | 130.0 |         |
|           |                                                    | Z | 5.52 | 66.46 | 16.19 |      | 130.0 |         |
| 10627-AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.85 | 67.11 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 66.72 | 16.24 |      | 130.0 |         |
|           |                                                    | Z | 5.74 | 66.98 | 16.41 |      | 130.0 |         |
| 10628-AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.66 | 66.72 | 16.28 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.48 | 66.22 | 15.91 |      | 130.0 |         |
|           |                                                    | Z | 5.54 | 66.51 | 16.11 |      | 130.0 |         |
| 10629-AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.75 | 66.81 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.55 | 66.27 | 15.93 |      | 130.0 |         |
|           |                                                    | Z | 5.61 | 66.56 | 16.12 |      | 130.0 |         |
| 10630-AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.18 | 68.27 | 17.04 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.98 | 67.75 | 16.67 |      | 130.0 |         |
|           |                                                    | Z | 5.96 | 67.79 | 16.74 |      | 130.0 |         |
| 10631-AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.10 | 68.12 | 17.15 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.88 | 67.58 | 16.79 |      | 130.0 |         |
|           |                                                    | Z | 5.92 | 67.78 | 16.93 |      | 130.0 |         |
| 10632-AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.82 | 67.18 | 16.70 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 66.81 | 16.43 |      | 130.0 |         |
|           |                                                    | Z | 5.72 | 67.07 | 16.59 |      | 130.0 |         |
| 10633-AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.73 | 66.90 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.54 | 66.39 | 16.03 |      | 130.0 |         |
|           |                                                    | Z | 5.61 | 66.71 | 16.24 |      | 130.0 |         |
| 10634-AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.72 | 66.92 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.53 | 66.43 | 16.11 |      | 130.0 |         |
|           |                                                    | Z | 5.60 | 66.74 | 16.31 |      | 130.0 |         |
| 10635-AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.61 | 66.29 | 15.89 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.40 | 65.72 | 15.48 |      | 130.0 |         |
|           |                                                    | Z | 5.47 | 66.04 | 15.69 |      | 130.0 |         |
| 10636-AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.02 | 66.96 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.87 | 66.52 | 16.09 |      | 130.0 |         |
|           |                                                    | Z | 5.93 | 66.81 | 16.27 |      | 130.0 |         |
| 10637-AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.18 | 67.32 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.02 | 66.91 | 16.26 |      | 130.0 |         |
|           |                                                    | Z | 6.07 | 67.17 | 16.43 |      | 130.0 |         |
| 10638-AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.18 | 67.31 | 16.53 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.02 | 66.87 | 16.22 |      | 130.0 |         |
|           |                                                    | Z | 6.08 | 67.16 | 16.40 |      | 130.0 |         |

|           |                                                        |   |        |        |       |       |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10639-AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.17   | 67.29  | 16.57 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.00   | 66.82  | 16.24 |       | 130.0 |         |
|           |                                                        | Z | 6.05   | 67.10  | 16.42 |       | 130.0 |         |
| 10640-AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.18   | 67.33  | 16.53 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.00   | 66.82  | 16.18 |       | 130.0 |         |
|           |                                                        | Z | 6.05   | 67.09  | 16.35 |       | 130.0 |         |
| 10641-AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.20   | 67.15  | 16.46 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.05   | 66.75  | 16.16 |       | 130.0 |         |
|           |                                                        | Z | 6.10   | 67.02  | 16.33 |       | 130.0 |         |
| 10642-AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.26   | 67.46  | 16.78 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.09   | 67.01  | 16.47 |       | 130.0 |         |
|           |                                                        | Z | 6.15   | 67.28  | 16.64 |       | 130.0 |         |
| 10643-AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.09   | 67.13  | 16.52 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 5.92   | 66.67  | 16.19 |       | 130.0 |         |
|           |                                                        | Z | 5.98   | 66.95  | 16.36 |       | 130.0 |         |
| 10644-AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.28   | 67.70  | 16.83 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.07   | 67.13  | 16.44 |       | 130.0 |         |
|           |                                                        | Z | 6.12   | 67.37  | 16.60 |       | 130.0 |         |
| 10645-AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.69   | 68.48  | 17.16 | 0.46  | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.34   | 67.56  | 16.61 |       | 130.0 |         |
|           |                                                        | Z | 6.31   | 67.59  | 16.66 |       | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 81.88  | 138.93 | 44.99 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 20.09  | 105.55 | 34.68 |       | 60.0  |         |
|           |                                                        | Z | 49.56  | 129.13 | 42.50 |       | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 77.69  | 138.77 | 45.14 | 9.30  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 19.01  | 105.10 | 34.68 |       | 60.0  |         |
|           |                                                        | Z | 43.65  | 127.19 | 42.16 |       | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 0.73   | 64.13  | 11.44 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.50   | 60.94  | 8.11  |       | 150.0 |         |
|           |                                                        | Z | 0.62   | 62.66  | 9.90  |       | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 4.23   | 68.60  | 17.43 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 3.70   | 66.70  | 16.11 |       | 80.0  |         |
|           |                                                        | Z | 3.95   | 67.96  | 16.88 |       | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 4.67   | 67.66  | 17.40 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.26   | 66.28  | 16.44 |       | 80.0  |         |
|           |                                                        | Z | 4.43   | 67.13  | 16.98 |       | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.61   | 67.29  | 17.38 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.24   | 65.98  | 16.48 |       | 80.0  |         |
|           |                                                        | Z | 4.40   | 66.77  | 16.98 |       | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 4.67   | 67.29  | 17.41 | 2.23  | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.30   | 65.98  | 16.52 |       | 80.0  |         |
|           |                                                        | Z | 4.46   | 66.74  | 17.01 |       | 80.0  |         |
| 10658-AAA | Pulse Waveform (200Hz, 10%)                            | X | 77.76  | 113.37 | 29.51 | 10.00 | 50.0  | ± 9.6 % |
|           |                                                        | Y | 8.85   | 80.14  | 18.93 |       | 50.0  |         |
|           |                                                        | Z | 55.85  | 107.32 | 27.27 |       | 50.0  |         |
| 10659-AAA | Pulse Waveform (200Hz, 20%)                            | X | 100.00 | 113.86 | 27.83 | 6.99  | 60.0  | ± 9.6 % |
|           |                                                        | Y | 15.18  | 87.15  | 19.66 |       | 60.0  |         |
|           |                                                        | Z | 100.00 | 112.04 | 26.63 |       | 60.0  |         |

|           |                             |   |        |        |       |      |       |         |
|-----------|-----------------------------|---|--------|--------|-------|------|-------|---------|
| 10660-AAA | Pulse Waveform (200Hz, 40%) | X | 100.00 | 112.50 | 25.83 | 3.98 | 80.0  | ± 9.6 % |
|           |                             | Y | 63.58  | 100.49 | 21.01 |      | 80.0  |         |
|           |                             | Z | 100.00 | 110.06 | 24.42 |      | 80.0  |         |
| 10661-AAA | Pulse Waveform (200Hz, 60%) | X | 100.00 | 114.00 | 25.19 | 2.22 | 100.0 | ± 9.6 % |
|           |                             | Y | 13.64  | 84.95  | 15.36 |      | 100.0 |         |
|           |                             | Z | 100.00 | 110.38 | 23.34 |      | 100.0 |         |
| 10662-AAA | Pulse Waveform (200Hz, 80%) | X | 100.00 | 118.57 | 25.30 | 0.97 | 120.0 | ± 9.6 % |
|           |                             | Y | 0.28   | 60.00  | 4.66  |      | 120.0 |         |
|           |                             | Z | 100.00 | 111.08 | 22.00 |      | 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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 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **ES3-3287\_Sep17**

## CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3287**

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

Calibration date: **September 18, 2017**

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         | 31-Dec-16 (No. ES3-3013_Dec16)    | Dec-17                 |
| DAE4                       | SN: 660          | 7-Dec-16 (No. DAE4-660_Dec16)     | Dec-17                 |
| 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-16) | In house check: Oct-17 |

|                                                                                                                 |                             |                                          |               |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------|---------------|
| Calibrated by:                                                                                                  | Name<br><b>Leif Klysner</b> | Function<br><b>Laboratory Technician</b> | Signature<br> |
| Approved by:                                                                                                    | <b>Katja Pokovlc</b>        | <b>Technical Manager</b>                 |               |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                             |                                          |               |

Issued: September 19, 2017



Accredited by the Swiss Accreditation Service (SAS)

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 $\phi$      | $\phi$ 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<sup>2</sup>-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 ES3DV3

## SN:3287

Manufactured: June 7, 2010  
Calibrated: September 18, 2017

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

# DASY/EASY - Parameters of Probe: ES3DV3 - SN:3287

## Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.87     | 0.98     | 1.00     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 107.7    | 103.1    | 105.0    |               |

## 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    | 191.5    | $\pm 3.3 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 198.9    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 180.8    |                           |

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 | 54.28    | 378.7    | 33.99                       | 28.46                               | 2.430                               | 5.072    | 1.313                 | 0.408                 | 1.009 |
| Y | 59.16    | 422.2    | 35.13                       | 29.85                               | 3.583                               | 5.094    | 0.041                 | 0.732                 | 1.008 |
| Z | 43.70    | 307.8    | 34.40                       | 28.00                               | 2.236                               | 5.100    | 1.282                 | 0.347                 | 1.010 |

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: ES3DV3 - SN:3287

### 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                            | 7.00    | 7.00    | 7.00    | 0.26               | 1.80                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 6.70    | 6.70    | 6.70    | 0.56               | 1.23                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 5.57    | 5.57    | 5.57    | 0.53               | 1.28                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 5.34    | 5.34    | 5.34    | 0.41               | 1.52                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 4.94    | 4.94    | 4.94    | 0.42               | 1.57                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 4.64    | 4.64    | 4.64    | 0.55               | 1.39                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 4.44    | 4.44    | 4.44    | 0.58               | 1.43                    | ± 12.0 %  |

<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: ES3DV3 - SN:3287

### 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                            | 6.71    | 6.71    | 6.71    | 0.45               | 1.38                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 6.56    | 6.56    | 6.56    | 0.80               | 1.05                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 5.19    | 5.19    | 5.19    | 0.37               | 1.73                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 5.00    | 5.00    | 5.00    | 0.47               | 1.51                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 4.66    | 4.66    | 4.66    | 0.59               | 1.36                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 4.47    | 4.47    | 4.47    | 0.55               | 1.20                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 4.28    | 4.28    | 4.28    | 0.50               | 1.20                    | ± 12.0 %  |

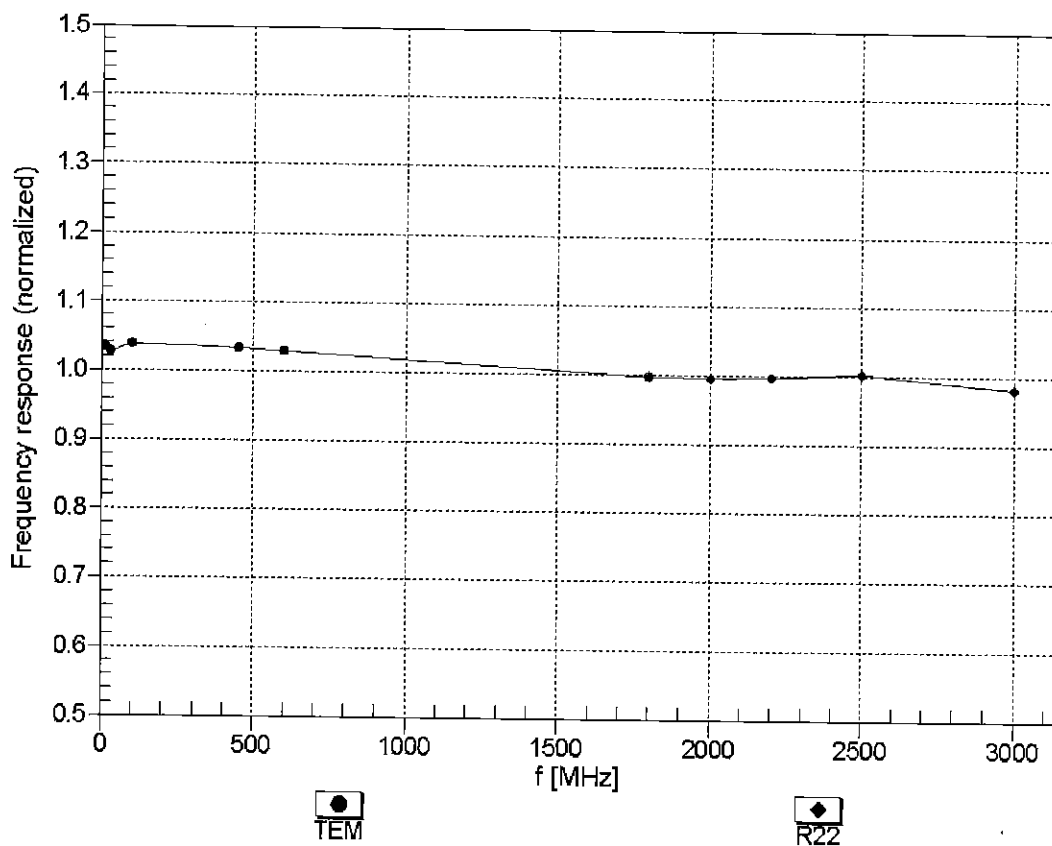
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below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

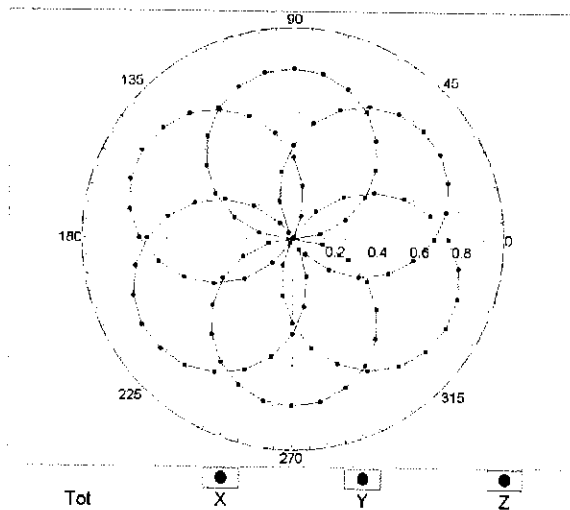
(TEM-Cell:ifi110 EXX, Waveguide: R22)



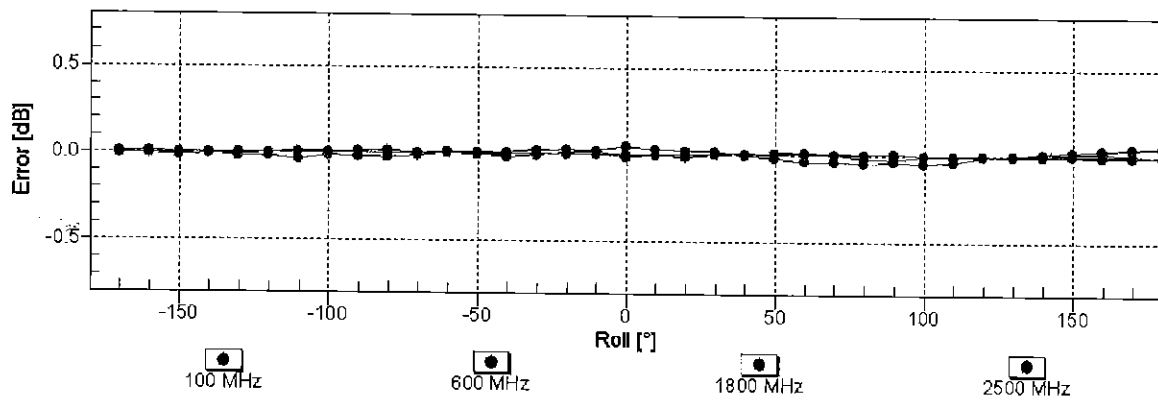
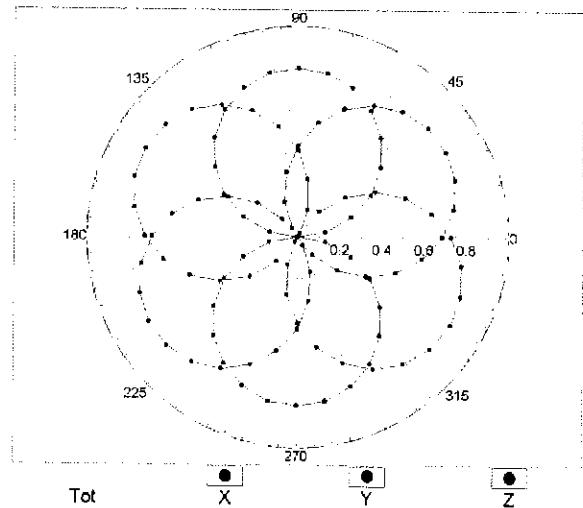
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

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

f=600 MHz,TEM

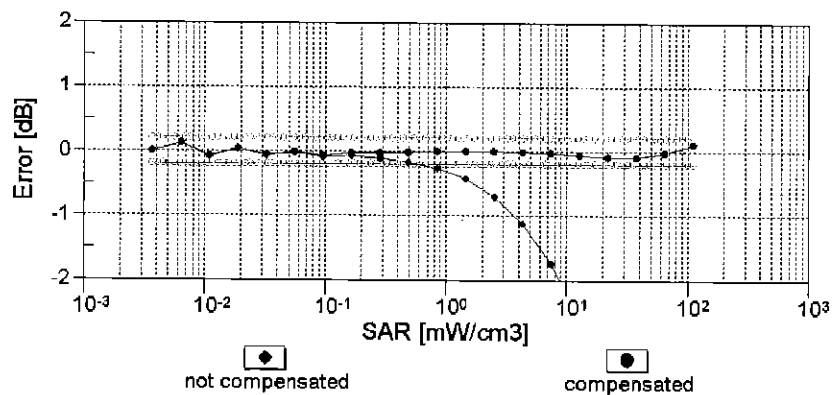
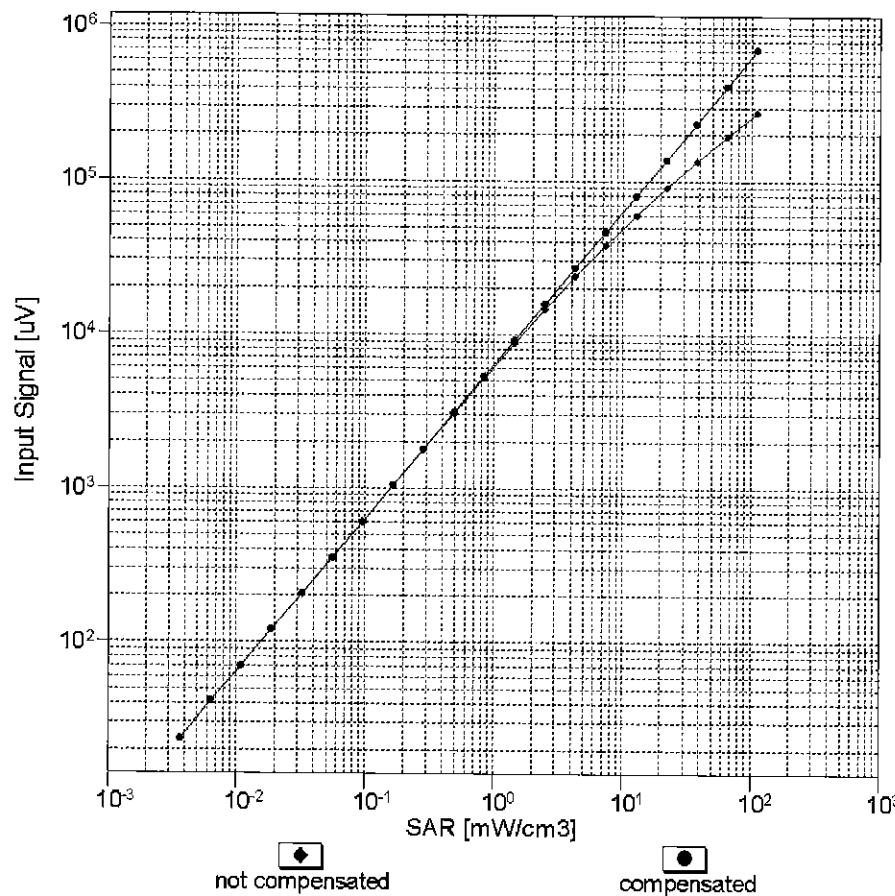


f=1800 MHz,R22



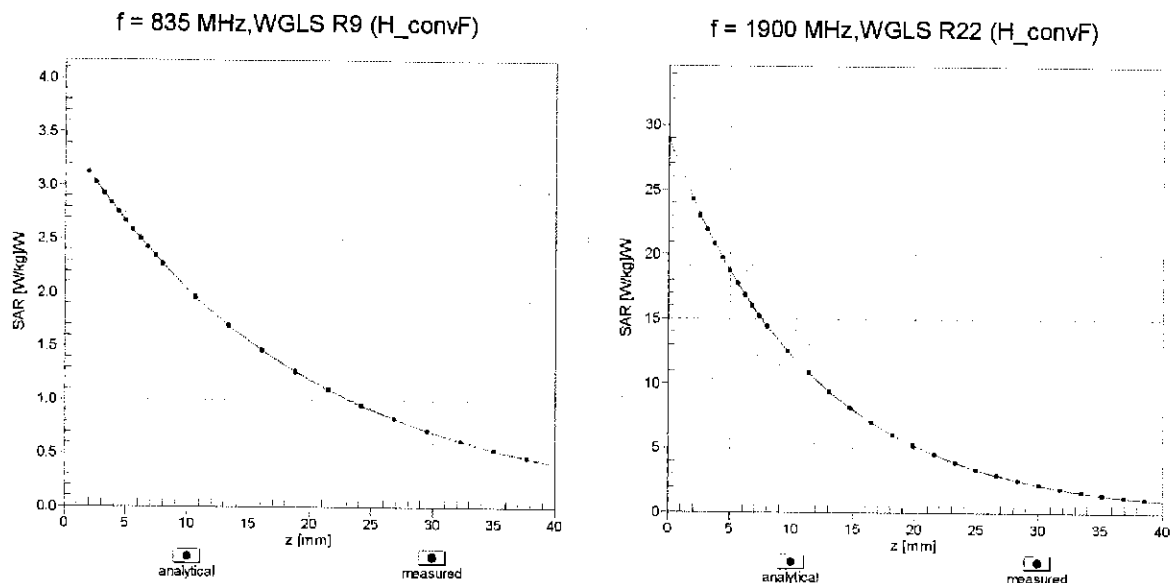
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

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



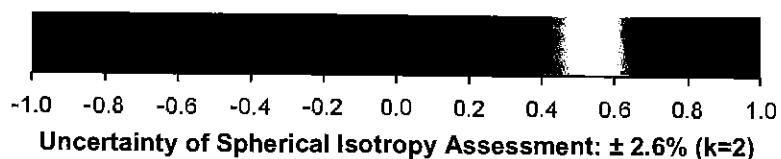
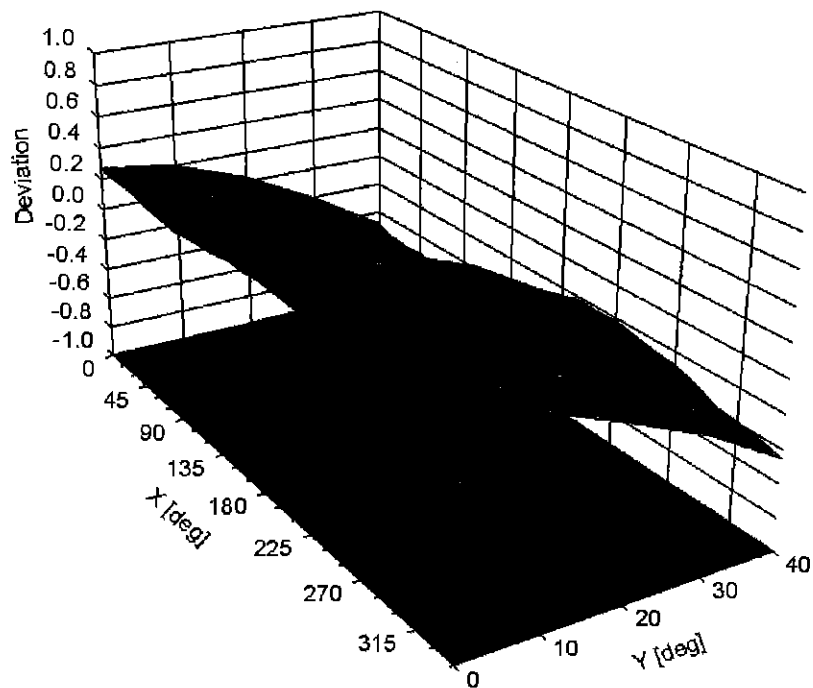
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3287

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 89.6       |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 10 mm      |
| Tip Diameter                                  | 4 mm       |
| Probe Tip to Sensor X Calibration Point       | 2 mm       |
| Probe Tip to Sensor Y Calibration Point       | 2 mm       |
| Probe Tip to Sensor Z Calibration Point       | 2 mm       |
| Recommended Measurement Distance from Surface | 3 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    | 191.5    | $\pm 3.3 \%$                     |
|               |                                               | Y | 0.00    | 0.00                   | 1.00  |         | 198.9    |                                  |
|               |                                               | Z | 0.00    | 0.00                   | 1.00  |         | 180.8    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 10.31   | 82.54                  | 19.92 | 10.00   | 25.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 9.70    | 81.57                  | 20.65 |         | 25.0     |                                  |
|               |                                               | Z | 13.02   | 86.61                  | 21.44 |         | 25.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.65    | 76.64                  | 20.39 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.11    | 68.31                  | 15.89 |         | 150.0    |                                  |
|               |                                               | Z | 1.20    | 70.53                  | 17.08 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.42    | 67.62                  | 17.77 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.35    | 65.44                  | 16.09 |         | 150.0    |                                  |
|               |                                               | Z | 1.35    | 66.18                  | 16.60 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 5.13    | 67.63                  | 17.69 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.21    | 67.37                  | 17.49 |         | 150.0    |                                  |
|               |                                               | Z | 5.05    | 67.67                  | 17.63 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 36.11   | 104.66                 | 28.70 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 17.06   | 92.75                  | 26.26 |         | 50.0     |                                  |
|               |                                               | Z | 74.47   | 117.68                 | 32.39 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 29.01   | 100.99                 | 27.69 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 15.70   | 91.12                  | 25.76 |         | 50.0     |                                  |
|               |                                               | Z | 50.86   | 111.27                 | 30.76 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 118.25                 | 30.37 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 79.14   | 117.46                 | 31.45 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 119.51                 | 30.92 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 18.01   | 104.77                 | 39.73 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 13.85   | 93.70                  | 35.01 |         | 50.0     |                                  |
|               |                                               | Z | 19.28   | 108.70                 | 41.83 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 22.37   | 106.73                 | 36.71 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 15.21   | 95.13                  | 32.50 |         | 60.0     |                                  |
|               |                                               | Z | 23.85   | 109.99                 | 38.29 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 117.60                 | 29.16 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 119.86                 | 30.73 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 118.96                 | 29.76 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 118.56                 | 28.79 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 119.98                 | 29.90 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 119.90                 | 29.38 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 14.79   | 97.42                  | 32.53 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 11.52   | 89.75                  | 29.55 |         | 80.0     |                                  |
|               |                                               | Z | 14.18   | 97.61                  | 32.99 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 116.89                 | 29.16 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 119.53                 | 30.94 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 118.05                 | 29.66 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 122.60                 | 28.99 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 121.51                 | 28.91 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 122.48                 | 28.93 |         | 100.0    |                                  |

|           |                                                     |   |        |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00 | 133.16 | 32.27 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 126.43 | 29.83 |       | 100.0 |         |
|           |                                                     | Z | 100.00 | 130.02 | 30.96 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 32.57  | 106.74 | 29.49 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 13.39  | 91.56  | 25.42 |       | 70.0  |         |
|           |                                                     | Z | 28.98  | 104.37 | 28.55 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 45.93  | 114.88 | 30.10 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 7.50   | 87.12  | 22.45 |       | 100.0 |         |
|           |                                                     | Z | 20.04  | 100.44 | 25.46 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 21.96  | 105.92 | 27.68 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.51   | 81.47  | 20.26 |       | 100.0 |         |
|           |                                                     | Z | 9.42   | 91.44  | 22.56 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 45.23  | 112.33 | 31.05 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 15.39  | 94.09  | 26.30 |       | 70.0  |         |
|           |                                                     | Z | 38.95  | 109.34 | 29.96 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 39.94  | 112.82 | 29.55 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 7.15   | 86.45  | 22.19 |       | 100.0 |         |
|           |                                                     | Z | 17.08  | 98.28  | 24.84 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 24.74  | 108.13 | 28.38 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 4.66   | 82.21  | 20.61 |       | 100.0 |         |
|           |                                                     | Z | 9.87   | 92.45  | 22.99 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 7.01   | 92.94  | 24.21 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.15   | 73.76  | 17.15 |       | 150.0 |         |
|           |                                                     | Z | 2.61   | 77.73  | 17.80 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00 | 117.06 | 30.06 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 33.54  | 102.85 | 27.66 |       | 50.0  |         |
|           |                                                     | Z | 100.00 | 118.08 | 30.50 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00   | 127.60 | 2.39  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.00   | 96.78  | 0.00  |       | 150.0 |         |
|           |                                                     | Z | 0.01   | 122.93 | 2.94  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 13.06  | 86.13  | 24.73 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 11.09  | 82.14  | 24.36 |       | 25.0  |         |
|           |                                                     | Z | 16.17  | 90.99  | 26.57 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 16.50  | 91.24  | 25.09 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 12.58  | 86.37  | 24.53 |       | 40.0  |         |
|           |                                                     | Z | 22.30  | 97.25  | 27.17 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 15.28  | 90.62  | 25.52 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 11.72  | 85.08  | 24.19 |       | 50.0  |         |
|           |                                                     | Z | 17.40  | 93.38  | 26.42 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 10.69  | 91.04  | 29.62 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 9.07   | 85.67  | 27.37 |       | 100.0 |         |
|           |                                                     | Z | 9.88   | 90.10  | 29.57 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.68   | 70.66  | 19.16 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.55   | 67.69  | 17.16 |       | 110.0 |         |
|           |                                                     | Z | 1.56   | 68.66  | 17.81 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00 | 135.64 | 35.63 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 100.00 | 131.50 | 34.05 |       | 110.0 |         |
|           |                                                     | Z | 100.00 | 134.30 | 35.03 |       | 110.0 |         |

|           |                                                |   |       |        |       |      |       |         |
|-----------|------------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 54.02 | 125.97 | 35.38 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 8.96  | 93.29  | 26.14 |      | 110.0 |         |
|           |                                                | Z | 19.56 | 108.50 | 30.84 |      | 110.0 |         |
| 10062-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.87  | 67.49  | 17.06 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.91  | 67.10  | 16.78 |      | 100.0 |         |
|           |                                                | Z | 4.75  | 67.38  | 16.89 |      | 100.0 |         |
| 10063-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.91  | 67.64  | 17.19 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.96  | 67.27  | 16.93 |      | 100.0 |         |
|           |                                                | Z | 4.80  | 67.55  | 17.03 |      | 100.0 |         |
| 10064-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 5.22  | 67.92  | 17.42 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.29  | 67.61  | 17.19 |      | 100.0 |         |
|           |                                                | Z | 5.08  | 67.80  | 17.26 |      | 100.0 |         |
| 10065-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 5.13  | 67.94  | 17.58 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.21  | 67.67  | 17.37 |      | 100.0 |         |
|           |                                                | Z | 5.00  | 67.84  | 17.45 |      | 100.0 |         |
| 10066-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 5.18  | 68.06  | 17.79 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.27  | 67.81  | 17.60 |      | 100.0 |         |
|           |                                                | Z | 5.05  | 67.98  | 17.68 |      | 100.0 |         |
| 10067-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.49  | 68.19  | 18.21 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.60  | 67.98  | 18.05 |      | 100.0 |         |
|           |                                                | Z | 5.39  | 68.30  | 18.20 |      | 100.0 |         |
| 10068-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.62  | 68.50  | 18.55 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.76  | 68.37  | 18.43 |      | 100.0 |         |
|           |                                                | Z | 5.50  | 68.48  | 18.50 |      | 100.0 |         |
| 10069-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.69  | 68.44  | 18.72 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.84  | 68.31  | 18.60 |      | 100.0 |         |
|           |                                                | Z | 5.58  | 68.54  | 18.73 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 5.27  | 67.84  | 18.05 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.37  | 67.63  | 17.89 |      | 100.0 |         |
|           |                                                | Z | 5.20  | 67.92  | 18.02 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 5.34  | 68.42  | 18.38 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.45  | 68.23  | 18.22 |      | 100.0 |         |
|           |                                                | Z | 5.25  | 68.45  | 18.35 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.47  | 68.76  | 18.79 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.61  | 68.62  | 18.66 |      | 100.0 |         |
|           |                                                | Z | 5.40  | 68.87  | 18.81 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 5.51  | 68.83  | 19.02 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.66  | 68.73  | 18.92 |      | 100.0 |         |
|           |                                                | Z | 5.46  | 68.99  | 19.07 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.65  | 69.27  | 19.49 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.85  | 69.26  | 19.43 |      | 90.0  |         |
|           |                                                | Z | 5.60  | 69.37  | 19.53 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.67  | 69.08  | 19.61 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.87  | 69.08  | 19.56 |      | 90.0  |         |
|           |                                                | Z | 5.65  | 69.30  | 19.73 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.72  | 69.19  | 19.72 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.92  | 69.19  | 19.67 |      | 90.0  |         |
|           |                                                | Z | 5.70  | 69.44  | 19.85 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 2.28   | 81.48  | 20.27 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.00   | 67.64  | 14.10 |      | 150.0 |         |
|           |                                                     | Z | 1.04   | 69.66  | 14.21 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 2.13   | 64.08  | 8.83  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 2.57   | 65.34  | 10.16 |      | 80.0  |         |
|           |                                                     | Z | 2.13   | 64.35  | 9.02  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 118.32 | 30.42 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 75.01  | 116.70 | 31.30 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 119.58 | 30.97 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 2.20   | 71.50  | 18.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.90   | 67.97  | 16.04 |      | 150.0 |         |
|           |                                                     | Z | 1.97   | 69.50  | 16.62 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 2.16   | 71.55  | 18.11 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.86   | 67.93  | 16.01 |      | 150.0 |         |
|           |                                                     | Z | 1.93   | 69.49  | 16.61 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 22.24  | 106.54 | 36.64 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 15.16  | 95.02  | 32.46 |      | 60.0  |         |
|           |                                                     | Z | 23.72  | 109.80 | 38.22 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.77   | 73.97  | 18.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.32   | 71.02  | 16.99 |      | 150.0 |         |
|           |                                                     | Z | 3.27   | 71.57  | 17.41 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.50   | 69.24  | 17.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.39   | 67.99  | 16.16 |      | 150.0 |         |
|           |                                                     | Z | 3.29   | 68.22  | 16.35 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.59   | 69.07  | 17.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.49   | 67.92  | 16.24 |      | 150.0 |         |
|           |                                                     | Z | 3.39   | 68.14  | 16.41 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 9.27   | 79.88  | 21.95 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.43   | 77.27  | 20.93 |      | 65.0  |         |
|           |                                                     | Z | 9.22   | 80.33  | 22.26 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 8.81   | 77.80  | 21.97 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 8.62   | 76.41  | 21.37 |      | 65.0  |         |
|           |                                                     | Z | 8.59   | 77.82  | 22.06 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 8.19   | 76.36  | 21.65 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.71   | 74.18  | 20.67 |      | 65.0  |         |
|           |                                                     | Z | 7.86   | 76.00  | 21.56 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 3.29   | 73.14  | 18.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.93   | 70.22  | 16.82 |      | 150.0 |         |
|           |                                                     | Z | 2.85   | 70.87  | 17.28 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 3.18   | 69.27  | 17.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.05   | 67.82  | 16.11 |      | 150.0 |         |
|           |                                                     | Z | 2.94   | 68.18  | 16.29 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.72   | 72.52  | 18.35 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.40   | 69.28  | 16.49 |      | 150.0 |         |
|           |                                                     | Z | 2.33   | 70.22  | 16.99 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.96   | 70.65  | 17.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.76   | 68.51  | 16.45 |      | 150.0 |         |
|           |                                                     | Z | 2.69   | 69.33  | 16.67 |      | 150.0 |         |

|           |                                                |   |       |       |       |      |       |         |
|-----------|------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.29  | 69.10 | 17.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.17  | 67.76 | 16.14 |      | 150.0 |         |
|           |                                                | Z | 3.06  | 68.15 | 16.32 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 3.11  | 70.58 | 17.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.92  | 68.59 | 16.56 |      | 150.0 |         |
|           |                                                | Z | 2.83  | 69.41 | 16.76 |      | 150.0 |         |
| 10114-CAB | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.26  | 67.86 | 16.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.25  | 67.40 | 16.53 |      | 150.0 |         |
|           |                                                | Z | 5.14  | 67.65 | 16.68 |      | 150.0 |         |
| 10115-CAB | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.60  | 68.11 | 16.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.62  | 67.73 | 16.70 |      | 150.0 |         |
|           |                                                | Z | 5.40  | 67.70 | 16.71 |      | 150.0 |         |
| 10116-CAB | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.38  | 68.12 | 16.91 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.38  | 67.68 | 16.59 |      | 150.0 |         |
|           |                                                | Z | 5.23  | 67.82 | 16.70 |      | 150.0 |         |
| 10117-CAB | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.24  | 67.79 | 16.84 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.25  | 67.40 | 16.55 |      | 150.0 |         |
|           |                                                | Z | 5.10  | 67.49 | 16.62 |      | 150.0 |         |
| 10118-CAB | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.68  | 68.30 | 17.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.70  | 67.92 | 16.80 |      | 150.0 |         |
|           |                                                | Z | 5.48  | 67.91 | 16.83 |      | 150.0 |         |
| 10119-CAB | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.35  | 68.04 | 16.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.35  | 67.63 | 16.58 |      | 150.0 |         |
|           |                                                | Z | 5.21  | 67.79 | 16.69 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.63  | 69.06 | 16.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.53  | 67.92 | 16.17 |      | 150.0 |         |
|           |                                                | Z | 3.42  | 68.16 | 16.33 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.75  | 69.06 | 17.04 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.65  | 67.98 | 16.31 |      | 150.0 |         |
|           |                                                | Z | 3.54  | 68.23 | 16.48 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.58  | 73.34 | 18.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.18  | 69.29 | 16.31 |      | 150.0 |         |
|           |                                                | Z | 2.13  | 70.56 | 16.73 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 3.01  | 72.46 | 18.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.65  | 69.32 | 16.38 |      | 150.0 |         |
|           |                                                | Z | 2.60  | 70.44 | 16.44 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.64  | 69.45 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.44  | 67.23 | 14.90 |      | 150.0 |         |
|           |                                                | Z | 2.30  | 67.73 | 14.62 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 2.19  | 73.84 | 16.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.54  | 67.56 | 13.92 |      | 150.0 |         |
|           |                                                | Z | 1.24  | 66.10 | 11.96 |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 6.00  | 80.94 | 18.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.97  | 71.15 | 15.11 |      | 150.0 |         |
|           |                                                | Z | 2.39  | 68.87 | 12.55 |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 13.14 | 91.59 | 22.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.76  | 74.52 | 16.70 |      | 150.0 |         |
|           |                                                | Z | 3.21  | 72.37 | 14.16 |      | 150.0 |         |

|           |                                            |   |       |       |       |      |       |         |
|-----------|--------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 3.19  | 69.34 | 17.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.06  | 67.89 | 16.15 |      | 150.0 |         |
|           |                                            | Z | 2.95  | 68.25 | 16.34 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.29  | 69.16 | 17.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.18  | 67.81 | 16.18 |      | 150.0 |         |
|           |                                            | Z | 3.07  | 68.20 | 16.36 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 10.08 | 82.65 | 23.10 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 9.04  | 79.65 | 21.96 |      | 65.0  |         |
|           |                                            | Z | 10.06 | 83.26 | 23.42 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 8.50  | 78.17 | 21.88 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.23  | 76.54 | 21.20 |      | 65.0  |         |
|           |                                            | Z | 8.27  | 78.18 | 21.88 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 8.91  | 78.99 | 22.55 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.60  | 77.29 | 21.85 |      | 65.0  |         |
|           |                                            | Z | 8.71  | 79.10 | 22.58 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.81  | 73.15 | 18.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.46  | 69.77 | 16.80 |      | 150.0 |         |
|           |                                            | Z | 2.38  | 70.62 | 17.23 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.96  | 70.66 | 17.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.76  | 68.51 | 16.46 |      | 150.0 |         |
|           |                                            | Z | 2.69  | 69.35 | 16.69 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 2.55  | 74.52 | 18.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.05  | 69.58 | 16.30 |      | 150.0 |         |
|           |                                            | Z | 2.00  | 70.89 | 16.58 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.62  | 71.06 | 16.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.30  | 67.95 | 15.09 |      | 150.0 |         |
|           |                                            | Z | 2.17  | 68.55 | 14.74 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 3.11  | 70.65 | 17.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.92  | 68.65 | 16.60 |      | 150.0 |         |
|           |                                            | Z | 2.84  | 69.48 | 16.81 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.77  | 71.67 | 17.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.42  | 68.44 | 15.40 |      | 150.0 |         |
|           |                                            | Z | 2.27  | 68.98 | 14.99 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 3.14  | 71.31 | 17.89 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.90  | 69.12 | 16.57 |      | 150.0 |         |
|           |                                            | Z | 2.85  | 69.90 | 17.00 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 3.19  | 69.15 | 17.05 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.08  | 67.73 | 16.13 |      | 150.0 |         |
|           |                                            | Z | 2.97  | 68.19 | 16.30 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.30  | 69.19 | 17.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.18  | 67.80 | 16.21 |      | 150.0 |         |
|           |                                            | Z | 3.08  | 68.34 | 16.41 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 4.14  | 72.27 | 20.63 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.92  | 70.06 | 19.35 |      | 150.0 |         |
|           |                                            | Z | 3.85  | 71.64 | 20.32 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 5.70  | 76.91 | 21.68 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.94  | 72.92 | 19.80 |      | 150.0 |         |
|           |                                            | Z | 5.14  | 76.11 | 21.32 |      | 150.0 |         |

|           |                                            |   |        |        |       |      |       |         |
|-----------|--------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 6.50   | 79.76  | 23.17 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.42   | 74.94  | 21.01 |      | 150.0 |         |
|           |                                            | Z | 5.85   | 78.93  | 22.82 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.88   | 74.16  | 21.49 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.53   | 70.80  | 19.64 |      | 150.0 |         |
|           |                                            | Z | 3.37   | 71.79  | 20.43 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 7.14   | 85.17  | 25.38 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.02   | 76.66  | 21.81 |      | 150.0 |         |
|           |                                            | Z | 5.41   | 80.65  | 23.72 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 5.21   | 78.32  | 21.78 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.13   | 72.50  | 19.15 |      | 150.0 |         |
|           |                                            | Z | 4.25   | 75.40  | 20.64 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 82.16  | 130.26 | 39.09 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 17.62  | 97.94  | 29.93 |      | 65.0  |         |
|           |                                            | Z | 65.78  | 128.99 | 39.45 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 91.21  | 124.95 | 35.70 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 19.75  | 96.35  | 28.03 |      | 65.0  |         |
|           |                                            | Z | 100.00 | 129.35 | 37.29 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 55.61  | 114.43 | 32.46 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 16.76  | 92.45  | 26.36 |      | 65.0  |         |
|           |                                            | Z | 70.56  | 121.14 | 34.65 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 3.81   | 73.71  | 21.19 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.48   | 70.45  | 19.37 |      | 150.0 |         |
|           |                                            | Z | 3.32   | 71.46  | 20.19 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 7.15   | 85.21  | 25.39 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.03   | 76.68  | 21.82 |      | 150.0 |         |
|           |                                            | Z | 5.42   | 80.68  | 23.74 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.85   | 73.93  | 21.31 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.51   | 70.63  | 19.48 |      | 150.0 |         |
|           |                                            | Z | 3.35   | 71.61  | 20.27 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 7.01   | 84.77  | 25.21 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.96   | 76.40  | 21.67 |      | 150.0 |         |
|           |                                            | Z | 5.36   | 80.45  | 23.62 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 6.07   | 81.52  | 23.41 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.53   | 74.41  | 20.33 |      | 150.0 |         |
|           |                                            | Z | 4.79   | 77.92  | 22.06 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 5.18   | 78.18  | 21.70 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.12   | 72.40  | 19.09 |      | 150.0 |         |
|           |                                            | Z | 4.24   | 75.33  | 20.60 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.84   | 73.91  | 21.30 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.51   | 70.61  | 19.47 |      | 150.0 |         |
|           |                                            | Z | 3.35   | 71.60  | 20.27 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 6.99   | 84.74  | 25.19 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.95   | 76.38  | 21.66 |      | 150.0 |         |
|           |                                            | Z | 5.35   | 80.42  | 23.61 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 5.17   | 78.15  | 21.69 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.11   | 72.38  | 19.08 |      | 150.0 |         |
|           |                                            | Z | 4.23   | 75.30  | 20.59 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.86 | 73.96 | 21.33 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.52 | 70.65 | 19.50 |      | 150.0 |         |
|           |                                               | Z | 3.36 | 71.64 | 20.29 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 7.04 | 84.85 | 25.24 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.98 | 76.45 | 21.70 |      | 150.0 |         |
|           |                                               | Z | 5.38 | 80.50 | 23.65 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 5.20 | 78.24 | 21.73 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.13 | 72.45 | 19.11 |      | 150.0 |         |
|           |                                               | Z | 4.25 | 75.38 | 20.62 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.87 | 74.02 | 21.39 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.53 | 70.69 | 19.55 |      | 150.0 |         |
|           |                                               | Z | 3.37 | 71.71 | 20.36 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 7.44 | 86.01 | 25.76 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.15 | 77.16 | 22.09 |      | 150.0 |         |
|           |                                               | Z | 5.58 | 81.30 | 24.05 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 5.39 | 78.94 | 22.10 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.22 | 72.89 | 19.39 |      | 150.0 |         |
|           |                                               | Z | 4.36 | 75.91 | 20.93 |      | 150.0 |         |
| 10193-CAB | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.67 | 67.32 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.67 | 66.82 | 16.30 |      | 150.0 |         |
|           |                                               | Z | 4.53 | 67.11 | 16.38 |      | 150.0 |         |
| 10194-CAB | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.85 | 67.66 | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.86 | 67.18 | 16.41 |      | 150.0 |         |
|           |                                               | Z | 4.69 | 67.40 | 16.51 |      | 150.0 |         |
| 10195-CAB | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.89 | 67.68 | 16.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.90 | 67.20 | 16.42 |      | 150.0 |         |
|           |                                               | Z | 4.73 | 67.43 | 16.52 |      | 150.0 |         |
| 10196-CAB | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.68 | 67.41 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.68 | 66.91 | 16.33 |      | 150.0 |         |
|           |                                               | Z | 4.52 | 67.15 | 16.39 |      | 150.0 |         |
| 10197-CAB | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.87 | 67.69 | 16.78 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.88 | 67.20 | 16.42 |      | 150.0 |         |
|           |                                               | Z | 4.70 | 67.42 | 16.52 |      | 150.0 |         |
| 10198-CAB | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.90 | 67.70 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.91 | 67.21 | 16.43 |      | 150.0 |         |
|           |                                               | Z | 4.73 | 67.45 | 16.54 |      | 150.0 |         |
| 10219-CAB | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.63 | 67.43 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.63 | 66.93 | 16.29 |      | 150.0 |         |
|           |                                               | Z | 4.47 | 67.18 | 16.36 |      | 150.0 |         |
| 10220-CAB | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.86 | 67.66 | 16.77 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.88 | 67.19 | 16.42 |      | 150.0 |         |
|           |                                               | Z | 4.69 | 67.38 | 16.50 |      | 150.0 |         |
| 10221-CAB | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.90 | 67.62 | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.91 | 67.14 | 16.42 |      | 150.0 |         |
|           |                                               | Z | 4.74 | 67.37 | 16.52 |      | 150.0 |         |
| 10222-CAB | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.22 | 67.81 | 16.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.23 | 67.42 | 16.55 |      | 150.0 |         |
|           |                                               | Z | 5.08 | 67.50 | 16.62 |      | 150.0 |         |

|           |                                           |   |        |        |       |      |       |         |
|-----------|-------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10223-CAB | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.53   | 67.97  | 16.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.59   | 67.74  | 16.73 |      | 150.0 |         |
|           |                                           | Z | 5.38   | 67.75  | 16.76 |      | 150.0 |         |
| 10224-CAB | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.26   | 67.91  | 16.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.27   | 67.51  | 16.52 |      | 150.0 |         |
|           |                                           | Z | 5.12   | 67.61  | 16.60 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 3.00   | 67.51  | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.93   | 66.39  | 15.65 |      | 150.0 |         |
|           |                                           | Z | 2.82   | 66.88  | 15.63 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 100.00 | 126.81 | 36.25 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 20.60  | 97.21  | 28.37 |      | 65.0  |         |
|           |                                           | Z | 100.00 | 129.54 | 37.41 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 65.64  | 117.49 | 33.34 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.22  | 94.00  | 26.93 |      | 65.0  |         |
|           |                                           | Z | 85.61  | 124.65 | 35.59 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 79.85  | 130.36 | 39.26 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 20.21  | 101.07 | 31.01 |      | 65.0  |         |
|           |                                           | Z | 65.84  | 129.47 | 39.67 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 91.11  | 124.93 | 35.70 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 19.80  | 96.38  | 28.04 |      | 65.0  |         |
|           |                                           | Z | 100.00 | 129.35 | 37.29 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 60.15  | 115.83 | 32.84 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 17.60  | 93.31  | 26.65 |      | 65.0  |         |
|           |                                           | Z | 77.12  | 122.67 | 35.03 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 72.28  | 128.22 | 38.64 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 19.39  | 100.17 | 30.67 |      | 65.0  |         |
|           |                                           | Z | 59.87  | 127.39 | 39.07 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 91.25  | 124.96 | 35.71 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 19.78  | 96.37  | 28.04 |      | 65.0  |         |
|           |                                           | Z | 100.00 | 129.36 | 37.30 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 60.26  | 115.87 | 32.85 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 17.59  | 93.32  | 26.66 |      | 65.0  |         |
|           |                                           | Z | 77.19  | 122.70 | 35.04 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 65.41  | 125.97 | 37.96 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.62  | 99.23  | 30.29 |      | 65.0  |         |
|           |                                           | Z | 54.84  | 125.34 | 38.42 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 91.93  | 125.11 | 35.75 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 19.81  | 96.41  | 28.05 |      | 65.0  |         |
|           |                                           | Z | 100.00 | 129.37 | 37.30 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 61.00  | 116.05 | 32.90 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 17.69  | 93.40  | 26.68 |      | 65.0  |         |
|           |                                           | Z | 78.43  | 122.94 | 35.10 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 73.61  | 128.60 | 38.74 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 19.49  | 100.29 | 30.70 |      | 65.0  |         |
|           |                                           | Z | 60.90  | 127.76 | 39.16 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 91.47  | 125.02 | 35.72 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 19.78  | 96.38  | 28.04 |      | 65.0  |         |
|           |                                           | Z | 100.00 | 129.37 | 37.30 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 60.36 | 115.92 | 32.87 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 17.58 | 93.32  | 26.66 |      | 65.0 |         |
|           |                                            | Z | 77.24 | 122.72 | 35.05 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 73.31 | 128.53 | 38.72 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 19.44 | 100.25 | 30.69 |      | 65.0 |         |
|           |                                            | Z | 60.69 | 127.70 | 39.15 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 14.22 | 90.30  | 28.70 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 11.91 | 84.78  | 26.56 |      | 65.0 |         |
|           |                                            | Z | 15.04 | 92.96  | 29.82 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 12.20 | 86.96  | 27.37 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 11.04 | 83.09  | 25.82 |      | 65.0 |         |
|           |                                            | Z | 14.66 | 92.40  | 29.55 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 9.46  | 83.32  | 26.91 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.15  | 80.79  | 25.71 |      | 65.0 |         |
|           |                                            | Z | 10.96 | 87.97  | 28.96 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 10.76 | 82.68  | 21.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.17  | 79.37  | 20.74 |      | 65.0 |         |
|           |                                            | Z | 9.65  | 80.90  | 20.36 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 10.44 | 81.95  | 21.29 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.07  | 78.96  | 20.54 |      | 65.0 |         |
|           |                                            | Z | 9.24  | 79.99  | 19.97 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 11.35 | 86.57  | 23.09 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.94  | 81.85  | 21.69 |      | 65.0 |         |
|           |                                            | Z | 10.01 | 84.49  | 21.88 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 8.24  | 79.27  | 21.01 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.74  | 77.28  | 20.43 |      | 65.0 |         |
|           |                                            | Z | 7.64  | 78.13  | 20.10 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 8.11  | 78.56  | 20.72 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.73  | 76.82  | 20.23 |      | 65.0 |         |
|           |                                            | Z | 7.48  | 77.39  | 19.79 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 12.62 | 88.79  | 24.56 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.64  | 83.20  | 22.76 |      | 65.0 |         |
|           |                                            | Z | 12.16 | 88.40  | 24.15 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 9.13  | 81.24  | 23.10 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.50  | 78.84  | 22.20 |      | 65.0 |         |
|           |                                            | Z | 8.86  | 81.11  | 22.89 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 8.47  | 78.74  | 21.83 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.10  | 76.89  | 21.13 |      | 65.0 |         |
|           |                                            | Z | 8.20  | 78.63  | 21.61 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 11.59 | 86.92  | 24.65 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.53  | 82.29  | 23.01 |      | 65.0 |         |
|           |                                            | Z | 11.63 | 87.60  | 24.87 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 8.27  | 77.55  | 21.65 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.04  | 76.02  | 21.02 |      | 65.0 |         |
|           |                                            | Z | 8.09  | 77.65  | 21.62 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 8.67  | 78.35  | 22.26 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.41  | 76.75  | 21.61 |      | 65.0 |         |
|           |                                            | Z | 8.50  | 78.49  | 22.25 |      | 65.0 |         |

|           |                                             |   |       |       |       |      |      |         |
|-----------|---------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 9.69  | 82.20 | 23.16 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.77  | 79.29 | 22.03 |      | 65.0 |         |
|           |                                             | Z | 9.70  | 82.84 | 23.45 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 9.10  | 79.45 | 19.54 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.28  | 77.46 | 19.27 |      | 65.0 |         |
|           |                                             | Z | 7.50  | 76.38 | 17.64 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 8.71  | 78.44 | 19.07 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.14  | 76.86 | 18.96 |      | 65.0 |         |
|           |                                             | Z | 7.10  | 75.27 | 17.09 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 9.16  | 82.49 | 20.98 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.92  | 79.54 | 20.28 |      | 65.0 |         |
|           |                                             | Z | 7.29  | 78.75 | 18.94 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 8.59  | 79.95 | 21.73 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.03  | 77.80 | 21.03 |      | 65.0 |         |
|           |                                             | Z | 8.13  | 79.27 | 21.11 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 8.53  | 79.55 | 21.59 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.06  | 77.57 | 20.96 |      | 65.0 |         |
|           |                                             | Z | 8.06  | 78.82 | 20.93 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 11.51 | 87.11 | 24.32 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.26  | 82.24 | 22.68 |      | 65.0 |         |
|           |                                             | Z | 11.28 | 87.12 | 24.13 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 9.12  | 81.19 | 23.06 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.49  | 78.79 | 22.16 |      | 65.0 |         |
|           |                                             | Z | 8.84  | 81.05 | 22.85 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 8.46  | 78.73 | 21.82 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.09  | 76.88 | 21.13 |      | 65.0 |         |
|           |                                             | Z | 8.19  | 78.61 | 21.60 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 11.49 | 86.74 | 24.57 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.47  | 82.16 | 22.94 |      | 65.0 |         |
|           |                                             | Z | 11.51 | 87.39 | 24.78 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 8.50  | 78.18 | 21.88 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.22  | 76.54 | 21.21 |      | 65.0 |         |
|           |                                             | Z | 8.27  | 78.18 | 21.88 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 8.90  | 78.98 | 22.54 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.60  | 77.28 | 21.84 |      | 65.0 |         |
|           |                                             | Z | 8.71  | 79.09 | 22.57 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 10.06 | 82.61 | 23.09 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.03  | 79.62 | 21.95 |      | 65.0 |         |
|           |                                             | Z | 10.04 | 83.22 | 23.41 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 8.87  | 77.45 | 21.95 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.72  | 76.18 | 21.40 |      | 65.0 |         |
|           |                                             | Z | 8.67  | 77.54 | 22.05 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 8.77  | 76.99 | 21.83 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.66  | 75.80 | 21.31 |      | 65.0 |         |
|           |                                             | Z | 8.60  | 77.10 | 21.92 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 9.16  | 79.20 | 21.93 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.71  | 77.35 | 21.19 |      | 65.0 |         |
|           |                                             | Z | 9.06  | 79.57 | 22.19 |      | 65.0 |         |

|           |                                                                    |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.80   | 68.17  | 16.47 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.67   | 66.63  | 15.50 |      | 150.0 |         |
|           |                                                                    | Z | 2.65   | 67.51  | 15.70 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 2.12   | 73.27  | 18.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.72   | 68.53  | 16.00 |      | 150.0 |         |
|           |                                                                    | Z | 1.76   | 70.05  | 16.72 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 5.32   | 68.96  | 13.42 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 6.41   | 71.20  | 15.49 |      | 50.0  |         |
|           |                                                                    | Z | 5.12   | 68.74  | 13.08 |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 9.11   | 79.62  | 20.31 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.22   | 79.31  | 21.03 |      | 50.0  |         |
|           |                                                                    | Z | 8.20   | 77.78  | 19.21 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 9.25   | 79.80  | 20.39 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 9.36   | 79.46  | 21.09 |      | 50.0  |         |
|           |                                                                    | Z | 8.30   | 77.91  | 19.28 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 3.59   | 82.57  | 20.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.73   | 70.44  | 15.45 |      | 150.0 |         |
|           |                                                                    | Z | 1.75   | 72.09  | 15.26 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 2.13   | 80.55  | 19.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.98   | 67.37  | 13.95 |      | 150.0 |         |
|           |                                                                    | Z | 1.01   | 69.27  | 14.02 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 12.02  | 108.71 | 29.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.26   | 72.03  | 16.54 |      | 150.0 |         |
|           |                                                                    | Z | 1.93   | 79.12  | 18.49 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 100.00 | 144.61 | 38.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.90   | 78.46  | 19.68 |      | 150.0 |         |
|           |                                                                    | Z | 6.64   | 97.19  | 24.86 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 11.58  | 85.59  | 24.60 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 10.44  | 82.50  | 23.85 |      | 50.0  |         |
|           |                                                                    | Z | 13.98  | 88.93  | 25.45 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 3.31   | 73.28  | 18.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.94   | 70.32  | 16.89 |      | 150.0 |         |
|           |                                                                    | Z | 2.86   | 70.97  | 17.35 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 2.53   | 75.50  | 18.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.83   | 69.14  | 15.39 |      | 150.0 |         |
|           |                                                                    | Z | 1.69   | 69.62  | 14.84 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 6.61   | 82.78  | 20.21 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 3.43   | 72.67  | 16.51 |      | 150.0 |         |
|           |                                                                    | Z | 3.82   | 74.80  | 16.21 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 3.24   | 71.51  | 15.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.57   | 67.68  | 13.54 |      | 150.0 |         |
|           |                                                                    | Z | 2.21   | 66.93  | 12.03 |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 5.62   | 68.28  | 18.87 | 4.17 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 5.93   | 68.63  | 18.94 |      | 80.0  |         |
|           |                                                                    | Z | 5.89   | 69.91  | 19.47 |      | 80.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 6.17   | 69.25  | 19.82 | 4.96 | 80.0  | ± 9.6 % |
|           |                                                                    | Y | 6.38   | 69.08  | 19.58 |      | 80.0  |         |
|           |                                                                    | Z | 6.23   | 69.95  | 19.93 |      | 80.0  |         |

|           |                                                                     |   |       |       |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|-------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 6.02  | 69.32 | 19.87 | 4.96  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.26  | 69.22 | 19.66 |       | 80.0  |         |
|           |                                                                     | Z | 6.09  | 70.04 | 19.96 |       | 80.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 5.67  | 68.65 | 19.09 | 4.17  | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.85  | 68.42 | 18.82 |       | 80.0  |         |
|           |                                                                     | Z | 5.71  | 69.28 | 19.12 |       | 80.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 9.13  | 83.00 | 26.75 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 11.08 | 85.83 | 27.58 |       | 50.0  |         |
|           |                                                                     | Z | 11.97 | 88.64 | 28.23 |       | 50.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 6.47  | 72.26 | 21.90 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.84  | 72.27 | 21.68 |       | 50.0  |         |
|           |                                                                     | Z | 6.81  | 73.77 | 22.17 |       | 50.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 6.58  | 73.04 | 22.08 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 8.34  | 78.37 | 24.64 |       | 50.0  |         |
|           |                                                                     | Z | 6.92  | 74.46 | 22.29 |       | 50.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 6.66  | 73.56 | 22.34 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 8.60  | 79.30 | 25.04 |       | 50.0  |         |
|           |                                                                     | Z | 7.08  | 75.16 | 22.62 |       | 50.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 6.58  | 72.60 | 22.09 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.95  | 72.58 | 21.85 |       | 50.0  |         |
|           |                                                                     | Z | 6.90  | 74.05 | 22.35 |       | 50.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 6.50  | 72.56 | 21.95 | 6.02  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 6.87  | 72.52 | 21.70 |       | 50.0  |         |
|           |                                                                     | Z | 6.86  | 74.10 | 22.23 |       | 50.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.70  | 72.28 | 18.01 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.30  | 69.61 | 16.53 |       | 150.0 |         |
|           |                                                                     | Z | 3.23  | 70.11 | 16.90 |       | 150.0 |         |
| 10313-AAA | iDEN 1:3                                                            | X | 9.18  | 81.61 | 19.86 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 7.64  | 78.40 | 19.13 |       | 70.0  |         |
|           |                                                                     | Z | 9.78  | 83.14 | 20.58 |       | 70.0  |         |
| 10314-AAA | iDEN 1:6                                                            | X | 13.83 | 90.60 | 25.32 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 9.35  | 83.01 | 23.15 |       | 30.0  |         |
|           |                                                                     | Z | 14.01 | 91.81 | 25.99 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.27  | 67.24 | 17.67 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.20  | 64.93 | 15.83 |       | 150.0 |         |
|           |                                                                     | Z | 1.21  | 65.68 | 16.36 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.76  | 67.47 | 16.83 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.78  | 67.03 | 16.51 |       | 150.0 |         |
|           |                                                                     | Z | 4.63  | 67.31 | 16.62 |       | 150.0 |         |
| 10317-AAB | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.76  | 67.47 | 16.83 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.78  | 67.03 | 16.51 |       | 150.0 |         |
|           |                                                                     | Z | 4.63  | 67.31 | 16.62 |       | 150.0 |         |
| 10400-AAC | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.86  | 67.74 | 16.77 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.87  | 67.24 | 16.40 |       | 150.0 |         |
|           |                                                                     | Z | 4.68  | 67.47 | 16.52 |       | 150.0 |         |
| 10401-AAC | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.51  | 67.76 | 16.81 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.52  | 67.36 | 16.52 |       | 150.0 |         |
|           |                                                                     | Z | 5.41  | 67.67 | 16.70 |       | 150.0 |         |

|           |                                                                                |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAC | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                            | X | 5.79   | 68.18  | 16.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.81   | 67.85  | 16.61 |      | 150.0 |         |
|           |                                                                                | Z | 5.64   | 67.83  | 16.63 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                     | X | 3.59   | 82.57  | 20.48 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.73   | 70.44  | 15.45 |      | 115.0 |         |
|           |                                                                                | Z | 1.75   | 72.09  | 15.26 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                     | X | 3.59   | 82.57  | 20.48 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.73   | 70.44  | 15.45 |      | 115.0 |         |
|           |                                                                                | Z | 1.75   | 72.09  | 15.26 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                           | X | 100.00 | 122.57 | 31.18 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                | Y | 18.35  | 99.60  | 26.20 |      | 100.0 |         |
|           |                                                                                | Z | 100.00 | 120.33 | 29.78 |      | 100.0 |         |
| 10410-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                 | X | 100.00 | 120.29 | 30.51 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                | Y | 100.00 | 120.68 | 31.13 |      | 80.0  |         |
|           |                                                                                | Z | 100.00 | 122.62 | 31.38 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                      | X | 1.09   | 65.33  | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 1.03   | 63.31  | 14.91 |      | 150.0 |         |
|           |                                                                                | Z | 1.05   | 64.05  | 15.43 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                  | X | 4.67   | 67.36  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.67   | 66.86  | 16.34 |      | 150.0 |         |
|           |                                                                                | Z | 4.53   | 67.14  | 16.45 |      | 150.0 |         |
| 10417-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                      | X | 4.67   | 67.36  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.67   | 66.86  | 16.34 |      | 150.0 |         |
|           |                                                                                | Z | 4.53   | 67.14  | 16.45 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)  | X | 4.66   | 67.53  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.66   | 67.00  | 16.35 |      | 150.0 |         |
|           |                                                                                | Z | 4.52   | 67.33  | 16.49 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble) | X | 4.68   | 67.47  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.68   | 66.95  | 16.36 |      | 150.0 |         |
|           |                                                                                | Z | 4.54   | 67.26  | 16.48 |      | 150.0 |         |
| 10422-AAA | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                   | X | 4.80   | 67.45  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.81   | 66.96  | 16.37 |      | 150.0 |         |
|           |                                                                                | Z | 4.65   | 67.24  | 16.49 |      | 150.0 |         |
| 10423-AAA | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                | X | 4.99   | 67.80  | 16.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.00   | 67.33  | 16.51 |      | 150.0 |         |
|           |                                                                                | Z | 4.80   | 67.54  | 16.59 |      | 150.0 |         |
| 10424-AAA | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                | X | 4.90   | 67.76  | 16.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.91   | 67.27  | 16.47 |      | 150.0 |         |
|           |                                                                                | Z | 4.73   | 67.50  | 16.57 |      | 150.0 |         |
| 10425-AAA | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                    | X | 5.49   | 68.02  | 16.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.50   | 67.62  | 16.64 |      | 150.0 |         |
|           |                                                                                | Z | 5.34   | 67.73  | 16.73 |      | 150.0 |         |
| 10426-AAA | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                  | X | 5.49   | 68.02  | 16.94 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.51   | 67.65  | 16.65 |      | 150.0 |         |
|           |                                                                                | Z | 5.36   | 67.83  | 16.78 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAA | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.50   | 68.00  | 16.93 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.52   | 67.64  | 16.64 |      | 150.0 |         |
|           |                                                                | Z | 5.36   | 67.74  | 16.73 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.54   | 72.09  | 19.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.40   | 70.73  | 18.36 |      | 150.0 |         |
|           |                                                                | Z | 4.26   | 71.56  | 18.37 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.40   | 68.10  | 16.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.40   | 67.42  | 16.40 |      | 150.0 |         |
|           |                                                                | Z | 4.19   | 67.79  | 16.46 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.68   | 67.87  | 16.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.69   | 67.31  | 16.44 |      | 150.0 |         |
|           |                                                                | Z | 4.50   | 67.59  | 16.53 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.92   | 67.80  | 16.85 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.93   | 67.31  | 16.50 |      | 150.0 |         |
|           |                                                                | Z | 4.74   | 67.53  | 16.59 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.73   | 73.25  | 19.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.51   | 71.54  | 18.38 |      | 150.0 |         |
|           |                                                                | Z | 4.38   | 72.53  | 18.34 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 120.11 | 30.42 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 120.53 | 31.07 |      | 80.0  |         |
|           |                                                                | Z | 100.00 | 122.42 | 31.29 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.76   | 68.51  | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.71   | 67.48  | 15.90 |      | 150.0 |         |
|           |                                                                | Z | 3.49   | 67.91  | 15.73 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.23   | 67.89  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.22   | 67.19  | 16.26 |      | 150.0 |         |
|           |                                                                | Z | 4.04   | 67.58  | 16.33 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.49   | 67.72  | 16.75 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.48   | 67.13  | 16.34 |      | 150.0 |         |
|           |                                                                | Z | 4.32   | 67.42  | 16.43 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.67   | 67.59  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.66   | 67.07  | 16.35 |      | 150.0 |         |
|           |                                                                | Z | 4.52   | 67.31  | 16.45 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.71   | 68.96  | 16.29 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.63   | 67.76  | 15.64 |      | 150.0 |         |
|           |                                                                | Z | 3.37   | 68.05  | 15.28 |      | 150.0 |         |
| 10456-AAA | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.34   | 68.51  | 17.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.36   | 68.23  | 16.81 |      | 150.0 |         |
|           |                                                                | Z | 6.24   | 68.31  | 16.89 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.87   | 65.97  | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.87   | 65.48  | 16.06 |      | 150.0 |         |
|           |                                                                | Z | 3.81   | 65.79  | 16.17 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 4.35   | 72.54  | 18.72 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.10   | 70.59  | 17.78 |      | 150.0 |         |
|           |                                                                | Z | 4.02   | 71.83  | 17.67 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 5.25   | 68.89  | 18.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.22   | 68.08  | 18.20 |      | 150.0 |         |
|           |                                                                | Z | 4.96   | 68.66  | 18.04 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 1.62   | 80.44  | 22.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.96   | 69.05  | 16.73 |      | 150.0 |         |
|           |                                                                   | Z | 1.09   | 72.04  | 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 | 125.40 | 32.90 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 122.42 | 32.02 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 127.89 | 33.84 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 109.25 | 25.21 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 110.42 | 26.29 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 110.45 | 25.54 |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 106.10 | 23.70 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 31.87  | 95.11  | 22.04 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 107.01 | 23.88 |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 123.48 | 31.85 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.78 | 31.11 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 125.94 | 32.77 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 108.73 | 24.95 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 57.38  | 103.50 | 24.59 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 109.93 | 25.28 |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 105.62 | 23.47 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.30  | 89.18  | 20.39 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.51 | 23.65 |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 123.71 | 31.96 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.96 | 31.19 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 126.19 | 32.89 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 108.89 | 25.03 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 68.69  | 105.73 | 25.14 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 110.12 | 25.37 |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 100.00 | 105.63 | 23.47 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.75  | 89.45  | 20.46 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.53 | 23.66 |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 123.74 | 31.96 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.98 | 31.20 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 126.22 | 32.89 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 108.84 | 25.00 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 69.00  | 105.75 | 25.13 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 110.07 | 25.35 |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 105.58 | 23.44 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.79  | 89.46  | 20.45 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.47 | 23.62 |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 123.71 | 31.95 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 120.96 | 31.18 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 126.20 | 32.88 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 108.85 | 25.00 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 67.79  | 105.55 | 25.09 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 110.08 | 25.35 |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 100.00 | 105.59 | 23.45 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 19.52  | 89.31  | 20.41 |      | 80.0  |         |
|           |                                                                   | Z | 100.00 | 106.49 | 23.63 |      | 80.0  |         |

|           |                                                                     |   |        |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|--------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 108.68 | 24.92 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 60.00  | 104.00 | 24.69 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 109.90 | 25.26 |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 105.53 | 23.42 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 19.24  | 89.12  | 20.35 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 106.43 | 23.60 |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 94.50  | 124.14 | 33.84 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 12.50  | 90.83  | 25.02 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 124.95 | 33.67 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 95.67  | 115.16 | 29.54 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 12.83  | 86.63  | 22.28 |      | 80.0 |         |
|           |                                                                     | Z | 100.00 | 114.83 | 28.84 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 58.64  | 107.02 | 27.16 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 11.35  | 84.25  | 21.22 |      | 80.0 |         |
|           |                                                                     | Z | 80.09  | 110.11 | 27.23 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 12.89  | 91.14  | 23.86 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.25   | 79.51  | 20.15 |      | 80.0 |         |
|           |                                                                     | Z | 8.39   | 84.42  | 21.05 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 18.92  | 92.85  | 24.00 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 8.58   | 80.90  | 20.47 |      | 80.0 |         |
|           |                                                                     | Z | 13.62  | 87.31  | 21.48 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 15.36  | 89.71  | 23.07 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 7.99   | 79.65  | 20.04 |      | 80.0 |         |
|           |                                                                     | Z | 10.91  | 84.16  | 20.49 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 10.83  | 89.50  | 24.25 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.29   | 79.77  | 20.91 |      | 80.0 |         |
|           |                                                                     | Z | 8.35   | 85.48  | 22.54 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.33   | 78.08  | 19.97 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.11   | 73.82  | 18.38 |      | 80.0 |         |
|           |                                                                     | Z | 5.40   | 75.74  | 18.50 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 6.09   | 77.15  | 19.61 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.06   | 73.33  | 18.18 |      | 80.0 |         |
|           |                                                                     | Z | 5.20   | 74.88  | 18.15 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 7.97   | 83.54  | 22.89 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.02   | 77.67  | 20.60 |      | 80.0 |         |
|           |                                                                     | Z | 6.66   | 81.06  | 21.92 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.54   | 75.17  | 19.93 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.05   | 72.55  | 18.77 |      | 80.0 |         |
|           |                                                                     | Z | 5.10   | 74.15  | 19.29 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.52   | 74.58  | 19.72 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.10   | 72.20  | 18.66 |      | 80.0 |         |
|           |                                                                     | Z | 5.11   | 73.70  | 19.12 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 6.68   | 78.67  | 21.27 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.75   | 75.05  | 19.71 |      | 80.0 |         |
|           |                                                                     | Z | 5.90   | 77.08  | 20.64 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.47   | 73.05  | 19.35 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.22   | 71.31  | 18.50 |      | 80.0 |         |
|           |                                                                     | Z | 5.12   | 72.35  | 18.92 |      | 80.0 |         |

|           |                                                                      |   |       |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|-------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.48  | 72.72 | 19.22 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.27  | 71.08 | 18.43 |      | 80.0 |         |
|           |                                                                      | Z | 5.15  | 72.07 | 18.82 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 7.90  | 81.45 | 22.09 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.41  | 76.92 | 20.25 |      | 80.0 |         |
|           |                                                                      | Z | 6.69  | 79.16 | 21.27 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.61  | 73.73 | 19.62 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.32  | 71.86 | 18.72 |      | 80.0 |         |
|           |                                                                      | Z | 5.21  | 72.81 | 19.16 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.57  | 73.09 | 19.41 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.35  | 71.43 | 18.59 |      | 80.0 |         |
|           |                                                                      | Z | 5.21  | 72.31 | 18.99 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 10.14 | 86.59 | 21.54 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.12  | 76.51 | 18.39 |      | 80.0 |         |
|           |                                                                      | Z | 5.35  | 77.20 | 17.46 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.29  | 72.00 | 15.43 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.72  | 69.52 | 14.77 |      | 80.0 |         |
|           |                                                                      | Z | 2.43  | 65.17 | 11.54 |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.97  | 70.70 | 14.77 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.61  | 68.83 | 14.36 |      | 80.0 |         |
|           |                                                                      | Z | 2.26  | 64.14 | 10.91 |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 8.79  | 85.79 | 23.33 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.95  | 78.30 | 20.59 |      | 80.0 |         |
|           |                                                                      | Z | 7.25  | 82.97 | 22.08 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.90  | 76.65 | 19.85 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.06  | 73.18 | 18.47 |      | 80.0 |         |
|           |                                                                      | Z | 5.28  | 75.13 | 18.80 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.87  | 76.18 | 19.62 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.09  | 72.91 | 18.33 |      | 80.0 |         |
|           |                                                                      | Z | 5.26  | 74.71 | 18.58 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 7.83  | 83.24 | 22.77 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.94  | 77.45 | 20.51 |      | 80.0 |         |
|           |                                                                      | Z | 6.55  | 80.79 | 21.81 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.51  | 75.05 | 19.87 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.02  | 72.46 | 18.72 |      | 80.0 |         |
|           |                                                                      | Z | 5.07  | 74.04 | 19.23 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 5.49  | 74.47 | 19.66 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.07  | 72.10 | 18.60 |      | 80.0 |         |
|           |                                                                      | Z | 5.08  | 73.60 | 19.06 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 7.81  | 81.23 | 22.00 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 6.35  | 76.76 | 20.18 |      | 80.0 |         |
|           |                                                                      | Z | 6.62  | 78.99 | 21.19 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 5.58  | 73.65 | 19.59 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 5.30  | 71.80 | 18.69 |      | 80.0 |         |
|           |                                                                      | Z | 5.19  | 72.75 | 19.13 |      | 80.0 |         |

|           |                                                                     |   |      |        |       |      |       |         |
|-----------|---------------------------------------------------------------------|---|------|--------|-------|------|-------|---------|
| 10508-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.55 | 73.01  | 19.36 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.33 | 71.35  | 18.55 |      | 80.0  |         |
|           |                                                                     | Z | 5.19 | 72.24  | 18.95 |      | 80.0  |         |
| 10509-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 7.03 | 77.40  | 20.60 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.25 | 74.54  | 19.35 |      | 80.0  |         |
|           |                                                                     | Z | 6.27 | 75.89  | 20.05 |      | 80.0  |         |
| 10510-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.86 | 72.49  | 19.18 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.70 | 71.14  | 18.49 |      | 80.0  |         |
|           |                                                                     | Z | 5.51 | 71.73  | 18.83 |      | 80.0  |         |
| 10511-AAC | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.83 | 72.01  | 19.03 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.71 | 70.79  | 18.40 |      | 80.0  |         |
|           |                                                                     | Z | 5.52 | 71.35  | 18.71 |      | 80.0  |         |
| 10512-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 8.18 | 80.50  | 21.58 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 6.82 | 76.59  | 19.98 |      | 80.0  |         |
|           |                                                                     | Z | 6.97 | 78.23  | 20.79 |      | 80.0  |         |
| 10513-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.86 | 73.15  | 19.44 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.65 | 71.64  | 18.67 |      | 80.0  |         |
|           |                                                                     | Z | 5.45 | 72.18  | 19.02 |      | 80.0  |         |
| 10514-AAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 5.75 | 72.41  | 19.20 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                                     | Y | 5.60 | 71.07  | 18.51 |      | 80.0  |         |
|           |                                                                     | Z | 5.40 | 71.58  | 18.82 |      | 80.0  |         |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)           | X | 1.06 | 65.76  | 16.90 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.00 | 63.51  | 14.99 |      | 150.0 |         |
|           |                                                                     | Z | 1.02 | 64.32  | 15.55 |      | 150.0 |         |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)         | X | 5.87 | 117.81 | 35.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.66 | 71.85  | 18.17 |      | 150.0 |         |
|           |                                                                     | Z | 0.94 | 79.02  | 21.78 |      | 150.0 |         |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)          | X | 1.03 | 70.61  | 19.18 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 0.86 | 65.67  | 15.75 |      | 150.0 |         |
|           |                                                                     | Z | 0.90 | 67.08  | 16.71 |      | 150.0 |         |
| 10518-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)           | X | 4.67 | 67.45  | 16.69 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.67 | 66.94  | 16.33 |      | 150.0 |         |
|           |                                                                     | Z | 4.52 | 67.23  | 16.44 |      | 150.0 |         |
| 10519-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)          | X | 4.87 | 67.70  | 16.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.88 | 67.22  | 16.46 |      | 150.0 |         |
|           |                                                                     | Z | 4.69 | 67.43  | 16.54 |      | 150.0 |         |
| 10520-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)          | X | 4.72 | 67.70  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.73 | 67.19  | 16.39 |      | 150.0 |         |
|           |                                                                     | Z | 4.54 | 67.39  | 16.47 |      | 150.0 |         |
| 10521-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)          | X | 4.66 | 67.72  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.66 | 67.20  | 16.38 |      | 150.0 |         |
|           |                                                                     | Z | 4.48 | 67.38  | 16.46 |      | 150.0 |         |
| 10522-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)          | X | 4.71 | 67.76  | 16.82 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.71 | 67.20  | 16.42 |      | 150.0 |         |
|           |                                                                     | Z | 4.54 | 67.51  | 16.56 |      | 150.0 |         |

|           |                                                            |   |      |       |       |      |       |         |
|-----------|------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10523-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.59 | 67.65 | 16.68 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.58 | 67.09 | 16.28 |      | 150.0 |         |
|           |                                                            | Z | 4.43 | 67.41 | 16.42 |      | 150.0 |         |
| 10524-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.66 | 67.69 | 16.79 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.66 | 67.15 | 16.40 |      | 150.0 |         |
|           |                                                            | Z | 4.48 | 67.43 | 16.53 |      | 150.0 |         |
| 10525-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)          | X | 4.63 | 66.73 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.62 | 66.18 | 15.99 |      | 150.0 |         |
|           |                                                            | Z | 4.49 | 66.49 | 16.12 |      | 150.0 |         |
| 10526-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)          | X | 4.82 | 67.13 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.82 | 66.58 | 16.14 |      | 150.0 |         |
|           |                                                            | Z | 4.64 | 66.83 | 16.26 |      | 150.0 |         |
| 10527-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)          | X | 4.74 | 67.11 | 16.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.73 | 66.55 | 16.09 |      | 150.0 |         |
|           |                                                            | Z | 4.57 | 66.80 | 16.20 |      | 150.0 |         |
| 10528-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)          | X | 4.76 | 67.13 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.75 | 66.57 | 16.12 |      | 150.0 |         |
|           |                                                            | Z | 4.58 | 66.81 | 16.23 |      | 150.0 |         |
| 10529-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)          | X | 4.76 | 67.13 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.75 | 66.57 | 16.12 |      | 150.0 |         |
|           |                                                            | Z | 4.58 | 66.81 | 16.23 |      | 150.0 |         |
| 10531-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)          | X | 4.77 | 67.27 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.76 | 66.71 | 16.15 |      | 150.0 |         |
|           |                                                            | Z | 4.56 | 66.89 | 16.24 |      | 150.0 |         |
| 10532-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)          | X | 4.62 | 67.15 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.61 | 66.57 | 16.09 |      | 150.0 |         |
|           |                                                            | Z | 4.43 | 66.75 | 16.17 |      | 150.0 |         |
| 10533-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)          | X | 4.77 | 67.17 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 4.76 | 66.59 | 16.10 |      | 150.0 |         |
|           |                                                            | Z | 4.59 | 66.88 | 16.23 |      | 150.0 |         |
| 10534-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)          | X | 5.27 | 67.15 | 16.50 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.27 | 66.72 | 16.17 |      | 150.0 |         |
|           |                                                            | Z | 5.12 | 66.84 | 16.26 |      | 150.0 |         |
| 10535-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)          | X | 5.34 | 67.31 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.34 | 66.86 | 16.23 |      | 150.0 |         |
|           |                                                            | Z | 5.19 | 67.03 | 16.35 |      | 150.0 |         |
| 10536-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)          | X | 5.22 | 67.31 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.21 | 66.84 | 16.21 |      | 150.0 |         |
|           |                                                            | Z | 5.06 | 66.99 | 16.32 |      | 150.0 |         |
| 10537-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)          | X | 5.27 | 67.26 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.28 | 66.82 | 16.20 |      | 150.0 |         |
|           |                                                            | Z | 5.12 | 66.94 | 16.29 |      | 150.0 |         |
| 10538-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)          | X | 5.37 | 67.28 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.39 | 66.89 | 16.27 |      | 150.0 |         |
|           |                                                            | Z | 5.20 | 66.94 | 16.33 |      | 150.0 |         |
| 10540-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)          | X | 5.29 | 67.28 | 16.59 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                            | Y | 5.29 | 66.84 | 16.26 |      | 150.0 |         |
|           |                                                            | Z | 5.13 | 66.94 | 16.35 |      | 150.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10541-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle)  | X | 5.26 | 67.15 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.27 | 66.73 | 16.20 |      | 150.0 |         |
|           |                                                    | Z | 5.11 | 66.82 | 16.27 |      | 150.0 |         |
| 10542-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | X | 5.42 | 67.19 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.42 | 66.79 | 16.25 |      | 150.0 |         |
|           |                                                    | Z | 5.26 | 66.90 | 16.33 |      | 150.0 |         |
| 10543-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5.49 | 67.21 | 16.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.51 | 66.80 | 16.27 |      | 150.0 |         |
|           |                                                    | Z | 5.32 | 66.91 | 16.36 |      | 150.0 |         |
| 10544-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | X | 5.57 | 67.22 | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.56 | 66.82 | 16.16 |      | 150.0 |         |
|           |                                                    | Z | 5.45 | 66.92 | 16.24 |      | 150.0 |         |
| 10545-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | X | 5.77 | 67.65 | 16.61 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.78 | 67.25 | 16.32 |      | 150.0 |         |
|           |                                                    | Z | 5.64 | 67.38 | 16.42 |      | 150.0 |         |
| 10546-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | X | 5.65 | 67.48 | 16.55 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.65 | 67.10 | 16.26 |      | 150.0 |         |
|           |                                                    | Z | 5.50 | 67.09 | 16.30 |      | 150.0 |         |
| 10547-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | X | 5.73 | 67.53 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 67.18 | 16.29 |      | 150.0 |         |
|           |                                                    | Z | 5.57 | 67.16 | 16.32 |      | 150.0 |         |
| 10548-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 6.02 | 68.59 | 17.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.08 | 68.34 | 16.83 |      | 150.0 |         |
|           |                                                    | Z | 5.80 | 68.04 | 16.74 |      | 150.0 |         |
| 10550-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | X | 5.67 | 67.46 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.67 | 67.06 | 16.25 |      | 150.0 |         |
|           |                                                    | Z | 5.54 | 67.19 | 16.36 |      | 150.0 |         |
| 10551-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | X | 5.68 | 67.52 | 16.53 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.69 | 67.13 | 16.25 |      | 150.0 |         |
|           |                                                    | Z | 5.53 | 67.15 | 16.30 |      | 150.0 |         |
| 10552-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | X | 5.59 | 67.30 | 16.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.59 | 66.90 | 16.14 |      | 150.0 |         |
|           |                                                    | Z | 5.46 | 67.00 | 16.23 |      | 150.0 |         |
| 10553-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.68 | 67.34 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.68 | 66.95 | 16.20 |      | 150.0 |         |
|           |                                                    | Z | 5.53 | 67.00 | 16.26 |      | 150.0 |         |
| 10554-AAB | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.97 | 67.57 | 16.52 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 5.97 | 67.21 | 16.26 |      | 150.0 |         |
|           |                                                    | Z | 5.86 | 67.27 | 16.32 |      | 150.0 |         |
| 10555-AAB | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 6.11 | 67.88 | 16.66 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.11 | 67.54 | 16.39 |      | 150.0 |         |
|           |                                                    | Z | 5.98 | 67.57 | 16.45 |      | 150.0 |         |
| 10556-AAB | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.13 | 67.93 | 16.67 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.13 | 67.56 | 16.40 |      | 150.0 |         |
|           |                                                    | Z | 6.01 | 67.63 | 16.48 |      | 150.0 |         |
| 10557-AAB | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 6.10 | 67.85 | 16.65 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                    | Y | 6.11 | 67.51 | 16.40 |      | 150.0 |         |
|           |                                                    | Z | 5.97 | 67.50 | 16.43 |      | 150.0 |         |

|           |                                                                 |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10558-AAB | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)              | X | 6.16   | 68.03  | 16.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.17   | 67.70  | 16.50 |      | 150.0 |         |
|           |                                                                 | Z | 6.01   | 67.66  | 16.53 |      | 150.0 |         |
| 10560-AAB | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)              | X | 6.15   | 67.86  | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.16   | 67.52  | 16.45 |      | 150.0 |         |
|           |                                                                 | Z | 6.00   | 67.50  | 16.49 |      | 150.0 |         |
| 10561-AAB | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)              | X | 6.06   | 67.83  | 16.73 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.07   | 67.48  | 16.47 |      | 150.0 |         |
|           |                                                                 | Z | 5.94   | 67.50  | 16.52 |      | 150.0 |         |
| 10562-AAB | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)              | X | 6.21   | 68.28  | 16.96 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.23   | 67.97  | 16.72 |      | 150.0 |         |
|           |                                                                 | Z | 6.03   | 67.79  | 16.67 |      | 150.0 |         |
| 10563-AAB | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)              | X | 6.55   | 68.85  | 17.19 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 6.59   | 68.58  | 16.96 |      | 150.0 |         |
|           |                                                                 | Z | 6.12   | 67.71  | 16.59 |      | 150.0 |         |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)  | X | 4.99   | 67.50  | 16.82 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.01   | 67.06  | 16.50 |      | 150.0 |         |
|           |                                                                 | Z | 4.85   | 67.32  | 16.61 |      | 150.0 |         |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.24   | 67.95  | 17.13 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.26   | 67.54  | 16.83 |      | 150.0 |         |
|           |                                                                 | Z | 5.06   | 67.72  | 16.90 |      | 150.0 |         |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 5.07   | 67.84  | 16.98 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.10   | 67.41  | 16.66 |      | 150.0 |         |
|           |                                                                 | Z | 4.90   | 67.58  | 16.73 |      | 150.0 |         |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 5.11   | 68.24  | 17.33 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.13   | 67.80  | 17.01 |      | 150.0 |         |
|           |                                                                 | Z | 4.93   | 67.94  | 17.07 |      | 150.0 |         |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.99   | 67.61  | 16.75 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.01   | 67.15  | 16.42 |      | 150.0 |         |
|           |                                                                 | Z | 4.83   | 67.42  | 16.55 |      | 150.0 |         |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 5.06   | 68.33  | 17.39 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.07   | 67.85  | 17.05 |      | 150.0 |         |
|           |                                                                 | Z | 4.91   | 68.11  | 17.17 |      | 150.0 |         |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 5.09   | 68.14  | 17.31 | 0.46 | 150.0 | ± 9.6 % |
|           |                                                                 | Y | 5.11   | 67.68  | 16.98 |      | 150.0 |         |
|           |                                                                 | Z | 4.92   | 67.93  | 17.09 |      | 150.0 |         |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)       | X | 1.50   | 68.95  | 18.38 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.40   | 66.38  | 16.51 |      | 130.0 |         |
|           |                                                                 | Z | 1.40   | 67.23  | 17.09 |      | 130.0 |         |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)       | X | 1.55   | 69.98  | 18.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.43   | 67.06  | 16.91 |      | 130.0 |         |
|           |                                                                 | Z | 1.44   | 67.99  | 17.53 |      | 130.0 |         |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)     | X | 100.00 | 153.35 | 41.94 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.15   | 96.81  | 26.53 |      | 130.0 |         |
|           |                                                                 | Z | 50.11  | 136.49 | 37.17 |      | 130.0 |         |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)      | X | 2.59   | 83.81  | 24.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 1.75   | 74.27  | 20.26 |      | 130.0 |         |
|           |                                                                 | Z | 1.86   | 76.56  | 21.49 |      | 130.0 |         |

|           |                                                                 |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)  | X | 4.81 | 67.37 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.84 | 66.96 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.68 | 67.23 | 16.73 |      | 130.0 |         |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)  | X | 4.84 | 67.54 | 16.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86 | 67.12 | 16.68 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.40 | 16.79 |      | 130.0 |         |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 5.05 | 67.83 | 17.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.09 | 67.44 | 16.86 |      | 130.0 |         |
|           |                                                                 | Z | 4.89 | 67.64 | 16.94 |      | 130.0 |         |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.96 | 68.04 | 17.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.99 | 67.62 | 16.97 |      | 130.0 |         |
|           |                                                                 | Z | 4.79 | 67.80 | 17.04 |      | 130.0 |         |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.73 | 67.38 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.76 | 66.96 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.57 | 67.14 | 16.40 |      | 130.0 |         |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.77 | 67.37 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.80 | 66.94 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.61 | 67.21 | 16.43 |      | 130.0 |         |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.86 | 68.14 | 17.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.89 | 67.70 | 16.92 |      | 130.0 |         |
|           |                                                                 | Z | 4.70 | 67.90 | 17.02 |      | 130.0 |         |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.67 | 67.12 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.71 | 66.71 | 16.10 |      | 130.0 |         |
|           |                                                                 | Z | 4.51 | 66.92 | 16.20 |      | 130.0 |         |
| 10583-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)       | X | 4.81 | 67.37 | 16.92 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.84 | 66.96 | 16.62 |      | 130.0 |         |
|           |                                                                 | Z | 4.68 | 67.23 | 16.73 |      | 130.0 |         |
| 10584-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)       | X | 4.84 | 67.54 | 16.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.86 | 67.12 | 16.68 |      | 130.0 |         |
|           |                                                                 | Z | 4.71 | 67.40 | 16.79 |      | 130.0 |         |
| 10585-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)      | X | 5.05 | 67.83 | 17.14 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 5.09 | 67.44 | 16.86 |      | 130.0 |         |
|           |                                                                 | Z | 4.89 | 67.64 | 16.94 |      | 130.0 |         |
| 10586-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)      | X | 4.96 | 68.04 | 17.27 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.99 | 67.62 | 16.97 |      | 130.0 |         |
|           |                                                                 | Z | 4.79 | 67.80 | 17.04 |      | 130.0 |         |
| 10587-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)      | X | 4.73 | 67.38 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.76 | 66.96 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.57 | 67.14 | 16.40 |      | 130.0 |         |
| 10588-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)      | X | 4.77 | 67.37 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.80 | 66.94 | 16.31 |      | 130.0 |         |
|           |                                                                 | Z | 4.61 | 67.21 | 16.43 |      | 130.0 |         |
| 10589-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)      | X | 4.86 | 68.14 | 17.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.89 | 67.70 | 16.92 |      | 130.0 |         |
|           |                                                                 | Z | 4.70 | 67.90 | 17.02 |      | 130.0 |         |
| 10590-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)      | X | 4.67 | 67.12 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                                 | Y | 4.71 | 66.71 | 16.10 |      | 130.0 |         |
|           |                                                                 | Z | 4.51 | 66.92 | 16.20 |      | 130.0 |         |

|           |                                                       |   |      |       |       |      |       |         |
|-----------|-------------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10591-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.95 | 67.39 | 16.99 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.98 | 67.01 | 16.71 |      | 130.0 |         |
|           |                                                       | Z | 4.83 | 67.26 | 16.81 |      | 130.0 |         |
| 10592-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.12 | 67.74 | 17.12 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.15 | 67.35 | 16.84 |      | 130.0 |         |
|           |                                                       | Z | 4.97 | 67.58 | 16.94 |      | 130.0 |         |
| 10593-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 5.04 | 67.68 | 17.02 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.08 | 67.30 | 16.74 |      | 130.0 |         |
|           |                                                       | Z | 4.89 | 67.49 | 16.82 |      | 130.0 |         |
| 10594-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 5.10 | 67.84 | 17.17 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.14 | 67.45 | 16.88 |      | 130.0 |         |
|           |                                                       | Z | 4.94 | 67.65 | 16.97 |      | 130.0 |         |
| 10595-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 5.07 | 67.81 | 17.07 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.11 | 67.42 | 16.78 |      | 130.0 |         |
|           |                                                       | Z | 4.91 | 67.63 | 16.88 |      | 130.0 |         |
| 10596-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 5.01 | 67.82 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.05 | 67.42 | 16.79 |      | 130.0 |         |
|           |                                                       | Z | 4.85 | 67.64 | 16.90 |      | 130.0 |         |
| 10597-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.96 | 67.75 | 16.98 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.00 | 67.35 | 16.69 |      | 130.0 |         |
|           |                                                       | Z | 4.80 | 67.53 | 16.77 |      | 130.0 |         |
| 10598-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.95 | 68.01 | 17.26 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 4.98 | 67.61 | 16.96 |      | 130.0 |         |
|           |                                                       | Z | 4.78 | 67.73 | 17.01 |      | 130.0 |         |
| 10599-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.60 | 67.86 | 17.12 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.66 | 67.61 | 16.91 |      | 130.0 |         |
|           |                                                       | Z | 5.48 | 67.70 | 16.99 |      | 130.0 |         |
| 10600-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.78 | 68.39 | 17.36 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.85 | 68.19 | 17.17 |      | 130.0 |         |
|           |                                                       | Z | 5.62 | 68.16 | 17.20 |      | 130.0 |         |
| 10601-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.65 | 68.09 | 17.22 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.71 | 67.83 | 17.01 |      | 130.0 |         |
|           |                                                       | Z | 5.51 | 67.89 | 17.08 |      | 130.0 |         |
| 10602-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.73 | 68.07 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.79 | 67.82 | 16.93 |      | 130.0 |         |
|           |                                                       | Z | 5.63 | 68.04 | 17.07 |      | 130.0 |         |
| 10603-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.82 | 68.41 | 17.43 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.87 | 68.11 | 17.19 |      | 130.0 |         |
|           |                                                       | Z | 5.69 | 68.27 | 17.32 |      | 130.0 |         |
| 10604-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.61 | 67.82 | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.66 | 67.56 | 16.91 |      | 130.0 |         |
|           |                                                       | Z | 5.56 | 67.91 | 17.12 |      | 130.0 |         |
| 10605-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.73 | 68.17 | 17.30 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.77 | 67.87 | 17.07 |      | 130.0 |         |
|           |                                                       | Z | 5.62 | 68.08 | 17.21 |      | 130.0 |         |
| 10606-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.50 | 67.62 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                       | Y | 5.53 | 67.31 | 16.65 |      | 130.0 |         |
|           |                                                       | Z | 5.35 | 67.34 | 16.70 |      | 130.0 |         |

|           |                                                   |   |      |       |       |      |       |         |
|-----------|---------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10607-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.80 | 66.75 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.81 | 66.30 | 16.32 |      | 130.0 |         |
|           |                                                   | Z | 4.67 | 66.60 | 16.45 |      | 130.0 |         |
| 10608-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 5.00 | 67.18 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.02 | 66.72 | 16.48 |      | 130.0 |         |
|           |                                                   | Z | 4.84 | 66.98 | 16.61 |      | 130.0 |         |
| 10609-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.89 | 67.06 | 16.67 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.91 | 66.60 | 16.34 |      | 130.0 |         |
|           |                                                   | Z | 4.73 | 66.84 | 16.45 |      | 130.0 |         |
| 10610-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.94 | 67.21 | 16.82 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.96 | 66.76 | 16.50 |      | 130.0 |         |
|           |                                                   | Z | 4.78 | 66.99 | 16.61 |      | 130.0 |         |
| 10611-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.86 | 67.03 | 16.68 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.89 | 66.59 | 16.36 |      | 130.0 |         |
|           |                                                   | Z | 4.70 | 66.81 | 16.46 |      | 130.0 |         |
| 10612-AAA | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.88 | 67.21 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.90 | 66.74 | 16.40 |      | 130.0 |         |
|           |                                                   | Z | 4.71 | 66.99 | 16.53 |      | 130.0 |         |
| 10613-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.89 | 67.11 | 16.63 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.91 | 66.65 | 16.30 |      | 130.0 |         |
|           |                                                   | Z | 4.71 | 66.83 | 16.39 |      | 130.0 |         |
| 10614-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.83 | 67.31 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.85 | 66.84 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 4.66 | 67.02 | 16.61 |      | 130.0 |         |
| 10615-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.86 | 66.85 | 16.46 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 4.89 | 66.40 | 16.13 |      | 130.0 |         |
|           |                                                   | Z | 4.70 | 66.67 | 16.26 |      | 130.0 |         |
| 10616-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.44 | 67.18 | 16.77 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.47 | 66.84 | 16.51 |      | 130.0 |         |
|           |                                                   | Z | 5.30 | 66.94 | 16.59 |      | 130.0 |         |
| 10617-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.50 | 67.33 | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.52 | 66.94 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 5.38 | 67.17 | 16.68 |      | 130.0 |         |
| 10618-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.40 | 67.39 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.42 | 67.02 | 16.59 |      | 130.0 |         |
|           |                                                   | Z | 5.27 | 67.18 | 16.70 |      | 130.0 |         |
| 10619-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.42 | 67.21 | 16.71 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.44 | 66.85 | 16.44 |      | 130.0 |         |
|           |                                                   | Z | 5.28 | 66.96 | 16.53 |      | 130.0 |         |
| 10620-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.51 | 67.25 | 16.78 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.56 | 66.94 | 16.53 |      | 130.0 |         |
|           |                                                   | Z | 5.36 | 66.98 | 16.59 |      | 130.0 |         |
| 10621-AAA | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.50 | 67.33 | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.53 | 67.00 | 16.68 |      | 130.0 |         |
|           |                                                   | Z | 5.36 | 67.10 | 16.76 |      | 130.0 |         |
| 10622-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.51 | 67.50 | 17.01 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                   | Y | 5.53 | 67.13 | 16.73 |      | 130.0 |         |
|           |                                                   | Z | 5.38 | 67.30 | 16.85 |      | 130.0 |         |

|           |                                                    |   |      |       |       |      |       |         |
|-----------|----------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10623-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | X | 5.39 | 67.03 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.41 | 66.69 | 16.40 |      | 130.0 |         |
|           |                                                    | Z | 5.25 | 66.80 | 16.48 |      | 130.0 |         |
| 10624-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.58 | 67.21 | 16.80 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.61 | 66.88 | 16.56 |      | 130.0 |         |
|           |                                                    | Z | 5.44 | 66.99 | 16.64 |      | 130.0 |         |
| 10625-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle)  | X | 5.99 | 68.31 | 17.39 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.04 | 68.02 | 17.17 |      | 130.0 |         |
|           |                                                    | Z | 5.71 | 67.69 | 17.04 |      | 130.0 |         |
| 10626-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.71 | 67.19 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.72 | 66.86 | 16.44 |      | 130.0 |         |
|           |                                                    | Z | 5.61 | 66.97 | 16.54 |      | 130.0 |         |
| 10627-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle)  | X | 5.96 | 67.77 | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.99 | 67.46 | 16.69 |      | 130.0 |         |
|           |                                                    | Z | 5.86 | 67.59 | 16.81 |      | 130.0 |         |
| 10628-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | X | 5.76 | 67.34 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.79 | 67.03 | 16.42 |      | 130.0 |         |
|           |                                                    | Z | 5.63 | 67.03 | 16.47 |      | 130.0 |         |
| 10629-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | X | 5.85 | 67.42 | 16.69 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.87 | 67.09 | 16.44 |      | 130.0 |         |
|           |                                                    | Z | 5.71 | 67.12 | 16.51 |      | 130.0 |         |
| 10630-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | X | 6.37 | 69.15 | 17.55 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.48 | 69.04 | 17.41 |      | 130.0 |         |
|           |                                                    | Z | 6.10 | 68.51 | 17.21 |      | 130.0 |         |
| 10631-AAA | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | X | 6.23 | 68.84 | 17.58 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.30 | 68.64 | 17.40 |      | 130.0 |         |
|           |                                                    | Z | 6.00 | 68.26 | 17.26 |      | 130.0 |         |
| 10632-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | X | 5.93 | 67.81 | 17.09 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.96 | 67.50 | 16.85 |      | 130.0 |         |
|           |                                                    | Z | 5.82 | 67.64 | 16.97 |      | 130.0 |         |
| 10633-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | X | 5.83 | 67.50 | 16.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.88 | 67.25 | 16.56 |      | 130.0 |         |
|           |                                                    | Z | 5.69 | 67.21 | 16.59 |      | 130.0 |         |
| 10634-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.81 | 67.52 | 16.84 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.85 | 67.23 | 16.61 |      | 130.0 |         |
|           |                                                    | Z | 5.67 | 67.21 | 16.64 |      | 130.0 |         |
| 10635-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.70 | 66.87 | 16.25 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 5.74 | 66.58 | 16.02 |      | 130.0 |         |
|           |                                                    | Z | 5.55 | 66.58 | 16.07 |      | 130.0 |         |
| 10636-AAB | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 6.12 | 67.55 | 16.76 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.14 | 67.26 | 16.54 |      | 130.0 |         |
|           |                                                    | Z | 6.03 | 67.32 | 16.61 |      | 130.0 |         |
| 10637-AAB | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.28 | 67.94 | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.31 | 67.65 | 16.72 |      | 130.0 |         |
|           |                                                    | Z | 6.19 | 67.72 | 16.79 |      | 130.0 |         |
| 10638-AAB | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.28 | 67.91 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                    | Y | 6.31 | 67.62 | 16.68 |      | 130.0 |         |
|           |                                                    | Z | 6.18 | 67.68 | 16.75 |      | 130.0 |         |

|           |                                                        |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10639-AAB | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle)     | X | 6.27   | 67.88  | 16.93 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.30   | 67.62  | 16.73 |      | 130.0 |         |
|           |                                                        | Z | 6.15   | 67.59  | 16.75 |      | 130.0 |         |
| 10640-AAB | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)     | X | 6.29   | 67.93  | 16.90 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.33   | 67.70  | 16.71 |      | 130.0 |         |
|           |                                                        | Z | 6.15   | 67.62  | 16.71 |      | 130.0 |         |
| 10641-AAB | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)     | X | 6.30   | 67.74  | 16.81 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.32   | 67.44  | 16.59 |      | 130.0 |         |
|           |                                                        | Z | 6.22   | 67.59  | 16.72 |      | 130.0 |         |
| 10642-AAB | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)     | X | 6.36   | 68.03  | 17.13 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.39   | 67.76  | 16.92 |      | 130.0 |         |
|           |                                                        | Z | 6.23   | 67.75  | 16.95 |      | 130.0 |         |
| 10643-AAB | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)     | X | 6.19   | 67.72  | 16.88 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.22   | 67.45  | 16.67 |      | 130.0 |         |
|           |                                                        | Z | 6.09   | 67.50  | 16.74 |      | 130.0 |         |
| 10644-AAB | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)     | X | 6.39   | 68.34  | 17.21 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.45   | 68.14  | 17.04 |      | 130.0 |         |
|           |                                                        | Z | 6.20   | 67.86  | 16.93 |      | 130.0 |         |
| 10645-AAB | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle)     | X | 6.86   | 69.27  | 17.61 | 0.46 | 130.0 | ± 9.6 % |
|           |                                                        | Y | 6.87   | 68.89  | 17.35 |      | 130.0 |         |
|           |                                                        | Z | 6.34   | 67.93  | 16.93 |      | 130.0 |         |
| 10646-AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 58.91  | 128.47 | 41.72 | 9.30 | 60.0  | ± 9.6 % |
|           |                                                        | Y | 22.23  | 103.66 | 34.19 |      | 60.0  |         |
|           |                                                        | Z | 97.77  | 144.05 | 46.65 |      | 60.0  |         |
| 10647-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 62.96  | 130.94 | 42.54 | 9.30 | 60.0  | ± 9.6 % |
|           |                                                        | Y | 22.84  | 105.02 | 34.74 |      | 60.0  |         |
|           |                                                        | Z | 100.00 | 145.78 | 47.28 |      | 60.0  |         |
| 10648-AAA | CDMA2000 (1x Advanced)                                 | X | 1.21   | 71.90  | 15.83 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                        | Y | 0.81   | 64.89  | 12.16 |      | 150.0 |         |
|           |                                                        | Z | 0.74   | 65.22  | 11.47 |      | 150.0 |         |
| 10652-AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | X | 4.72   | 70.40  | 18.28 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.59   | 69.04  | 17.59 |      | 80.0  |         |
|           |                                                        | Z | 4.50   | 69.96  | 17.82 |      | 80.0  |         |
| 10653-AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | X | 5.05   | 69.01  | 18.05 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 5.03   | 68.18  | 17.58 |      | 80.0  |         |
|           |                                                        | Z | 4.88   | 68.67  | 17.76 |      | 80.0  |         |
| 10654-AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | X | 4.97   | 68.58  | 18.01 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 4.96   | 67.84  | 17.57 |      | 80.0  |         |
|           |                                                        | Z | 4.83   | 68.24  | 17.75 |      | 80.0  |         |
| 10655-AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | X | 5.02   | 68.56  | 18.04 | 2.23 | 80.0  | ± 9.6 % |
|           |                                                        | Y | 5.02   | 67.86  | 17.60 |      | 80.0  |         |
|           |                                                        | Z | 4.89   | 68.17  | 17.77 |      | 80.0  |         |

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

Accreditation No.: **SCS 0108**

Client **PC Test**

Certificate No: **ES3-3319\_Mar18**

## CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3319**

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

Calibration date: **March 13, 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)

BN ✓  
 03/30/2018

| 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>Jeton Kastrati | Function<br>Laboratory Technician | Signature<br>          |
| Approved by:                                                                                                    | Katja Pokovic          | Technical Manager                 |                        |
|                                                                                                                 |                        |                                   | Issued: March 15, 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<sup>2</sup>-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 ES3DV3

## SN:3319

Manufactured: January 10, 2012  
Calibrated: March 13, 2018

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

## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3319

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 1.08     | 1.05     | 1.12     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 104.0    | 103.0    | 104.0    |               |

### 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    | 197.9    | $\pm 3.8 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 198.2    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 200.6    |                           |

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 | 60.52    | 430.8    | 35.08                       | 29.64                                 | 3.011                                 | 5.10     | 0.615                 | 0.538                 | 1.010 |
| Y | 55.79    | 400.8    | 35.48                       | 29.01                                 | 2.492                                 | 5.10     | 0.600                 | 0.518                 | 1.009 |
| Z | 63.98    | 455.3    | 34.93                       | 29.72                                 | 3.442                                 | 5.10     | 0.679                 | 0.571                 | 1.011 |

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: ES3DV3 - SN:3319

### 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                            | 6.70    | 6.70    | 6.70    | 0.80               | 1.21                    | ± 12.0 %  |
| 835                  | 41.5                               | 0.90                            | 6.44    | 6.44    | 6.44    | 0.80               | 1.17                    | ± 12.0 %  |
| 1750                 | 40.1                               | 1.37                            | 5.49    | 5.49    | 5.49    | 0.65               | 1.43                    | ± 12.0 %  |
| 1900                 | 40.0                               | 1.40                            | 5.29    | 5.29    | 5.29    | 0.76               | 1.30                    | ± 12.0 %  |
| 2300                 | 39.5                               | 1.67                            | 5.06    | 5.06    | 5.06    | 0.72               | 1.29                    | ± 12.0 %  |
| 2450                 | 39.2                               | 1.80                            | 4.71    | 4.71    | 4.71    | 0.77               | 1.30                    | ± 12.0 %  |
| 2600                 | 39.0                               | 1.96                            | 4.55    | 4.55    | 4.55    | 0.80               | 1.31                    | ± 12.0 %  |

<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: ES3DV3 - SN:3319

### Calibration Parameter Determined in Body Tissue Simulating Media

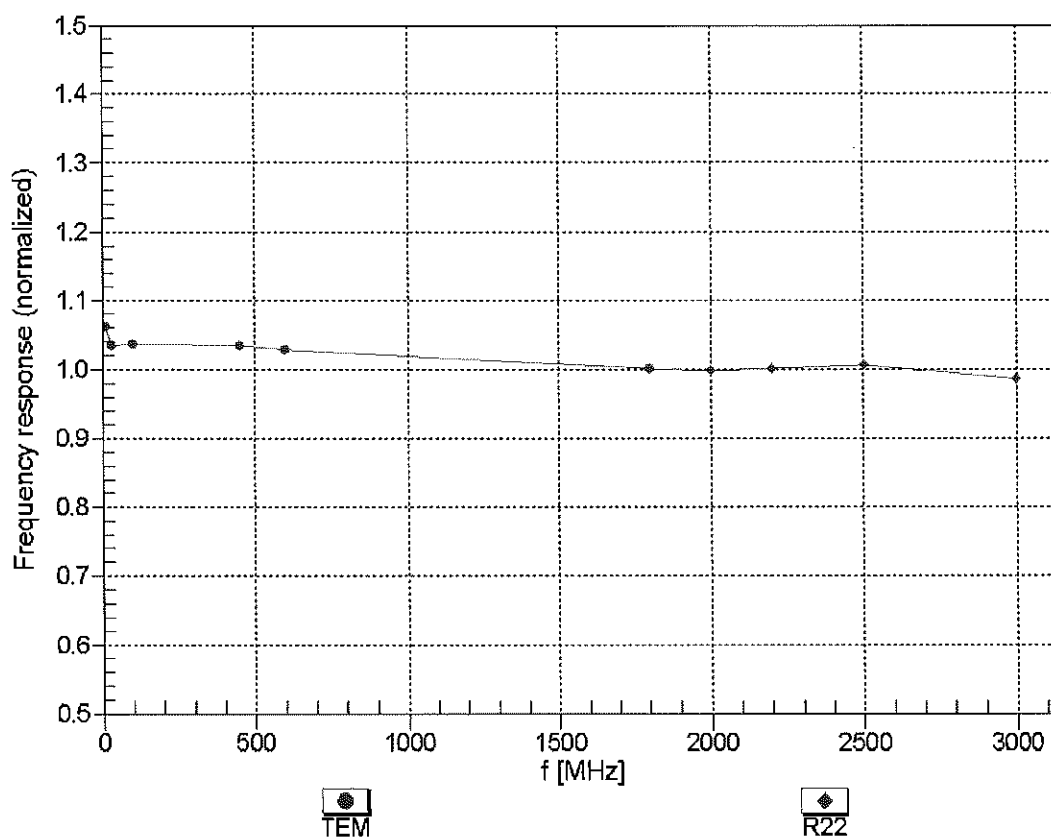
| f (MHz) <sup>c</sup> | Relative Permittivity <sup>F</sup> | Conductivity (S/m) <sup>F</sup> | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k=2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 750                  | 55.5                               | 0.96                            | 6.32    | 6.32    | 6.32    | 0.65               | 1.26                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 6.20    | 6.20    | 6.20    | 0.80               | 1.14                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 5.05    | 5.05    | 5.05    | 0.76               | 1.27                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 4.84    | 4.84    | 4.84    | 0.55               | 1.56                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 4.63    | 4.63    | 4.63    | 0.80               | 1.30                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 4.51    | 4.51    | 4.51    | 0.80               | 1.25                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 4.33    | 4.33    | 4.33    | 0.80               | 1.20                    | ± 12.0 %  |

<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.

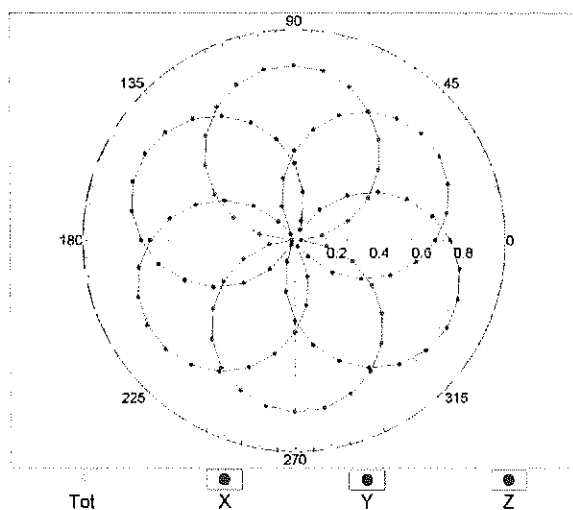
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



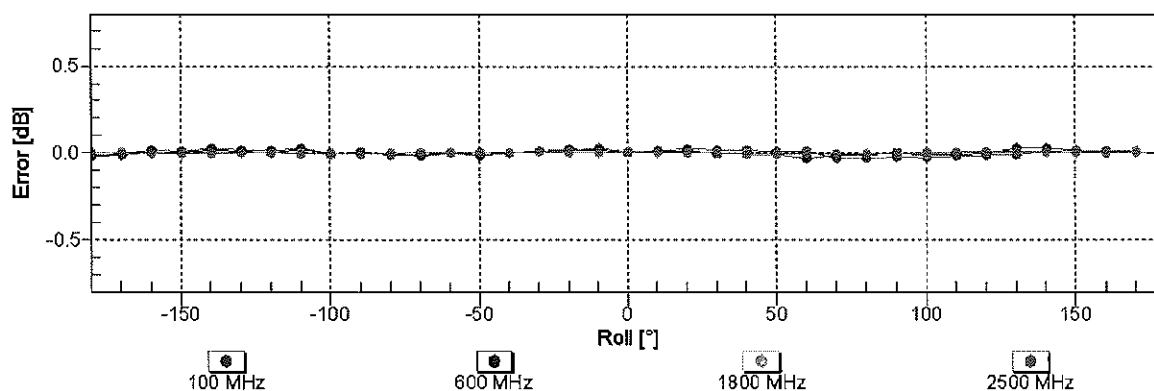
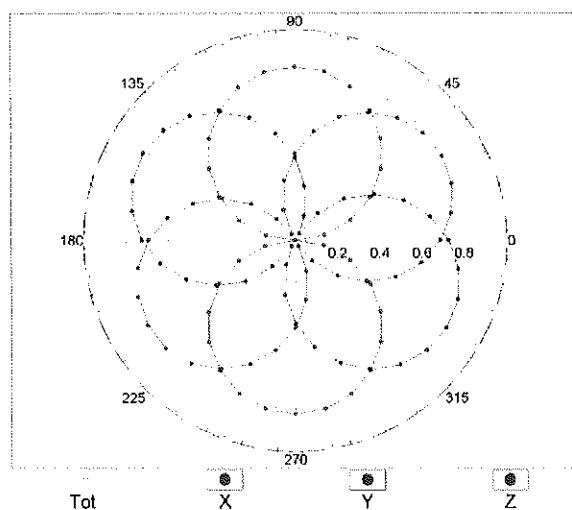
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

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

f=600 MHz,TEM

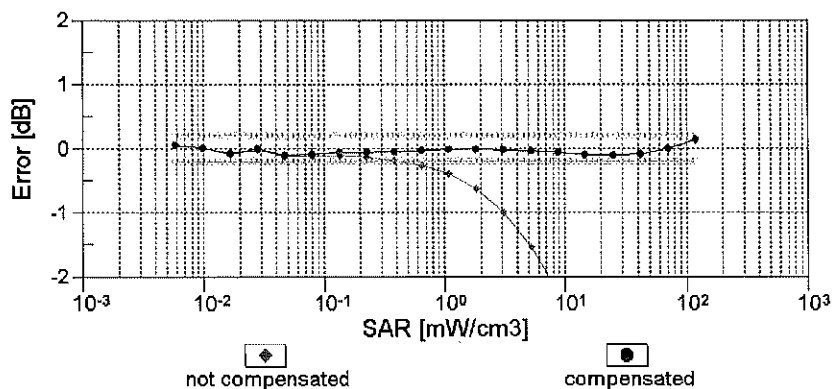
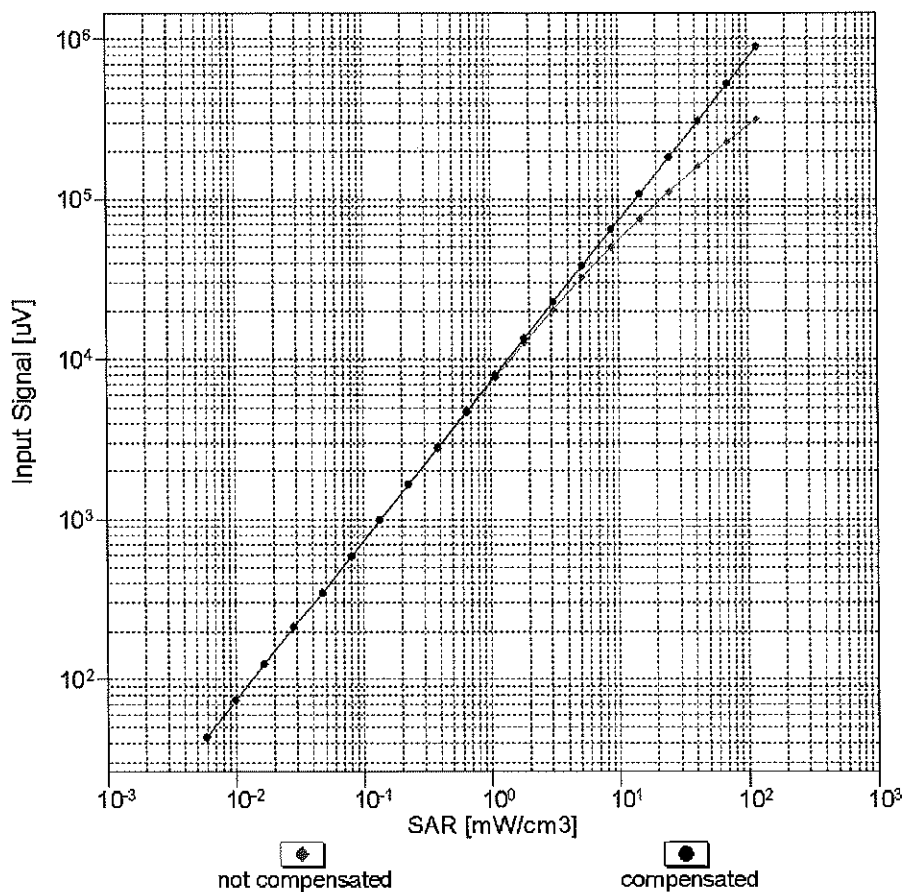


f=1800 MHz,R22



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

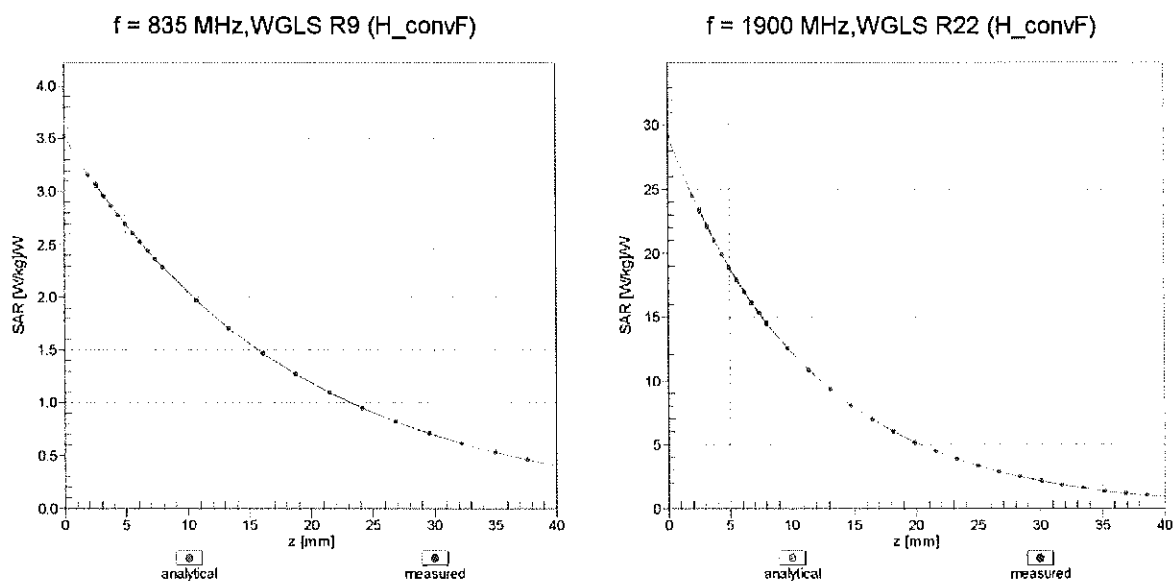
## Dynamic Range $f(\text{SAR}_{\text{head}})$ (TEM cell , $f_{\text{eval}} = 1900 \text{ MHz}$ )



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

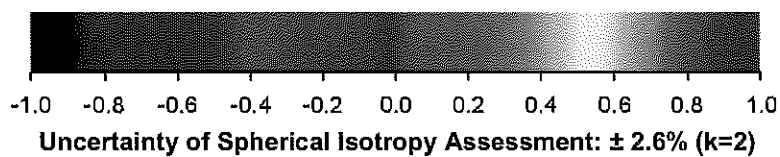
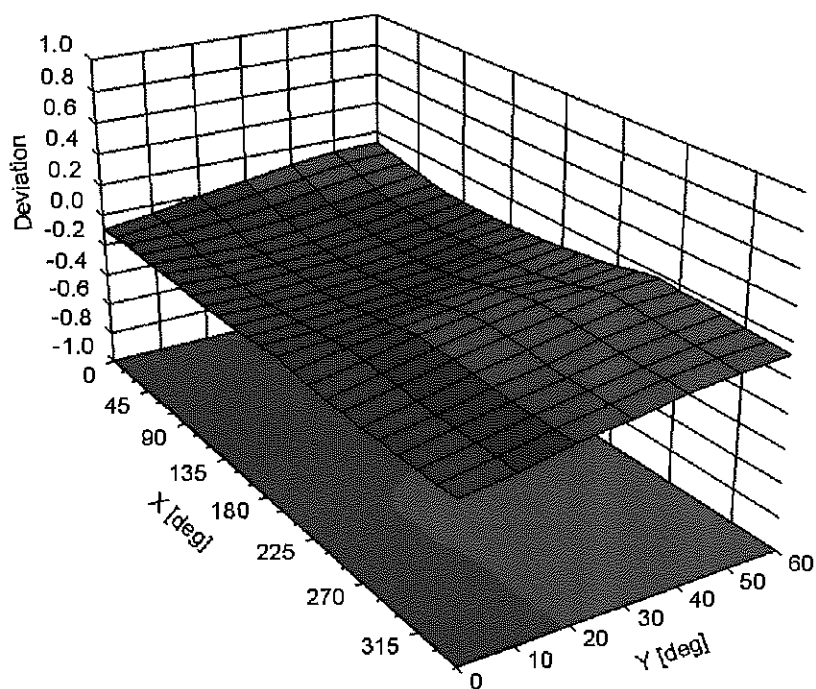


## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



## DASY/EASY - Parameters of Probe: ES3DV3 - SN:3319

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 60.4       |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 10 mm      |
| Tip Diameter                                  | 4 mm       |
| Probe Tip to Sensor X Calibration Point       | 2 mm       |
| Probe Tip to Sensor Y Calibration Point       | 2 mm       |
| Probe Tip to Sensor Z Calibration Point       | 2 mm       |
| Recommended Measurement Distance from Surface | 3 mm       |

**Appendix: Modulation Calibration Parameters**

| UID           | Communication System Name                     |   | A<br>dB | B<br>dB $\mu$ 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    | 197.9    | $\pm 3.8 \%$                     |
|               |                                               | Y | 0.00    | 0.00            | 1.00  |         | 198.2    |                                  |
|               |                                               | Z | 0.00    | 0.00            | 1.00  |         | 200.6    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 9.56    | 81.28           | 19.98 | 10.00   | 25.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 8.09    | 78.70           | 18.35 |         | 25.0     |                                  |
|               |                                               | Z | 8.70    | 79.52           | 19.57 |         | 25.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.34    | 72.37           | 18.08 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 0.99    | 67.12           | 14.82 |         | 150.0    |                                  |
|               |                                               | Z | 1.12    | 68.87           | 16.00 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.37    | 66.58           | 17.00 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.25    | 64.92           | 15.59 |         | 150.0    |                                  |
|               |                                               | Z | 1.32    | 65.58           | 16.11 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 5.18    | 67.48           | 17.64 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.08    | 67.20           | 17.36 |         | 150.0    |                                  |
|               |                                               | Z | 5.20    | 67.32           | 17.47 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 20.40   | 95.52           | 26.57 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 29.46   | 101.11          | 27.60 |         | 50.0     |                                  |
|               |                                               | Z | 14.66   | 89.52           | 24.83 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 18.37   | 93.61           | 26.02 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 24.41   | 97.95           | 26.72 |         | 50.0     |                                  |
|               |                                               | Z | 13.84   | 88.39           | 24.49 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 119.56          | 31.31 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 117.39          | 29.93 |         | 60.0     |                                  |
|               |                                               | Z | 47.21   | 108.31          | 28.71 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 21.09   | 108.48          | 41.18 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 17.11   | 102.80          | 38.82 |         | 50.0     |                                  |
|               |                                               | Z | 18.44   | 103.12          | 38.97 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 21.59   | 105.09          | 36.25 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 18.95   | 102.20          | 35.03 |         | 60.0     |                                  |
|               |                                               | Z | 18.49   | 100.22          | 34.38 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 118.49          | 29.83 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 115.83          | 28.28 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 118.30          | 29.89 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 118.84          | 29.14 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 115.36          | 27.25 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 118.10          | 28.92 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 15.08   | 97.16           | 32.49 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 12.90   | 93.80           | 31.06 |         | 80.0     |                                  |
|               |                                               | Z | 13.60   | 93.82           | 31.09 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 118.11          | 30.01 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 115.58          | 28.50 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 118.16          | 30.20 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 121.01          | 28.44 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 114.03          | 25.11 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 118.73          | 27.54 |         | 100.0    |                                  |

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

<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: **EX3-7308\_Aug17**

## CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7308**

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: **August 16, 2017**

PN ✓  
 8/27/17

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         | 31-Dec-16 (No. ES3-3013_Dec16)    | Dec-17                 |
| DAE4                       | SN: 660          | 7-Dec-16 (No. DAE4-660_Dec16)     | Dec-17                 |
| 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-16) | In house check: Oct-17 |

|                                                                                                                 |                              |                                          |                         |
|-----------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------|-------------------------|
| Calibrated by:                                                                                                  | Name<br><b>Leif Klysner</b>  | Function<br><b>Laboratory Technician</b> | Signature<br>           |
| Approved by:                                                                                                    | Name<br><b>Katja Pokovic</b> | Function<br><b>Technical Manager</b>     | Signature<br>           |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                              |                                          | Issued: August 16, 2017 |



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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<sup>2</sup>-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:7308

Manufactured: March 11, 2014  
Calibrated: August 16, 2017

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

### Basic Calibration Parameters

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k=2)     |
|-----------------------------------------------------------|----------|----------|----------|---------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.49     | 0.60     | 0.44     | $\pm 10.1 \%$ |
| DCP (mV) <sup>B</sup>                                     | 97.0     | 91.7     | 98.5     |               |

### 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    | 134.5    | $\pm 3.3 \%$              |
|     |                           | Y | 0.0     | 0.0                          | 1.0 |         | 130.8    |                           |
|     |                           | Z | 0.0     | 0.0                          | 1.0 |         | 149.9    |                           |

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 | 46.65    | 351.1    | 36.16                       | 14.68                               | 0.000                               | 5.088    | 0.834                 | 0.399                 | 1.005 |
| Y | 52.88    | 402.1    | 36.74                       | 19.55                               | 0.309                               | 5.100    | 0.477                 | 0.605                 | 1.007 |
| Z | 36.70    | 273.3    | 35.48                       | 9.322                               | 0.000                               | 5.034    | 0.373                 | 0.314                 | 1.002 |

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:7308

### 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) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-----------|
| 5250                 | 35.9                               | 4.71                            | 5.25    | 5.25    | 5.25    | 0.35               | 1.80                    | ± 13.1 %  |
| 5600                 | 35.5                               | 5.07                            | 4.83    | 4.83    | 4.83    | 0.40               | 1.80                    | ± 13.1 %  |
| 5750                 | 35.4                               | 5.22                            | 5.11    | 5.11    | 5.11    | 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:7308

### 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                            | 10.39   | 10.39   | 10.39   | 0.54               | 0.85                    | ± 12.0 %  |
| 835                  | 55.2                               | 0.97                            | 10.21   | 10.21   | 10.21   | 0.47               | 0.84                    | ± 12.0 %  |
| 1750                 | 53.4                               | 1.49                            | 8.24    | 8.24    | 8.24    | 0.41               | 0.84                    | ± 12.0 %  |
| 1900                 | 53.3                               | 1.52                            | 7.96    | 7.96    | 7.96    | 0.37               | 0.80                    | ± 12.0 %  |
| 2300                 | 52.9                               | 1.81                            | 7.77    | 7.77    | 7.77    | 0.39               | 0.86                    | ± 12.0 %  |
| 2450                 | 52.7                               | 1.95                            | 7.66    | 7.66    | 7.66    | 0.35               | 0.85                    | ± 12.0 %  |
| 2600                 | 52.5                               | 2.16                            | 7.46    | 7.46    | 7.46    | 0.31               | 0.95                    | ± 12.0 %  |
| 5250                 | 48.9                               | 5.36                            | 4.84    | 4.84    | 4.84    | 0.35               | 1.90                    | ± 13.1 %  |
| 5600                 | 48.5                               | 5.77                            | 4.23    | 4.23    | 4.23    | 0.40               | 1.90                    | ± 13.1 %  |
| 5750                 | 48.3                               | 5.94                            | 4.50    | 4.50    | 4.50    | 0.40               | 1.90                    | ± 13.1 %  |

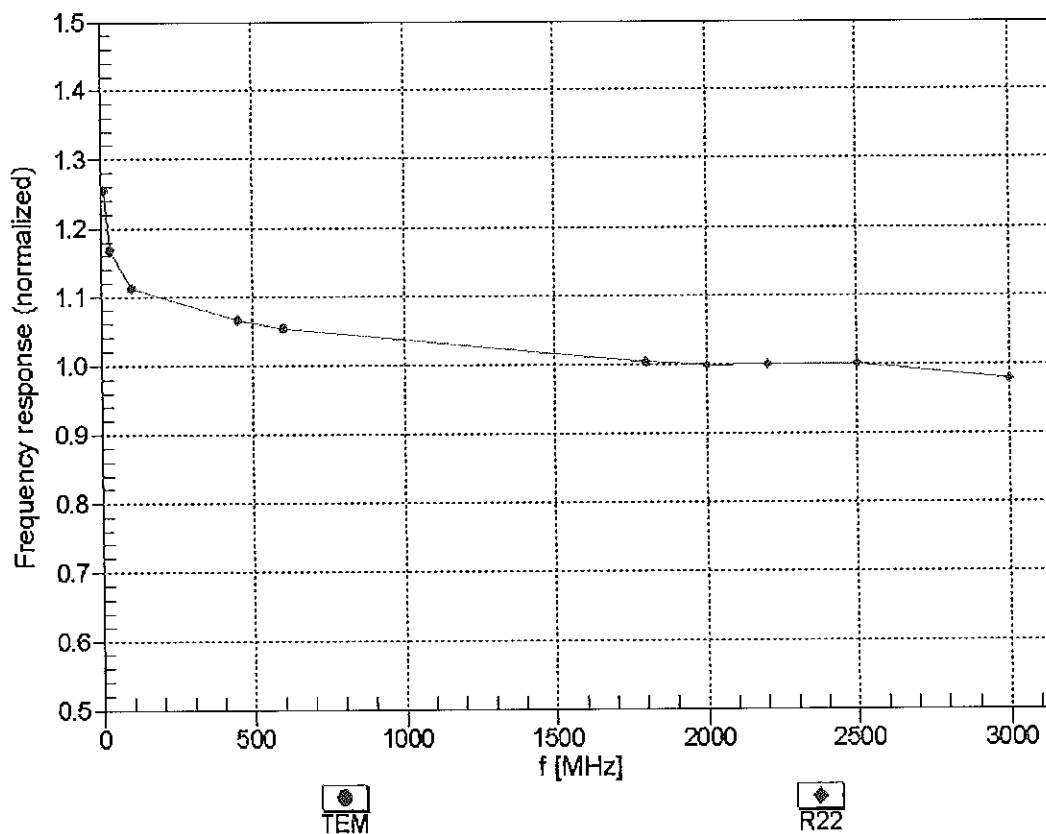
<sup>C</sup> Frequency validity above 300 MHz of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below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

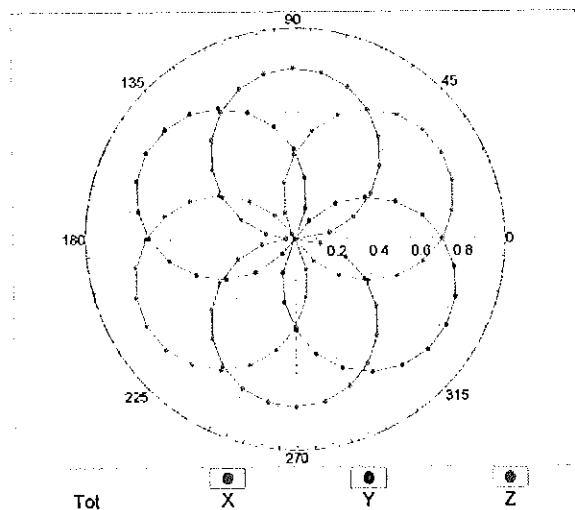
(TEM-Cell:ifi110 EXX, Waveguide: R22)



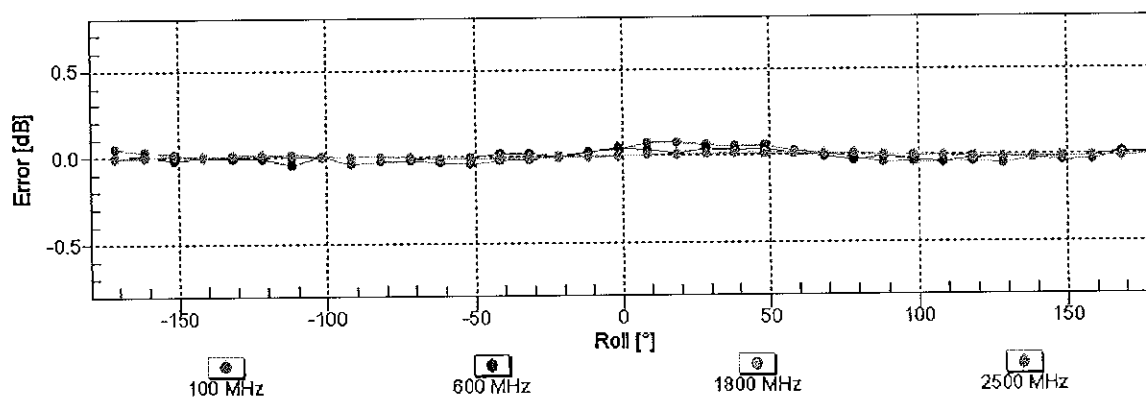
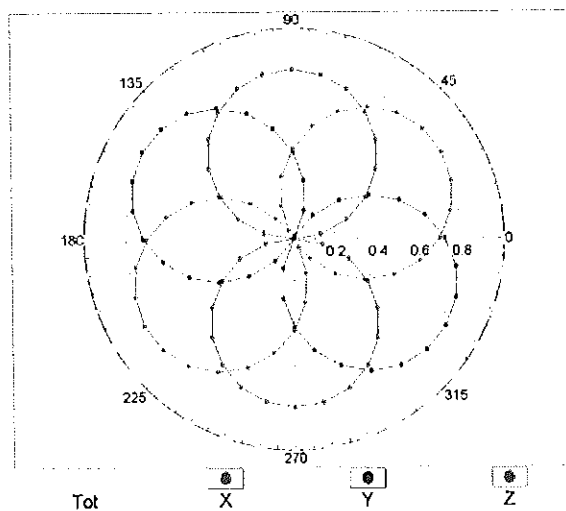
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  ( $k=2$ )

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

f=600 MHz,TEM

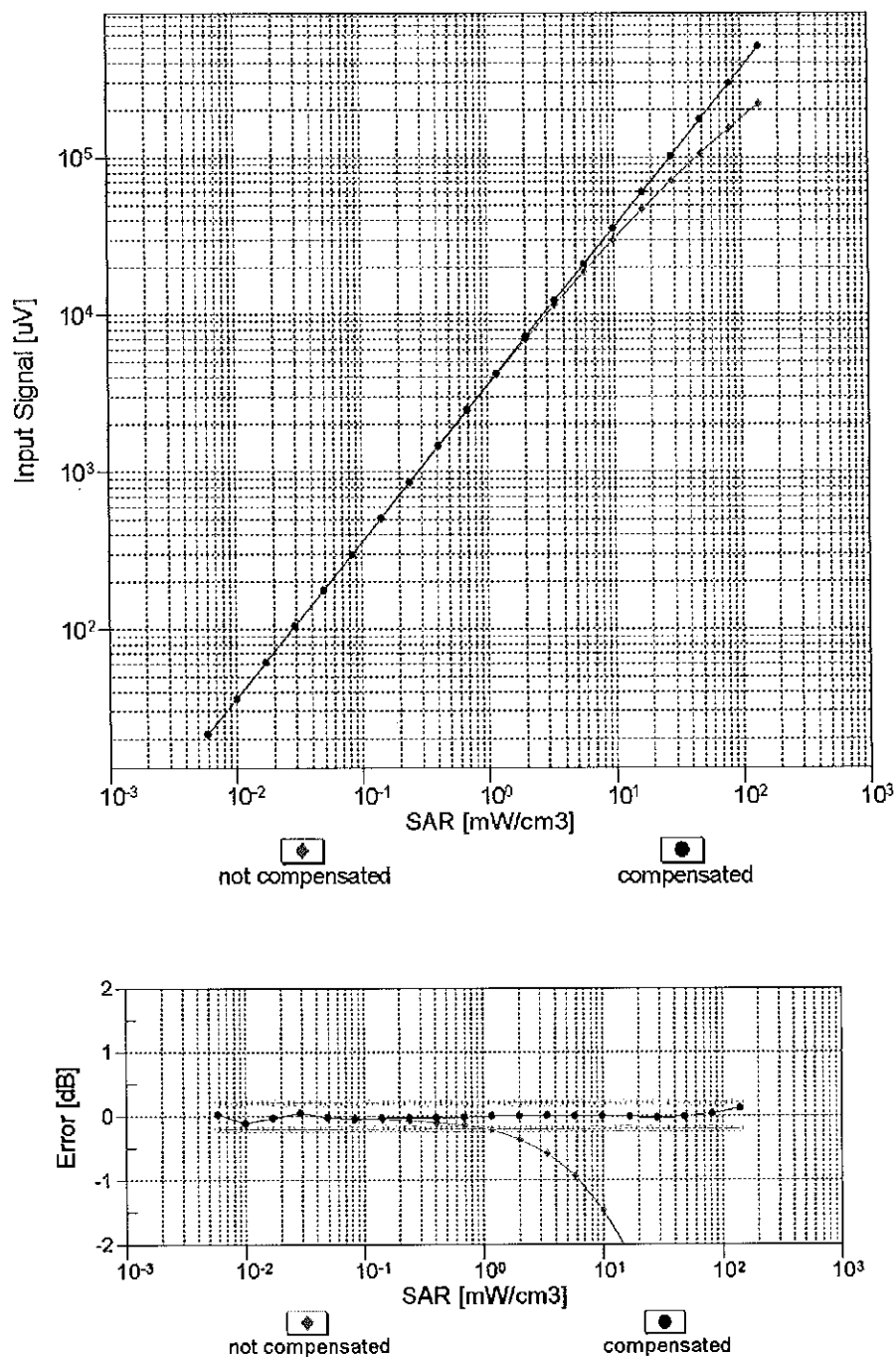


f=1800 MHz,R22



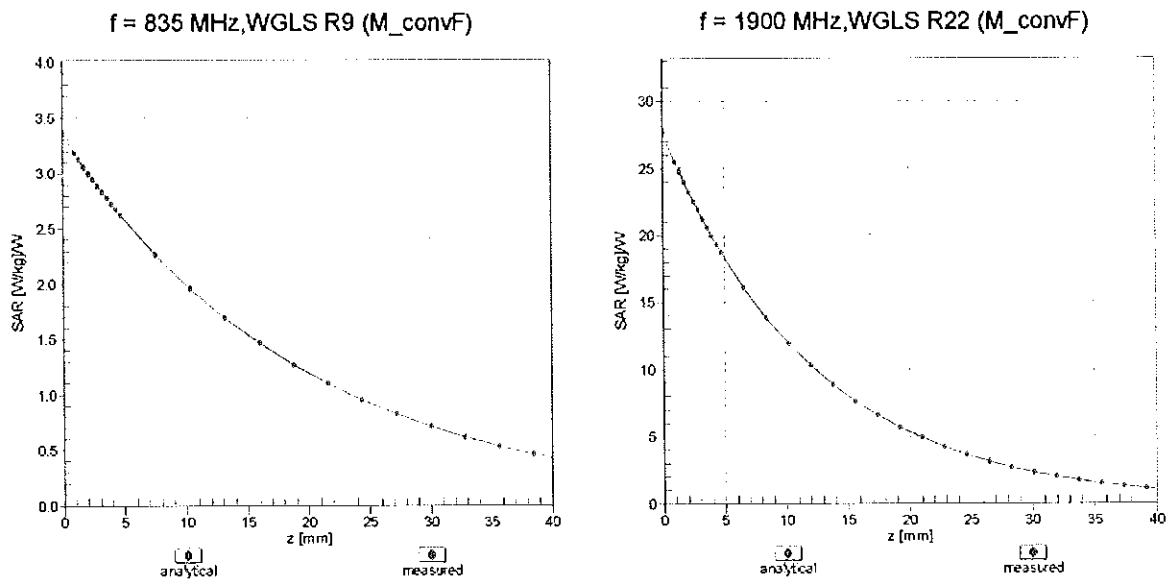
Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  ( $k=2$ )

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



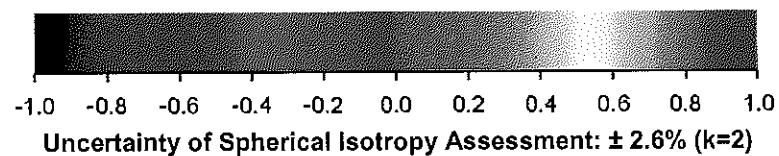
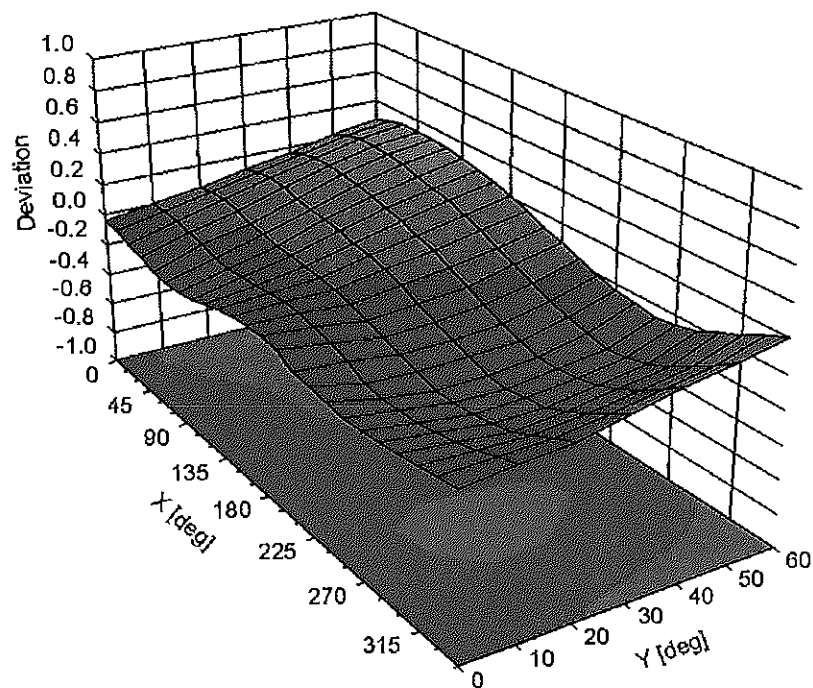
Uncertainty of Linearity Assessment:  $\pm 0.6\%$  ( $k=2$ )

## Conversion Factor Assessment



## Deviation from Isotropy in Liquid

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



## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

### Other Probe Parameters

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle (°)                           | 108.4      |
| 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    | 134.5    | $\pm 3.3 \%$                     |
|               |                                               | Y | 0.00    | 0.00                   | 1.00  |         | 130.8    |                                  |
|               |                                               | Z | 0.00    | 0.00                   | 1.00  |         | 149.9    |                                  |
| 10010-<br>CAA | SAR Validation (Square, 100ms, 10ms)          | X | 2.82    | 69.38                  | 11.47 | 10.00   | 20.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 8.85    | 81.60                  | 16.75 |         | 20.0     |                                  |
|               |                                               | Z | 1.57    | 63.55                  | 8.34  |         | 20.0     |                                  |
| 10011-<br>CAB | UMTS-FDD (WCDMA)                              | X | 1.10    | 68.34                  | 15.94 | 0.00    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.03    | 66.61                  | 14.91 |         | 150.0    |                                  |
|               |                                               | Z | 1.05    | 68.21                  | 15.74 |         | 150.0    |                                  |
| 10012-<br>CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)      | X | 1.19    | 64.20                  | 15.65 | 0.41    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 1.20    | 63.83                  | 15.29 |         | 150.0    |                                  |
|               |                                               | Z | 1.16    | 63.91                  | 15.33 |         | 150.0    |                                  |
| 10013-<br>CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | X | 4.89    | 66.77                  | 17.26 | 1.46    | 150.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 4.97    | 66.66                  | 17.21 |         | 150.0    |                                  |
|               |                                               | Z | 4.71    | 66.76                  | 17.06 |         | 150.0    |                                  |
| 10021-<br>DAC | GSM-FDD (TDMA, GMSK)                          | X | 100.00  | 115.21                 | 27.27 | 9.39    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 118.99                 | 29.62 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 108.16                 | 23.75 |         | 50.0     |                                  |
| 10023-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0)                   | X | 100.00  | 114.49                 | 26.98 | 9.57    | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 118.59                 | 29.46 |         | 50.0     |                                  |
|               |                                               | Z | 100.00  | 107.44                 | 23.48 |         | 50.0     |                                  |
| 10024-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                 | X | 100.00  | 117.36                 | 27.41 | 6.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 118.20                 | 28.43 |         | 60.0     |                                  |
|               |                                               | Z | 100.00  | 109.72                 | 23.49 |         | 60.0     |                                  |
| 10025-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                   | X | 9.43    | 102.43                 | 43.37 | 12.57   | 50.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 5.76    | 81.81                  | 33.21 |         | 50.0     |                                  |
|               |                                               | Z | 6.64    | 89.92                  | 37.39 |         | 50.0     |                                  |
| 10026-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                 | X | 12.23   | 103.58                 | 38.33 | 9.56    | 60.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 13.89   | 103.56                 | 37.54 |         | 60.0     |                                  |
|               |                                               | Z | 6.87    | 89.09                  | 32.73 |         | 60.0     |                                  |
| 10027-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)               | X | 100.00  | 121.12                 | 28.38 | 4.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 119.35                 | 28.26 |         | 80.0     |                                  |
|               |                                               | Z | 100.00  | 113.58                 | 24.47 |         | 80.0     |                                  |
| 10028-<br>DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)             | X | 100.00  | 126.40                 | 29.97 | 3.55    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 121.68                 | 28.61 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 119.83                 | 26.46 |         | 100.0    |                                  |
| 10029-<br>DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)               | X | 6.36    | 85.88                  | 30.18 | 7.80    | 80.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 7.77    | 88.44                  | 30.64 |         | 80.0     |                                  |
|               |                                               | Z | 4.37    | 77.58                  | 26.51 |         | 80.0     |                                  |
| 10030-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)           | X | 100.00  | 116.71                 | 26.74 | 5.30    | 70.0     | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 116.86                 | 27.45 |         | 70.0     |                                  |
|               |                                               | Z | 100.00  | 108.46                 | 22.53 |         | 70.0     |                                  |
| 10031-<br>CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)           | X | 100.00  | 130.68                 | 30.26 | 1.88    | 100.0    | $\pm 9.6 \%$                     |
|               |                                               | Y | 100.00  | 122.76                 | 27.68 |         | 100.0    |                                  |
|               |                                               | Z | 100.00  | 121.33                 | 25.72 |         | 100.0    |                                  |

|           |                                                     |   |         |        |       |       |       |         |
|-----------|-----------------------------------------------------|---|---------|--------|-------|-------|-------|---------|
| 10032-CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                 | X | 100.00  | 146.47 | 35.43 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 100.00  | 130.05 | 29.64 |       | 100.0 |         |
|           |                                                     | Z | 100.00  | 142.38 | 32.95 |       | 100.0 |         |
| 10033-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)           | X | 100.00  | 133.81 | 36.67 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 132.56 | 36.57 |       | 70.0  |         |
|           |                                                     | Z | 18.79   | 102.95 | 27.19 |       | 70.0  |         |
| 10034-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)           | X | 7.76    | 92.37  | 23.91 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 6.00    | 87.65  | 22.68 |       | 100.0 |         |
|           |                                                     | Z | 3.22    | 78.87  | 18.00 |       | 100.0 |         |
| 10035-CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)           | X | 3.37    | 81.04  | 19.87 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.89    | 77.85  | 18.94 |       | 100.0 |         |
|           |                                                     | Z | 2.06    | 74.00  | 15.93 |       | 100.0 |         |
| 10036-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)               | X | 100.00  | 134.35 | 36.91 | 5.30  | 70.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 133.01 | 36.79 |       | 70.0  |         |
|           |                                                     | Z | 38.41   | 113.99 | 30.14 |       | 70.0  |         |
| 10037-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)               | X | 6.72    | 90.40  | 23.29 | 1.88  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 5.52    | 86.51  | 22.28 |       | 100.0 |         |
|           |                                                     | Z | 2.77    | 77.09  | 17.35 |       | 100.0 |         |
| 10038-CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)               | X | 3.40    | 81.53  | 20.18 | 1.17  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 2.93    | 78.34  | 19.24 |       | 100.0 |         |
|           |                                                     | Z | 2.07    | 74.35  | 16.21 |       | 100.0 |         |
| 10039-CAB | CDMA2000 (1xRTT, RC1)                               | X | 2.05    | 73.74  | 16.48 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.78    | 70.97  | 15.59 |       | 150.0 |         |
|           |                                                     | Z | 1.68    | 71.87  | 14.68 |       | 150.0 |         |
| 10042-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | X | 100.00  | 111.92 | 25.18 | 7.78  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 114.62 | 26.97 |       | 50.0  |         |
|           |                                                     | Z | 100.00  | 105.38 | 21.87 |       | 50.0  |         |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM)                    | X | 0.00    | 97.13  | 0.41  | 0.00  | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.00    | 93.19  | 1.28  |       | 150.0 |         |
|           |                                                     | Z | 0.01    | 94.96  | 0.54  |       | 150.0 |         |
| 10048-CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)           | X | 100.00  | 111.98 | 26.96 | 13.80 | 25.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 121.05 | 31.60 |       | 25.0  |         |
|           |                                                     | Z | 34.07   | 91.91  | 20.28 |       | 25.0  |         |
| 10049-CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)         | X | 1284.72 | 142.21 | 32.21 | 10.79 | 40.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 117.51 | 29.18 |       | 40.0  |         |
|           |                                                     | Z | 145.96  | 109.32 | 23.74 |       | 40.0  |         |
| 10056-CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps)                      | X | 100.00  | 128.20 | 35.15 | 9.03  | 50.0  | ± 9.6 % |
|           |                                                     | Y | 100.00  | 128.83 | 35.96 |       | 50.0  |         |
|           |                                                     | Z | 100.00  | 122.10 | 31.77 |       | 50.0  |         |
| 10058-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                   | X | 4.71    | 78.88  | 26.31 | 6.55  | 100.0 | ± 9.6 % |
|           |                                                     | Y | 5.67    | 81.33  | 26.92 |       | 100.0 |         |
|           |                                                     | Z | 3.54    | 73.15  | 23.60 |       | 100.0 |         |
| 10059-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)            | X | 1.24    | 65.47  | 16.42 | 0.61  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 1.27    | 65.23  | 16.10 |       | 110.0 |         |
|           |                                                     | Z | 1.17    | 64.77  | 15.84 |       | 110.0 |         |
| 10060-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)          | X | 100.00  | 144.38 | 38.50 | 1.30  | 110.0 | ± 9.6 % |
|           |                                                     | Y | 100.00  | 138.88 | 36.40 |       | 110.0 |         |
|           |                                                     | Z | 13.09   | 112.30 | 30.84 |       | 110.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10061-CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)      | X | 4.05 | 88.33 | 25.97 | 2.04 | 110.0 | ± 9.6 % |
|           |                                                | Y | 4.75 | 88.86 | 25.68 |      | 110.0 |         |
|           |                                                | Z | 2.16 | 77.73 | 21.68 |      | 110.0 |         |
| 10062-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)       | X | 4.69 | 66.76 | 16.65 | 0.49 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.76 | 66.60 | 16.58 |      | 100.0 |         |
|           |                                                | Z | 4.53 | 66.78 | 16.51 |      | 100.0 |         |
| 10063-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)       | X | 4.71 | 66.86 | 16.76 | 0.72 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.78 | 66.72 | 16.70 |      | 100.0 |         |
|           |                                                | Z | 4.54 | 66.86 | 16.60 |      | 100.0 |         |
| 10064-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)      | X | 4.99 | 67.12 | 16.99 | 0.86 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.09 | 67.02 | 16.95 |      | 100.0 |         |
|           |                                                | Z | 4.78 | 67.06 | 16.80 |      | 100.0 |         |
| 10065-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)      | X | 4.86 | 67.02 | 17.11 | 1.21 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.96 | 66.95 | 17.08 |      | 100.0 |         |
|           |                                                | Z | 4.65 | 66.90 | 16.87 |      | 100.0 |         |
| 10066-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)      | X | 4.88 | 67.05 | 17.29 | 1.46 | 100.0 | ± 9.6 % |
|           |                                                | Y | 4.99 | 66.99 | 17.27 |      | 100.0 |         |
|           |                                                | Z | 4.65 | 66.88 | 17.02 |      | 100.0 |         |
| 10067-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)      | X | 5.16 | 67.22 | 17.75 | 2.04 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.27 | 67.12 | 17.71 |      | 100.0 |         |
|           |                                                | Z | 4.93 | 67.13 | 17.49 |      | 100.0 |         |
| 10068-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)      | X | 5.20 | 67.26 | 17.98 | 2.55 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.34 | 67.28 | 18.00 |      | 100.0 |         |
|           |                                                | Z | 4.95 | 67.02 | 17.64 |      | 100.0 |         |
| 10069-CAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)      | X | 5.28 | 67.26 | 18.18 | 2.67 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.42 | 67.23 | 18.17 |      | 100.0 |         |
|           |                                                | Z | 5.02 | 67.05 | 17.83 |      | 100.0 |         |
| 10071-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)  | X | 4.98 | 66.86 | 17.58 | 1.99 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.07 | 66.77 | 17.55 |      | 100.0 |         |
|           |                                                | Z | 4.79 | 66.80 | 17.35 |      | 100.0 |         |
| 10072-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | X | 4.95 | 67.19 | 17.81 | 2.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.06 | 67.16 | 17.80 |      | 100.0 |         |
|           |                                                | Z | 4.74 | 67.03 | 17.53 |      | 100.0 |         |
| 10073-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | X | 5.00 | 67.34 | 18.16 | 2.83 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.12 | 67.33 | 18.16 |      | 100.0 |         |
|           |                                                | Z | 4.79 | 67.17 | 17.85 |      | 100.0 |         |
| 10074-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | X | 4.97 | 67.20 | 18.31 | 3.30 | 100.0 | ± 9.6 % |
|           |                                                | Y | 5.10 | 67.22 | 18.33 |      | 100.0 |         |
|           |                                                | Z | 4.78 | 67.07 | 17.99 |      | 100.0 |         |
| 10075-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | X | 5.00 | 67.30 | 18.63 | 3.82 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.15 | 67.40 | 18.70 |      | 90.0  |         |
|           |                                                | Z | 4.78 | 67.05 | 18.23 |      | 90.0  |         |
| 10076-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | X | 5.00 | 67.05 | 18.74 | 4.15 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.14 | 67.12 | 18.78 |      | 90.0  |         |
|           |                                                | Z | 4.81 | 66.90 | 18.39 |      | 90.0  |         |
| 10077-CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | X | 5.02 | 67.11 | 18.84 | 4.30 | 90.0  | ± 9.6 % |
|           |                                                | Y | 5.16 | 67.16 | 18.87 |      | 90.0  |         |
|           |                                                | Z | 4.84 | 66.97 | 18.50 |      | 90.0  |         |

|           |                                                     |   |        |        |       |      |       |         |
|-----------|-----------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10081-CAB | CDMA2000 (1xRTT, RC3)                               | X | 0.91   | 67.10  | 13.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 0.87   | 65.55  | 12.69 |      | 150.0 |         |
|           |                                                     | Z | 0.76   | 65.80  | 11.60 |      | 150.0 |         |
| 10082-CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | X | 0.67   | 60.00  | 4.34  | 4.77 | 80.0  | ± 9.6 % |
|           |                                                     | Y | 0.83   | 60.00  | 4.98  |      | 80.0  |         |
|           |                                                     | Z | 1.32   | 62.68  | 4.53  |      | 80.0  |         |
| 10090-DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                       | X | 100.00 | 117.37 | 27.43 | 6.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 100.00 | 118.23 | 28.46 |      | 60.0  |         |
|           |                                                     | Z | 100.00 | 109.70 | 23.50 |      | 60.0  |         |
| 10097-CAB | UMTS-FDD (HSDPA)                                    | X | 1.89   | 68.18  | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.82   | 67.06  | 15.47 |      | 150.0 |         |
|           |                                                     | Z | 1.87   | 68.73  | 15.97 |      | 150.0 |         |
| 10098-CAB | UMTS-FDD (HSUPA, Subtest 2)                         | X | 1.85   | 68.15  | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 1.78   | 67.01  | 15.43 |      | 150.0 |         |
|           |                                                     | Z | 1.83   | 68.68  | 15.95 |      | 150.0 |         |
| 10099-DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                       | X | 12.41  | 103.93 | 38.44 | 9.56 | 60.0  | ± 9.6 % |
|           |                                                     | Y | 14.05  | 103.81 | 37.62 |      | 60.0  |         |
|           |                                                     | Z | 6.94   | 89.30  | 32.81 |      | 60.0  |         |
| 10100-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 3.20   | 70.68  | 16.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.15   | 69.96  | 16.53 |      | 150.0 |         |
|           |                                                     | Z | 3.05   | 70.44  | 16.91 |      | 150.0 |         |
| 10101-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 3.27   | 67.67  | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.29   | 67.34  | 15.87 |      | 150.0 |         |
|           |                                                     | Z | 3.15   | 67.56  | 16.02 |      | 150.0 |         |
| 10102-CAD | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 3.37   | 67.61  | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 3.39   | 67.30  | 15.96 |      | 150.0 |         |
|           |                                                     | Z | 3.26   | 67.54  | 16.10 |      | 150.0 |         |
| 10103-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)            | X | 6.70   | 77.76  | 21.71 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.25   | 78.01  | 21.66 |      | 65.0  |         |
|           |                                                     | Z | 5.31   | 74.49  | 20.24 |      | 65.0  |         |
| 10104-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)          | X | 6.39   | 74.88  | 21.30 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 7.01   | 75.63  | 21.49 |      | 65.0  |         |
|           |                                                     | Z | 5.41   | 72.53  | 20.08 |      | 65.0  |         |
| 10105-CAD | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)          | X | 5.93   | 73.22  | 20.87 | 3.98 | 65.0  | ± 9.6 % |
|           |                                                     | Y | 6.37   | 73.62  | 20.93 |      | 65.0  |         |
|           |                                                     | Z | 4.98   | 70.66  | 19.52 |      | 65.0  |         |
| 10108-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)            | X | 2.79   | 69.92  | 16.81 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.76   | 69.17  | 16.35 |      | 150.0 |         |
|           |                                                     | Z | 2.63   | 69.76  | 16.75 |      | 150.0 |         |
| 10109-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)          | X | 2.93   | 67.55  | 16.01 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.94   | 67.14  | 15.76 |      | 150.0 |         |
|           |                                                     | Z | 2.80   | 67.54  | 15.90 |      | 150.0 |         |
| 10110-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)             | X | 2.27   | 69.10  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.25   | 68.23  | 15.96 |      | 150.0 |         |
|           |                                                     | Z | 2.13   | 69.06  | 16.32 |      | 150.0 |         |
| 10111-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)           | X | 2.65   | 68.45  | 16.32 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                     | Y | 2.64   | 67.76  | 16.00 |      | 150.0 |         |
|           |                                                     | Z | 2.55   | 68.78  | 16.20 |      | 150.0 |         |

|           |                                                |   |      |       |       |      |       |         |
|-----------|------------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10112-CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | X | 3.05 | 67.53 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.07 | 67.13 | 15.82 |      | 150.0 |         |
|           |                                                | Z | 2.92 | 67.58 | 15.97 |      | 150.0 |         |
| 10113-CAE | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | X | 2.80 | 68.56 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.80 | 67.90 | 16.13 |      | 150.0 |         |
|           |                                                | Z | 2.69 | 68.93 | 16.32 |      | 150.0 |         |
| 10114-CAB | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | X | 5.15 | 67.26 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.19 | 67.08 | 16.42 |      | 150.0 |         |
|           |                                                | Z | 4.99 | 67.20 | 16.47 |      | 150.0 |         |
| 10115-CAB | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | X | 5.43 | 67.37 | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.52 | 67.34 | 16.56 |      | 150.0 |         |
|           |                                                | Z | 5.24 | 67.27 | 16.51 |      | 150.0 |         |
| 10116-CAB | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.24 | 67.44 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.30 | 67.32 | 16.46 |      | 150.0 |         |
|           |                                                | Z | 5.08 | 67.39 | 16.50 |      | 150.0 |         |
| 10117-CAB | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | X | 5.11 | 67.11 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.16 | 66.99 | 16.39 |      | 150.0 |         |
|           |                                                | Z | 4.99 | 67.15 | 16.47 |      | 150.0 |         |
| 10118-CAB | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | X | 5.51 | 67.58 | 16.71 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.61 | 67.54 | 16.67 |      | 150.0 |         |
|           |                                                | Z | 5.31 | 67.44 | 16.61 |      | 150.0 |         |
| 10119-CAB | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | X | 5.22 | 67.40 | 16.54 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 5.27 | 67.25 | 16.44 |      | 150.0 |         |
|           |                                                | Z | 5.07 | 67.38 | 16.51 |      | 150.0 |         |
| 10140-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | X | 3.41 | 67.63 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.43 | 67.31 | 15.88 |      | 150.0 |         |
|           |                                                | Z | 3.28 | 67.57 | 16.02 |      | 150.0 |         |
| 10141-CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | X | 3.53 | 67.71 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 3.55 | 67.40 | 16.05 |      | 150.0 |         |
|           |                                                | Z | 3.40 | 67.71 | 16.20 |      | 150.0 |         |
| 10142-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | X | 2.05 | 69.21 | 16.15 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.02 | 68.14 | 15.65 |      | 150.0 |         |
|           |                                                | Z | 1.90 | 69.18 | 15.79 |      | 150.0 |         |
| 10143-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | X | 2.53 | 69.32 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.50 | 68.40 | 15.76 |      | 150.0 |         |
|           |                                                | Z | 2.39 | 69.52 | 15.59 |      | 150.0 |         |
| 10144-CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | X | 2.28 | 66.94 | 14.41 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.31 | 66.41 | 14.31 |      | 150.0 |         |
|           |                                                | Z | 2.06 | 66.49 | 13.57 |      | 150.0 |         |
| 10145-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | X | 1.26 | 65.57 | 12.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 1.33 | 65.51 | 12.47 |      | 150.0 |         |
|           |                                                | Z | 0.90 | 62.72 | 9.31  |      | 150.0 |         |
| 10146-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | X | 1.87 | 65.71 | 11.26 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.34 | 67.84 | 13.03 |      | 150.0 |         |
|           |                                                | Z | 1.05 | 60.97 | 7.27  |      | 150.0 |         |
| 10147-CAE | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | X | 2.17 | 67.47 | 12.23 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                | Y | 2.79 | 70.16 | 14.23 |      | 150.0 |         |
|           |                                                | Z | 1.11 | 61.38 | 7.60  |      | 150.0 |         |

|           |                                            |   |      |       |       |      |       |         |
|-----------|--------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10149-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 2.93 | 67.61 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.95 | 67.20 | 15.81 |      | 150.0 |         |
|           |                                            | Z | 2.81 | 67.60 | 15.95 |      | 150.0 |         |
| 10150-CAD | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 3.06 | 67.58 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.08 | 67.18 | 15.86 |      | 150.0 |         |
|           |                                            | Z | 2.93 | 67.64 | 16.01 |      | 150.0 |         |
| 10151-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)    | X | 7.47 | 81.50 | 23.31 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 8.13 | 81.64 | 23.19 |      | 65.0  |         |
|           |                                            | Z | 5.82 | 78.02 | 21.74 |      | 65.0  |         |
| 10152-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)  | X | 5.96 | 75.09 | 21.13 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.59 | 75.82 | 21.34 |      | 65.0  |         |
|           |                                            | Z | 4.95 | 72.53 | 19.69 |      | 65.0  |         |
| 10153-CAD | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)  | X | 6.33 | 76.00 | 21.87 | 3.98 | 65.0  | ± 9.6 % |
|           |                                            | Y | 6.98 | 76.72 | 22.08 |      | 65.0  |         |
|           |                                            | Z | 5.31 | 73.57 | 20.52 |      | 65.0  |         |
| 10154-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 2.32 | 69.50 | 16.70 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.30 | 68.63 | 16.21 |      | 150.0 |         |
|           |                                            | Z | 2.17 | 69.43 | 16.55 |      | 150.0 |         |
| 10155-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 2.65 | 68.47 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.64 | 67.77 | 16.01 |      | 150.0 |         |
|           |                                            | Z | 2.55 | 68.82 | 16.23 |      | 150.0 |         |
| 10156-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 1.90 | 69.38 | 15.98 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 1.87 | 68.22 | 15.49 |      | 150.0 |         |
|           |                                            | Z | 1.73 | 69.10 | 15.35 |      | 150.0 |         |
| 10157-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 2.13 | 67.61 | 14.49 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.14 | 66.94 | 14.37 |      | 150.0 |         |
|           |                                            | Z | 1.88 | 66.88 | 13.39 |      | 150.0 |         |
| 10158-CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 2.80 | 68.62 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.80 | 67.95 | 16.18 |      | 150.0 |         |
|           |                                            | Z | 2.70 | 69.02 | 16.37 |      | 150.0 |         |
| 10159-CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 2.24 | 68.05 | 14.76 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.25 | 67.38 | 14.65 |      | 150.0 |         |
|           |                                            | Z | 1.97 | 67.26 | 13.62 |      | 150.0 |         |
| 10160-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)    | X | 2.79 | 68.96 | 16.56 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.78 | 68.29 | 16.16 |      | 150.0 |         |
|           |                                            | Z | 2.67 | 69.03 | 16.52 |      | 150.0 |         |
| 10161-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 2.95 | 67.54 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 2.97 | 67.10 | 15.79 |      | 150.0 |         |
|           |                                            | Z | 2.82 | 67.63 | 15.91 |      | 150.0 |         |
| 10162-CAD | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 3.06 | 67.69 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.08 | 67.22 | 15.89 |      | 150.0 |         |
|           |                                            | Z | 2.94 | 67.84 | 16.05 |      | 150.0 |         |
| 10166-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 3.60 | 69.71 | 19.22 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.76 | 69.53 | 19.10 |      | 150.0 |         |
|           |                                            | Z | 3.14 | 68.43 | 18.52 |      | 150.0 |         |
| 10167-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 4.49 | 72.92 | 19.79 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.71 | 72.48 | 19.58 |      | 150.0 |         |
|           |                                            | Z | 3.64 | 70.88 | 18.81 |      | 150.0 |         |

|           |                                            |   |       |        |       |      |       |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10168-CAE | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 4.99  | 75.19  | 21.10 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 5.19  | 74.57  | 20.82 |      | 150.0 |         |
|           |                                            | Z | 4.03  | 73.14  | 20.19 |      | 150.0 |         |
| 10169-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 3.02  | 69.31  | 19.06 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.27  | 69.70  | 19.15 |      | 150.0 |         |
|           |                                            | Z | 2.51  | 66.78  | 17.76 |      | 150.0 |         |
| 10170-CAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 4.24  | 75.66  | 21.52 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.60  | 75.59  | 21.37 |      | 150.0 |         |
|           |                                            | Z | 3.08  | 71.28  | 19.66 |      | 150.0 |         |
| 10171-AAD | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 3.48  | 71.52  | 18.79 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.80  | 71.54  | 18.73 |      | 150.0 |         |
|           |                                            | Z | 2.62  | 68.04  | 17.18 |      | 150.0 |         |
| 10172-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)      | X | 9.86  | 97.03  | 31.31 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 11.94 | 97.60  | 31.03 |      | 65.0  |         |
|           |                                            | Z | 3.49  | 77.54  | 23.86 |      | 65.0  |         |
| 10173-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)    | X | 35.90 | 116.24 | 34.55 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 33.36 | 111.72 | 33.12 |      | 65.0  |         |
|           |                                            | Z | 6.56  | 87.15  | 25.45 |      | 65.0  |         |
| 10174-CAD | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)    | X | 21.48 | 105.16 | 30.85 | 6.02 | 65.0  | ± 9.6 % |
|           |                                            | Y | 20.65 | 101.59 | 29.68 |      | 65.0  |         |
|           |                                            | Z | 4.70  | 80.63  | 22.56 |      | 65.0  |         |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)      | X | 2.98  | 69.02  | 18.83 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.23  | 69.39  | 18.90 |      | 150.0 |         |
|           |                                            | Z | 2.49  | 66.55  | 17.55 |      | 150.0 |         |
| 10176-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)    | X | 4.24  | 75.68  | 21.53 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.61  | 75.61  | 21.38 |      | 150.0 |         |
|           |                                            | Z | 3.09  | 71.30  | 19.67 |      | 150.0 |         |
| 10177-CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)       | X | 3.01  | 69.16  | 18.92 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.26  | 69.54  | 19.00 |      | 150.0 |         |
|           |                                            | Z | 2.50  | 66.65  | 17.62 |      | 150.0 |         |
| 10178-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)     | X | 4.21  | 75.48  | 21.42 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.56  | 75.38  | 21.26 |      | 150.0 |         |
|           |                                            | Z | 3.07  | 71.19  | 19.60 |      | 150.0 |         |
| 10179-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)    | X | 3.83  | 73.49  | 20.03 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.16  | 73.42  | 19.91 |      | 150.0 |         |
|           |                                            | Z | 2.83  | 69.59  | 18.31 |      | 150.0 |         |
| 10180-CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)     | X | 3.47  | 71.46  | 18.75 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.79  | 71.47  | 18.68 |      | 150.0 |         |
|           |                                            | Z | 2.62  | 68.01  | 17.15 |      | 150.0 |         |
| 10181-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 3.00  | 69.14  | 18.91 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.26  | 69.52  | 18.99 |      | 150.0 |         |
|           |                                            | Z | 2.50  | 66.64  | 17.62 |      | 150.0 |         |
| 10182-CAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)    | X | 4.20  | 75.46  | 21.41 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 4.55  | 75.36  | 21.25 |      | 150.0 |         |
|           |                                            | Z | 3.07  | 71.17  | 19.59 |      | 150.0 |         |
| 10183-AAC | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 3.46  | 71.44  | 18.74 | 3.01 | 150.0 | ± 9.6 % |
|           |                                            | Y | 3.78  | 71.45  | 18.67 |      | 150.0 |         |
|           |                                            | Z | 2.62  | 68.00  | 17.14 |      | 150.0 |         |

|           |                                               |   |      |       |       |      |       |         |
|-----------|-----------------------------------------------|---|------|-------|-------|------|-------|---------|
| 10184-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)          | X | 3.01 | 69.18 | 18.93 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.27 | 69.56 | 19.01 |      | 150.0 |         |
|           |                                               | Z | 2.51 | 66.67 | 17.63 |      | 150.0 |         |
| 10185-CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)        | X | 4.22 | 75.53 | 21.45 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.57 | 75.42 | 21.28 |      | 150.0 |         |
|           |                                               | Z | 3.08 | 71.23 | 19.63 |      | 150.0 |         |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)        | X | 3.48 | 71.51 | 18.77 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.80 | 71.51 | 18.70 |      | 150.0 |         |
|           |                                               | Z | 2.63 | 68.05 | 17.17 |      | 150.0 |         |
| 10187-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)        | X | 3.02 | 69.24 | 19.00 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.28 | 69.61 | 19.07 |      | 150.0 |         |
|           |                                               | Z | 2.52 | 66.73 | 17.71 |      | 150.0 |         |
| 10188-CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)      | X | 4.35 | 76.17 | 21.80 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.72 | 76.08 | 21.65 |      | 150.0 |         |
|           |                                               | Z | 3.15 | 71.69 | 19.93 |      | 150.0 |         |
| 10189-AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)      | X | 3.56 | 71.93 | 19.04 | 3.01 | 150.0 | ± 9.6 % |
|           |                                               | Y | 3.88 | 71.93 | 18.97 |      | 150.0 |         |
|           |                                               | Z | 2.67 | 68.37 | 17.41 |      | 150.0 |         |
| 10193-CAB | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)  | X | 4.54 | 66.68 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.59 | 66.47 | 16.13 |      | 150.0 |         |
|           |                                               | Z | 4.40 | 66.85 | 16.19 |      | 150.0 |         |
| 10194-CAB | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 4.70 | 66.99 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.77 | 66.80 | 16.26 |      | 150.0 |         |
|           |                                               | Z | 4.55 | 67.09 | 16.33 |      | 150.0 |         |
| 10195-CAB | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | X | 4.74 | 67.02 | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.81 | 66.83 | 16.27 |      | 150.0 |         |
|           |                                               | Z | 4.58 | 67.11 | 16.34 |      | 150.0 |         |
| 10196-CAB | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)       | X | 4.54 | 66.74 | 16.25 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.60 | 66.55 | 16.16 |      | 150.0 |         |
|           |                                               | Z | 4.39 | 66.85 | 16.19 |      | 150.0 |         |
| 10197-CAB | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)      | X | 4.72 | 67.01 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.78 | 66.83 | 16.27 |      | 150.0 |         |
|           |                                               | Z | 4.56 | 67.10 | 16.33 |      | 150.0 |         |
| 10198-CAB | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)      | X | 4.75 | 67.04 | 16.39 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.81 | 66.85 | 16.28 |      | 150.0 |         |
|           |                                               | Z | 4.58 | 67.11 | 16.34 |      | 150.0 |         |
| 10219-CAB | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)       | X | 4.49 | 66.76 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.55 | 66.56 | 16.12 |      | 150.0 |         |
|           |                                               | Z | 4.34 | 66.89 | 16.16 |      | 150.0 |         |
| 10220-CAB | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)    | X | 4.71 | 66.98 | 16.36 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.78 | 66.81 | 16.26 |      | 150.0 |         |
|           |                                               | Z | 4.55 | 67.06 | 16.32 |      | 150.0 |         |
| 10221-CAB | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)    | X | 4.75 | 66.96 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 4.82 | 66.78 | 16.27 |      | 150.0 |         |
|           |                                               | Z | 4.59 | 67.05 | 16.33 |      | 150.0 |         |
| 10222-CAB | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)        | X | 5.08 | 67.12 | 16.48 | 0.00 | 150.0 | ± 9.6 % |
|           |                                               | Y | 5.14 | 67.00 | 16.39 |      | 150.0 |         |
|           |                                               | Z | 4.96 | 67.13 | 16.45 |      | 150.0 |         |

|           |                                           |   |       |        |       |      |       |         |
|-----------|-------------------------------------------|---|-------|--------|-------|------|-------|---------|
| 10223-CAB | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)  | X | 5.38  | 67.33  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.45  | 67.20  | 16.51 |      | 150.0 |         |
|           |                                           | Z | 5.23  | 67.33  | 16.56 |      | 150.0 |         |
| 10224-CAB | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | X | 5.13  | 67.23  | 16.46 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 5.19  | 67.11  | 16.37 |      | 150.0 |         |
|           |                                           | Z | 4.99  | 67.25  | 16.44 |      | 150.0 |         |
| 10225-CAB | UMTS-FDD (HSPA+)                          | X | 2.82  | 66.29  | 15.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                           | Y | 2.85  | 65.89  | 15.31 |      | 150.0 |         |
|           |                                           | Z | 2.69  | 66.42  | 15.13 |      | 150.0 |         |
| 10226-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)  | X | 40.58 | 118.73 | 35.31 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 36.88 | 113.76 | 33.77 |      | 65.0  |         |
|           |                                           | Z | 6.94  | 88.26  | 25.92 |      | 65.0  |         |
| 10227-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)  | X | 36.33 | 114.29 | 33.35 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 31.30 | 108.87 | 31.78 |      | 65.0  |         |
|           |                                           | Z | 6.95  | 87.06  | 24.80 |      | 65.0  |         |
| 10228-CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)    | X | 13.65 | 104.05 | 33.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 18.81 | 107.23 | 34.08 |      | 65.0  |         |
|           |                                           | Z | 4.50  | 82.80  | 25.97 |      | 65.0  |         |
| 10229-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)    | X | 36.18 | 116.36 | 34.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 33.58 | 111.82 | 33.15 |      | 65.0  |         |
|           |                                           | Z | 6.61  | 87.25  | 25.49 |      | 65.0  |         |
| 10230-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)    | X | 32.38 | 112.10 | 32.69 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 28.70 | 107.19 | 31.24 |      | 65.0  |         |
|           |                                           | Z | 6.54  | 85.97  | 24.36 |      | 65.0  |         |
| 10231-CAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)      | X | 12.84 | 102.68 | 33.09 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 17.62 | 105.78 | 33.56 |      | 65.0  |         |
|           |                                           | Z | 4.35  | 82.09  | 25.62 |      | 65.0  |         |
| 10232-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)    | X | 36.15 | 116.36 | 34.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 33.55 | 111.82 | 33.15 |      | 65.0  |         |
|           |                                           | Z | 6.59  | 87.23  | 25.48 |      | 65.0  |         |
| 10233-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)    | X | 32.28 | 112.07 | 32.68 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 28.65 | 107.18 | 31.24 |      | 65.0  |         |
|           |                                           | Z | 6.52  | 85.93  | 24.35 |      | 65.0  |         |
| 10234-CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)      | X | 12.22 | 101.47 | 32.58 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 16.65 | 104.42 | 33.04 |      | 65.0  |         |
|           |                                           | Z | 4.24  | 81.51  | 25.28 |      | 65.0  |         |
| 10235-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)   | X | 36.31 | 116.46 | 34.62 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 33.66 | 111.90 | 33.18 |      | 65.0  |         |
|           |                                           | Z | 6.60  | 87.26  | 25.49 |      | 65.0  |         |
| 10236-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)   | X | 33.06 | 112.44 | 32.77 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 29.12 | 107.43 | 31.30 |      | 65.0  |         |
|           |                                           | Z | 6.60  | 86.11  | 24.40 |      | 65.0  |         |
| 10237-CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)     | X | 12.90 | 102.82 | 33.13 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 17.72 | 105.93 | 33.61 |      | 65.0  |         |
|           |                                           | Z | 4.35  | 82.12  | 25.64 |      | 65.0  |         |
| 10238-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)   | X | 36.09 | 116.34 | 34.59 | 6.02 | 65.0  | ± 9.6 % |
|           |                                           | Y | 33.52 | 111.82 | 33.15 |      | 65.0  |         |
|           |                                           | Z | 6.58  | 87.20  | 25.47 |      | 65.0  |         |

|           |                                            |   |       |        |       |      |      |         |
|-----------|--------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10239-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)    | X | 32.17 | 112.03 | 32.67 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 28.59 | 107.16 | 31.23 |      | 65.0 |         |
|           |                                            | Z | 6.49  | 85.89  | 24.34 |      | 65.0 |         |
| 10240-CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)      | X | 12.85 | 102.75 | 33.11 | 6.02 | 65.0 | ± 9.6 % |
|           |                                            | Y | 17.65 | 105.86 | 33.59 |      | 65.0 |         |
|           |                                            | Z | 4.34  | 82.09  | 25.63 |      | 65.0 |         |
| 10241-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | X | 8.52  | 83.40  | 26.72 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.34  | 83.46  | 26.63 |      | 65.0 |         |
|           |                                            | Z | 6.49  | 79.39  | 24.77 |      | 65.0 |         |
| 10242-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | X | 7.72  | 81.29  | 25.79 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.22  | 80.66  | 25.42 |      | 65.0 |         |
|           |                                            | Z | 5.72  | 76.85  | 23.63 |      | 65.0 |         |
| 10243-CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)   | X | 5.95  | 76.72  | 24.82 | 6.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.41  | 76.67  | 24.65 |      | 65.0 |         |
|           |                                            | Z | 4.75  | 73.34  | 22.98 |      | 65.0 |         |
| 10244-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X | 6.67  | 78.45  | 19.67 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 8.20  | 80.91  | 21.14 |      | 65.0 |         |
|           |                                            | Z | 3.50  | 69.23  | 14.35 |      | 65.0 |         |
| 10245-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X | 6.39  | 77.48  | 19.23 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 7.92  | 80.07  | 20.76 |      | 65.0 |         |
|           |                                            | Z | 3.42  | 68.65  | 14.03 |      | 65.0 |         |
| 10246-CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)     | X | 8.15  | 85.97  | 22.95 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.24  | 86.80  | 23.49 |      | 65.0 |         |
|           |                                            | Z | 4.03  | 75.23  | 17.77 |      | 65.0 |         |
| 10247-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | X | 5.50  | 76.42  | 20.00 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.26  | 77.49  | 20.66 |      | 65.0 |         |
|           |                                            | Z | 3.95  | 71.61  | 16.94 |      | 65.0 |         |
| 10248-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | X | 5.40  | 75.54  | 19.60 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.16  | 76.66  | 20.28 |      | 65.0 |         |
|           |                                            | Z | 3.89  | 70.88  | 16.59 |      | 65.0 |         |
| 10249-CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)     | X | 9.66  | 89.43  | 25.19 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 10.35 | 89.11  | 25.13 |      | 65.0 |         |
|           |                                            | Z | 5.64  | 80.91  | 21.33 |      | 65.0 |         |
| 10250-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X | 6.21  | 78.20  | 22.44 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.93  | 79.00  | 22.73 |      | 65.0 |         |
|           |                                            | Z | 4.95  | 74.96  | 20.57 |      | 65.0 |         |
| 10251-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X | 5.85  | 75.76  | 21.03 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.49  | 76.44  | 21.31 |      | 65.0 |         |
|           |                                            | Z | 4.69  | 72.73  | 19.17 |      | 65.0 |         |
| 10252-CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)    | X | 8.41  | 86.24  | 25.10 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 9.13  | 86.11  | 24.91 |      | 65.0 |         |
|           |                                            | Z | 5.95  | 81.04  | 22.79 |      | 65.0 |         |
| 10253-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X | 5.81  | 74.45  | 20.83 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.39  | 75.11  | 21.05 |      | 65.0 |         |
|           |                                            | Z | 4.88  | 72.13  | 19.42 |      | 65.0 |         |
| 10254-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)  | X | 6.16  | 75.32  | 21.51 | 3.98 | 65.0 | ± 9.6 % |
|           |                                            | Y | 6.77  | 75.99  | 21.73 |      | 65.0 |         |
|           |                                            | Z | 5.19  | 73.05  | 20.14 |      | 65.0 |         |

|           |                                             |   |      |       |       |      |      |         |
|-----------|---------------------------------------------|---|------|-------|-------|------|------|---------|
| 10255-CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)     | X | 6.96 | 80.42 | 23.12 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.59 | 80.64 | 23.06 |      | 65.0 |         |
|           |                                             | Z | 5.51 | 77.21 | 21.58 |      | 65.0 |         |
| 10256-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | X | 4.89 | 73.41 | 16.49 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.68 | 77.30 | 18.76 |      | 65.0 |         |
|           |                                             | Z | 2.46 | 64.75 | 10.88 |      | 65.0 |         |
| 10257-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | X | 4.63 | 72.26 | 15.89 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.35 | 76.13 | 18.19 |      | 65.0 |         |
|           |                                             | Z | 2.42 | 64.27 | 10.52 |      | 65.0 |         |
| 10258-CAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)   | X | 5.50 | 79.01 | 19.45 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.01 | 81.77 | 20.90 |      | 65.0 |         |
|           |                                             | Z | 2.56 | 68.30 | 13.54 |      | 65.0 |         |
| 10259-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)   | X | 5.80 | 77.14 | 20.90 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.53 | 78.01 | 21.38 |      | 65.0 |         |
|           |                                             | Z | 4.38 | 73.08 | 18.36 |      | 65.0 |         |
| 10260-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)   | X | 5.78 | 76.67 | 20.70 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.51 | 77.60 | 21.22 |      | 65.0 |         |
|           |                                             | Z | 4.39 | 72.73 | 18.19 |      | 65.0 |         |
| 10261-CAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)     | X | 8.27 | 86.47 | 24.62 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.00 | 86.40 | 24.57 |      | 65.0 |         |
|           |                                             | Z | 5.46 | 80.05 | 21.57 |      | 65.0 |         |
| 10262-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)   | X | 6.19 | 78.15 | 22.39 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.92 | 78.95 | 22.69 |      | 65.0 |         |
|           |                                             | Z | 4.94 | 74.88 | 20.51 |      | 65.0 |         |
| 10263-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)   | X | 5.84 | 75.72 | 21.02 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.48 | 76.42 | 21.31 |      | 65.0 |         |
|           |                                             | Z | 4.68 | 72.71 | 19.16 |      | 65.0 |         |
| 10264-CAD | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)     | X | 8.30 | 85.98 | 24.99 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 9.03 | 85.88 | 24.80 |      | 65.0 |         |
|           |                                             | Z | 5.88 | 80.81 | 22.67 |      | 65.0 |         |
| 10265-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)  | X | 5.96 | 75.09 | 21.13 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.59 | 75.82 | 21.35 |      | 65.0 |         |
|           |                                             | Z | 4.95 | 72.53 | 19.70 |      | 65.0 |         |
| 10266-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)  | X | 6.33 | 75.99 | 21.86 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 6.97 | 76.70 | 22.07 |      | 65.0 |         |
|           |                                             | Z | 5.31 | 73.56 | 20.51 |      | 65.0 |         |
| 10267-CAD | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)    | X | 7.45 | 81.44 | 23.28 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 8.11 | 81.58 | 23.17 |      | 65.0 |         |
|           |                                             | Z | 5.81 | 77.97 | 21.72 |      | 65.0 |         |
| 10268-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)  | X | 6.50 | 74.59 | 21.27 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.11 | 75.29 | 21.47 |      | 65.0 |         |
|           |                                             | Z | 5.58 | 72.49 | 20.14 |      | 65.0 |         |
| 10269-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)  | X | 6.45 | 74.07 | 21.10 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.04 | 74.76 | 21.30 |      | 65.0 |         |
|           |                                             | Z | 5.59 | 72.11 | 20.01 |      | 65.0 |         |
| 10270-CAD | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)    | X | 6.83 | 77.38 | 21.77 | 3.98 | 65.0 | ± 9.6 % |
|           |                                             | Y | 7.44 | 77.78 | 21.79 |      | 65.0 |         |
|           |                                             | Z | 5.71 | 75.01 | 20.64 |      | 65.0 |         |

|           |                                                                    |   |       |       |       |      |       |         |
|-----------|--------------------------------------------------------------------|---|-------|-------|-------|------|-------|---------|
| 10274-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                          | X | 2.62  | 66.75 | 15.42 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.61  | 66.15 | 15.17 |      | 150.0 |         |
|           |                                                                    | Z | 2.54  | 67.07 | 15.23 |      | 150.0 |         |
| 10275-CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                           | X | 1.67  | 68.55 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.61  | 67.31 | 15.31 |      | 150.0 |         |
|           |                                                                    | Z | 1.61  | 68.63 | 15.84 |      | 150.0 |         |
| 10277-CAA | PHS (QPSK)                                                         | X | 1.74  | 60.91 | 6.37  | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 2.31  | 62.75 | 8.24  |      | 50.0  |         |
|           |                                                                    | Z | 1.34  | 59.32 | 4.61  |      | 50.0  |         |
| 10278-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5)                                 | X | 9.23  | 83.71 | 19.86 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 16.13 | 92.59 | 23.80 |      | 50.0  |         |
|           |                                                                    | Z | 2.80  | 66.68 | 11.50 |      | 50.0  |         |
| 10279-CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                                | X | 9.55  | 84.14 | 20.09 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 16.22 | 92.62 | 23.87 |      | 50.0  |         |
|           |                                                                    | Z | 2.90  | 67.01 | 11.74 |      | 50.0  |         |
| 10290-AAB | CDMA2000, RC1, SO55, Full Rate                                     | X | 1.55  | 69.78 | 14.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.48  | 68.23 | 14.09 |      | 150.0 |         |
|           |                                                                    | Z | 1.19  | 67.52 | 12.47 |      | 150.0 |         |
| 10291-AAB | CDMA2000, RC3, SO55, Full Rate                                     | X | 0.89  | 66.83 | 13.08 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 0.85  | 65.35 | 12.57 |      | 150.0 |         |
|           |                                                                    | Z | 0.74  | 65.55 | 11.46 |      | 150.0 |         |
| 10292-AAB | CDMA2000, RC3, SO32, Full Rate                                     | X | 1.27  | 72.61 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.03  | 68.80 | 14.67 |      | 150.0 |         |
|           |                                                                    | Z | 1.20  | 72.32 | 14.93 |      | 150.0 |         |
| 10293-AAB | CDMA2000, RC3, SO3, Full Rate                                      | X | 2.34  | 81.60 | 20.09 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.43  | 73.64 | 17.27 |      | 150.0 |         |
|           |                                                                    | Z | 3.93  | 87.90 | 20.92 |      | 150.0 |         |
| 10295-AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.                              | X | 16.32 | 98.49 | 29.02 | 9.03 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 11.98 | 92.39 | 27.58 |      | 50.0  |         |
|           |                                                                    | Z | 18.77 | 96.90 | 26.52 |      | 50.0  |         |
| 10297-AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                            | X | 2.80  | 70.02 | 16.88 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.77  | 69.27 | 16.41 |      | 150.0 |         |
|           |                                                                    | Z | 2.65  | 69.87 | 16.82 |      | 150.0 |         |
| 10298-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                             | X | 1.62  | 68.28 | 14.44 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 1.62  | 67.40 | 14.26 |      | 150.0 |         |
|           |                                                                    | Z | 1.32  | 66.56 | 12.71 |      | 150.0 |         |
| 10299-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                           | X | 2.59  | 69.34 | 14.00 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.92  | 70.30 | 15.01 |      | 150.0 |         |
|           |                                                                    | Z | 1.54  | 64.05 | 10.22 |      | 150.0 |         |
| 10300-AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                           | X | 1.92  | 64.86 | 11.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                    | Y | 2.24  | 65.95 | 12.27 |      | 150.0 |         |
|           |                                                                    | Z | 1.26  | 61.60 | 8.20  |      | 150.0 |         |
| 10301-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC)                 | X | 4.85  | 66.06 | 17.86 | 4.17 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 4.97  | 65.84 | 17.76 |      | 50.0  |         |
|           |                                                                    | Z | 4.42  | 65.27 | 17.23 |      | 50.0  |         |
| 10302-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | X | 5.22  | 66.19 | 18.31 | 4.96 | 50.0  | ± 9.6 % |
|           |                                                                    | Y | 5.38  | 66.17 | 18.31 |      | 50.0  |         |
|           |                                                                    | Z | 4.86  | 65.76 | 17.88 |      | 50.0  |         |

|           |                                                                     |   |       |        |       |       |       |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|-------|-------|---------|
| 10303-AAA | IEEE 802.16e WiMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.96  | 65.79  | 18.13 | 4.96  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 5.14  | 65.84  | 18.17 |       | 50.0  |         |
|           |                                                                     | Z | 4.61  | 65.34  | 17.65 |       | 50.0  |         |
| 10304-AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)                 | X | 4.78  | 65.69  | 17.62 | 4.17  | 50.0  | ± 9.6 % |
|           |                                                                     | Y | 4.94  | 65.66  | 17.62 |       | 50.0  |         |
|           |                                                                     | Z | 4.45  | 65.35  | 17.22 |       | 50.0  |         |
| 10305-AAA | IEEE 802.16e WiMAX (31:15, 10ms, 10MHz, 64QAM, PUSC, 15 symbols)    | X | 4.24  | 66.91  | 19.40 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.54  | 67.57  | 19.86 |       | 35.0  |         |
|           |                                                                     | Z | 3.84  | 65.89  | 18.29 |       | 35.0  |         |
| 10306-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)    | X | 4.62  | 66.22  | 19.11 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.86  | 66.59  | 19.39 |       | 35.0  |         |
|           |                                                                     | Z | 4.26  | 65.53  | 18.31 |       | 35.0  |         |
| 10307-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)     | X | 4.50  | 66.31  | 19.05 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.77  | 66.81  | 19.39 |       | 35.0  |         |
|           |                                                                     | Z | 4.12  | 65.47  | 18.17 |       | 35.0  |         |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)                | X | 4.47  | 66.49  | 19.18 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.73  | 66.98  | 19.51 |       | 35.0  |         |
|           |                                                                     | Z | 4.09  | 65.63  | 18.30 |       | 35.0  |         |
| 10309-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3, 18 symbols) | X | 4.68  | 66.45  | 19.27 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.93  | 66.86  | 19.56 |       | 35.0  |         |
|           |                                                                     | Z | 4.28  | 65.63  | 18.41 |       | 35.0  |         |
| 10310-AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)  | X | 4.56  | 66.25  | 19.08 | 6.02  | 35.0  | ± 9.6 % |
|           |                                                                     | Y | 4.81  | 66.65  | 19.36 |       | 35.0  |         |
|           |                                                                     | Z | 4.20  | 65.54  | 18.28 |       | 35.0  |         |
| 10311-AAC | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                            | X | 3.16  | 69.26  | 16.50 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 3.13  | 68.60  | 16.08 |       | 150.0 |         |
|           |                                                                     | Z | 3.01  | 69.09  | 16.45 |       | 150.0 |         |
| 10313-AAA | IDEN 1:3                                                            | X | 8.00  | 86.23  | 21.34 | 6.99  | 70.0  | ± 9.6 % |
|           |                                                                     | Y | 8.53  | 85.21  | 20.95 |       | 70.0  |         |
|           |                                                                     | Z | 3.31  | 75.28  | 17.31 |       | 70.0  |         |
| 10314-AAA | IDEN 1:6                                                            | X | 12.68 | 100.31 | 29.33 | 10.00 | 30.0  | ± 9.6 % |
|           |                                                                     | Y | 13.31 | 98.73  | 28.67 |       | 30.0  |         |
|           |                                                                     | Z | 5.19  | 85.23  | 24.17 |       | 30.0  |         |
| 10315-AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)           | X | 1.10  | 64.07  | 15.53 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 1.10  | 63.56  | 15.08 |       | 150.0 |         |
|           |                                                                     | Z | 1.08  | 63.95  | 15.31 |       | 150.0 |         |
| 10316-AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)       | X | 4.59  | 66.75  | 16.41 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.66  | 66.58  | 16.32 |       | 150.0 |         |
|           |                                                                     | Z | 4.43  | 66.78  | 16.29 |       | 150.0 |         |
| 10317-AAB | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)             | X | 4.59  | 66.75  | 16.41 | 0.17  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.66  | 66.58  | 16.32 |       | 150.0 |         |
|           |                                                                     | Z | 4.43  | 66.78  | 16.29 |       | 150.0 |         |
| 10400-AAC | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)                 | X | 4.69  | 67.06  | 16.37 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 4.77  | 66.86  | 16.25 |       | 150.0 |         |
|           |                                                                     | Z | 4.51  | 67.11  | 16.31 |       | 150.0 |         |
| 10401-AAC | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle)                 | X | 5.41  | 67.26  | 16.54 | 0.00  | 150.0 | ± 9.6 % |
|           |                                                                     | Y | 5.45  | 67.06  | 16.42 |       | 150.0 |         |
|           |                                                                     | Z | 5.18  | 66.94  | 16.33 |       | 150.0 |         |

|           |                                                                                |   |        |        |       |      |       |         |
|-----------|--------------------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10402-AAC | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)                            | X | 5.65   | 67.49  | 16.51 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.72   | 67.43  | 16.45 |      | 150.0 |         |
|           |                                                                                | Z | 5.51   | 67.47  | 16.48 |      | 150.0 |         |
| 10403-AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                     | X | 1.55   | 69.78  | 14.51 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.48   | 68.23  | 14.09 |      | 115.0 |         |
|           |                                                                                | Z | 1.19   | 67.52  | 12.47 |      | 115.0 |         |
| 10404-AAB | CDMA2000 (1xEV-DO, Rev. A)                                                     | X | 1.55   | 69.78  | 14.51 | 0.00 | 115.0 | ± 9.6 % |
|           |                                                                                | Y | 1.48   | 68.23  | 14.09 |      | 115.0 |         |
|           |                                                                                | Z | 1.19   | 67.52  | 12.47 |      | 115.0 |         |
| 10406-AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                           | X | 100.00 | 120.41 | 29.76 | 0.00 | 100.0 | ± 9.6 % |
|           |                                                                                | Y | 19.72  | 99.25  | 25.38 |      | 100.0 |         |
|           |                                                                                | Z | 22.86  | 100.95 | 24.14 |      | 100.0 |         |
| 10410-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                 | X | 100.00 | 125.71 | 31.88 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                                | Y | 100.00 | 124.16 | 31.78 |      | 80.0  |         |
|           |                                                                                | Z | 8.15   | 91.76  | 22.46 |      | 80.0  |         |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)                      | X | 1.03   | 63.26  | 14.92 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 1.02   | 62.63  | 14.41 |      | 150.0 |         |
|           |                                                                                | Z | 1.03   | 63.39  | 14.88 |      | 150.0 |         |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)                  | X | 4.54   | 66.72  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.59   | 66.51  | 16.19 |      | 150.0 |         |
|           |                                                                                | Z | 4.40   | 66.84  | 16.26 |      | 150.0 |         |
| 10417-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)                      | X | 4.54   | 66.72  | 16.31 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.59   | 66.51  | 16.19 |      | 150.0 |         |
|           |                                                                                | Z | 4.40   | 66.84  | 16.26 |      | 150.0 |         |
| 10418-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)  | X | 4.53   | 66.89  | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.58   | 66.66  | 16.20 |      | 150.0 |         |
|           |                                                                                | Z | 4.40   | 67.05  | 16.32 |      | 150.0 |         |
| 10419-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble) | X | 4.55   | 66.83  | 16.33 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.60   | 66.61  | 16.21 |      | 150.0 |         |
|           |                                                                                | Z | 4.41   | 66.98  | 16.30 |      | 150.0 |         |
| 10422-AAA | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                   | X | 4.66   | 66.83  | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.72   | 66.62  | 16.23 |      | 150.0 |         |
|           |                                                                                | Z | 4.52   | 66.95  | 16.31 |      | 150.0 |         |
| 10423-AAA | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                | X | 4.82   | 67.13  | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.90   | 66.96  | 16.35 |      | 150.0 |         |
|           |                                                                                | Z | 4.65   | 67.21  | 16.40 |      | 150.0 |         |
| 10424-AAA | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                | X | 4.75   | 67.09  | 16.43 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 4.82   | 66.90  | 16.32 |      | 150.0 |         |
|           |                                                                                | Z | 4.58   | 67.17  | 16.38 |      | 150.0 |         |
| 10425-AAA | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                    | X | 5.35   | 67.37  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.42   | 67.27  | 16.52 |      | 150.0 |         |
|           |                                                                                | Z | 5.19   | 67.35  | 16.55 |      | 150.0 |         |
| 10426-AAA | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                  | X | 5.36   | 67.42  | 16.62 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                                | Y | 5.42   | 67.27  | 16.52 |      | 150.0 |         |
|           |                                                                                | Z | 5.21   | 67.42  | 16.58 |      | 150.0 |         |

|           |                                                                |   |        |        |       |      |       |         |
|-----------|----------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10427-AAA | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                 | X | 5.37   | 67.38  | 16.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 5.43   | 67.25  | 16.50 |      | 150.0 |         |
|           |                                                                | Z | 5.18   | 67.23  | 16.48 |      | 150.0 |         |
| 10430-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                               | X | 4.24   | 70.83  | 18.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.26   | 70.25  | 18.02 |      | 150.0 |         |
|           |                                                                | Z | 4.20   | 71.89  | 18.27 |      | 150.0 |         |
| 10431-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                              | X | 4.21   | 67.30  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.28   | 67.03  | 16.19 |      | 150.0 |         |
|           |                                                                | Z | 4.03   | 67.45  | 16.18 |      | 150.0 |         |
| 10432-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                              | X | 4.51   | 67.15  | 16.38 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.58   | 66.93  | 16.27 |      | 150.0 |         |
|           |                                                                | Z | 4.34   | 67.27  | 16.32 |      | 150.0 |         |
| 10433-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                              | X | 4.76   | 67.12  | 16.45 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.83   | 66.94  | 16.34 |      | 150.0 |         |
|           |                                                                | Z | 4.59   | 67.20  | 16.40 |      | 150.0 |         |
| 10434-AAA | W-CDMA (BS Test Model 1, 64 DPCH)                              | X | 4.34   | 71.72  | 18.14 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.35   | 71.03  | 17.99 |      | 150.0 |         |
|           |                                                                | Z | 4.31   | 72.81  | 18.12 |      | 150.0 |         |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 125.48 | 31.77 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                | Y | 100.00 | 123.97 | 31.69 |      | 80.0  |         |
|           |                                                                | Z | 7.63   | 90.76  | 22.11 |      | 80.0  |         |
| 10447-AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                 | X | 3.51   | 67.35  | 15.60 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.58   | 66.99  | 15.55 |      | 150.0 |         |
|           |                                                                | Z | 3.28   | 67.36  | 15.16 |      | 150.0 |         |
| 10448-AAB | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                | X | 4.06   | 67.09  | 16.17 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.12   | 66.80  | 16.05 |      | 150.0 |         |
|           |                                                                | Z | 3.89   | 67.25  | 16.05 |      | 150.0 |         |
| 10449-AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                | X | 4.33   | 66.98  | 16.28 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.39   | 66.75  | 16.16 |      | 150.0 |         |
|           |                                                                | Z | 4.18   | 67.10  | 16.22 |      | 150.0 |         |
| 10450-AAB | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                | X | 4.53   | 66.89  | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.58   | 66.69  | 16.19 |      | 150.0 |         |
|           |                                                                | Z | 4.39   | 66.98  | 16.26 |      | 150.0 |         |
| 10451-AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)                | X | 3.39   | 67.51  | 15.20 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.48   | 67.19  | 15.21 |      | 150.0 |         |
|           |                                                                | Z | 3.10   | 67.22  | 14.48 |      | 150.0 |         |
| 10456-AAA | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)           | X | 6.22   | 67.91  | 16.74 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 6.28   | 67.83  | 16.68 |      | 150.0 |         |
|           |                                                                | Z | 6.11   | 67.90  | 16.72 |      | 150.0 |         |
| 10457-AAA | UMTS-FDD (DC-HSDPA)                                            | X | 3.80   | 65.37  | 16.02 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.83   | 65.15  | 15.90 |      | 150.0 |         |
|           |                                                                | Z | 3.74   | 65.57  | 15.99 |      | 150.0 |         |
| 10458-AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                         | X | 3.21   | 66.83  | 14.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 3.31   | 66.55  | 14.68 |      | 150.0 |         |
|           |                                                                | Z | 2.82   | 66.01  | 13.39 |      | 150.0 |         |
| 10459-AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                         | X | 4.29   | 65.14  | 15.57 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                | Y | 4.36   | 64.71  | 15.51 |      | 150.0 |         |
|           |                                                                | Z | 4.04   | 65.27  | 15.07 |      | 150.0 |         |

|           |                                                                   |   |        |        |       |      |       |         |
|-----------|-------------------------------------------------------------------|---|--------|--------|-------|------|-------|---------|
| 10460-AAA | UMTS-FDD (WCDMA, AMR)                                             | X | 0.96   | 69.26  | 16.86 | 0.00 | 150.0 | ± 9.6 % |
|           |                                                                   | Y | 0.88   | 67.02  | 15.53 |      | 150.0 |         |
|           |                                                                   | Z | 0.94   | 69.35  | 16.76 |      | 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 | 131.25 | 34.47 | 3.29 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 128.59 | 33.89 |      | 80.0  |         |
|           |                                                                   | Z | 3.16   | 81.29  | 20.28 |      | 80.0  |         |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 18.15  | 90.54  | 19.55 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 110.06 | 25.23 |      | 80.0  |         |
|           |                                                                   | Z | 0.71   | 60.00  | 7.72  |      | 80.0  |         |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.32   | 68.92  | 12.27 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 12.78  | 85.50  | 18.46 |      | 80.0  |         |
|           |                                                                   | Z | 0.72   | 60.00  | 7.06  |      | 80.0  |         |
| 10464-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 128.50 | 33.02 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 126.31 | 32.66 |      | 80.0  |         |
|           |                                                                   | Z | 2.43   | 77.27  | 18.20 |      | 80.0  |         |
| 10465-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 7.48   | 81.44  | 16.98 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 53.06  | 102.63 | 23.42 |      | 80.0  |         |
|           |                                                                   | Z | 0.71   | 60.00  | 7.65  |      | 80.0  |         |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.86   | 66.75  | 11.37 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 7.10   | 79.26  | 16.56 |      | 80.0  |         |
|           |                                                                   | Z | 0.72   | 60.00  | 7.01  |      | 80.0  |         |
| 10467-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 100.00 | 128.82 | 33.16 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 126.57 | 32.78 |      | 80.0  |         |
|           |                                                                   | Z | 2.60   | 78.29  | 18.60 |      | 80.0  |         |
| 10468-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 9.21   | 83.60  | 17.62 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 76.07  | 106.68 | 24.37 |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.67  |      | 80.0  |         |
| 10469-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 1.87   | 66.82  | 11.40 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 7.22   | 79.45  | 16.62 |      | 80.0  |         |
|           |                                                                   | Z | 0.72   | 60.00  | 7.01  |      | 80.0  |         |
| 10470-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 128.87 | 33.17 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 126.61 | 32.79 |      | 80.0  |         |
|           |                                                                   | Z | 2.61   | 78.33  | 18.61 |      | 80.0  |         |
| 10471-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 9.03   | 83.37  | 17.54 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 75.72  | 106.57 | 24.32 |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.66  |      | 80.0  |         |
| 10472-AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.85   | 66.72  | 11.34 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 7.17   | 79.36  | 16.58 |      | 80.0  |         |
|           |                                                                   | Z | 0.72   | 60.00  | 6.99  |      | 80.0  |         |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 100.00 | 128.83 | 33.15 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 100.00 | 126.57 | 32.77 |      | 80.0  |         |
|           |                                                                   | Z | 2.60   | 78.28  | 18.59 |      | 80.0  |         |
| 10474-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 8.86   | 83.19  | 17.49 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 73.20  | 106.22 | 24.25 |      | 80.0  |         |
|           |                                                                   | Z | 0.70   | 60.00  | 7.66  |      | 80.0  |         |
| 10475-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 1.84   | 66.67  | 11.33 | 3.23 | 80.0  | ± 9.6 % |
|           |                                                                   | Y | 7.07   | 79.22  | 16.54 |      | 80.0  |         |
|           |                                                                   | Z | 0.72   | 60.00  | 6.99  |      | 80.0  |         |

|           |                                                                     |   |       |        |       |      |      |         |
|-----------|---------------------------------------------------------------------|---|-------|--------|-------|------|------|---------|
| 10477-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | X | 7.55  | 81.52  | 16.98 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 56.45 | 103.26 | 23.54 |      | 80.0 |         |
|           |                                                                     | Z | 0.70  | 60.00  | 7.63  |      | 80.0 |         |
| 10478-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X | 1.82  | 66.56  | 11.27 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.95  | 79.03  | 16.47 |      | 80.0 |         |
|           |                                                                     | Z | 0.72  | 60.00  | 6.98  |      | 80.0 |         |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 10.99 | 93.23  | 25.61 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.79  | 90.18  | 24.96 |      | 80.0 |         |
|           |                                                                     | Z | 4.54  | 80.48  | 20.41 |      | 80.0 |         |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 12.16 | 88.23  | 21.88 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 11.98 | 87.55  | 22.28 |      | 80.0 |         |
|           |                                                                     | Z | 2.88  | 70.37  | 14.48 |      | 80.0 |         |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 8.71  | 82.91  | 19.80 | 3.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 9.82  | 84.02  | 20.80 |      | 80.0 |         |
|           |                                                                     | Z | 2.18  | 66.77  | 12.57 |      | 80.0 |         |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.05  | 77.33  | 19.19 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.17  | 76.68  | 19.19 |      | 80.0 |         |
|           |                                                                     | Z | 2.07  | 68.66  | 14.58 |      | 80.0 |         |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.93  | 75.57  | 17.70 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 6.34  | 78.50  | 19.36 |      | 80.0 |         |
|           |                                                                     | Z | 1.80  | 63.38  | 11.04 |      | 80.0 |         |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 4.47  | 74.01  | 17.11 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 5.79  | 76.98  | 18.82 |      | 80.0 |         |
|           |                                                                     | Z | 1.76  | 62.89  | 10.79 |      | 80.0 |         |
| 10485-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.05  | 77.49  | 20.34 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.20  | 76.76  | 20.09 |      | 80.0 |         |
|           |                                                                     | Z | 2.71  | 72.24  | 17.50 |      | 80.0 |         |
| 10486-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.54  | 71.63  | 17.34 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.76  | 71.58  | 17.54 |      | 80.0 |         |
|           |                                                                     | Z | 2.51  | 67.51  | 14.60 |      | 80.0 |         |
| 10487-AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.49  | 71.03  | 17.07 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.74  | 71.08  | 17.31 |      | 80.0 |         |
|           |                                                                     | Z | 2.49  | 67.04  | 14.35 |      | 80.0 |         |
| 10488-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 3.92  | 74.84  | 20.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.21  | 74.77  | 19.87 |      | 80.0 |         |
|           |                                                                     | Z | 2.99  | 71.49  | 18.31 |      | 80.0 |         |
| 10489-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.58  | 70.14  | 18.01 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.82  | 70.22  | 18.04 |      | 80.0 |         |
|           |                                                                     | Z | 3.03  | 68.36  | 16.75 |      | 80.0 |         |
| 10490-AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.66  | 69.89  | 17.90 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 3.90  | 69.97  | 17.95 |      | 80.0 |         |
|           |                                                                     | Z | 3.10  | 68.21  | 16.67 |      | 80.0 |         |
| 10491-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.00  | 72.50  | 19.16 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.28  | 72.62  | 19.08 |      | 80.0 |         |
|           |                                                                     | Z | 3.25  | 70.05  | 17.90 |      | 80.0 |         |
| 10492-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.86  | 68.99  | 17.79 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                     | Y | 4.11  | 69.18  | 17.85 |      | 80.0 |         |
|           |                                                                     | Z | 3.37  | 67.61  | 16.86 |      | 80.0 |         |

|           |                                                                      |   |      |       |       |      |      |         |
|-----------|----------------------------------------------------------------------|---|------|-------|-------|------|------|---------|
| 10493-AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.92 | 68.82 | 17.72 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.17 | 69.02 | 17.78 |      | 80.0 |         |
|           |                                                                      | Z | 3.43 | 67.50 | 16.80 |      | 80.0 |         |
| 10494-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 4.43 | 74.41 | 19.78 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.75 | 74.52 | 19.68 |      | 80.0 |         |
|           |                                                                      | Z | 3.49 | 71.39 | 18.37 |      | 80.0 |         |
| 10495-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.90 | 69.39 | 18.01 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.16 | 69.65 | 18.06 |      | 80.0 |         |
|           |                                                                      | Z | 3.39 | 67.86 | 17.06 |      | 80.0 |         |
| 10496-AAC | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.97 | 69.05 | 17.88 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.22 | 69.30 | 17.94 |      | 80.0 |         |
|           |                                                                      | Z | 3.47 | 67.65 | 16.99 |      | 80.0 |         |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 2.87 | 72.14 | 16.05 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.23 | 72.92 | 16.83 |      | 80.0 |         |
|           |                                                                      | Z | 1.19 | 62.14 | 10.12 |      | 80.0 |         |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.73 | 63.11 | 10.85 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.27 | 65.45 | 12.56 |      | 80.0 |         |
|           |                                                                      | Z | 1.15 | 60.00 | 7.68  |      | 80.0 |         |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.65 | 62.30 | 10.28 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 2.18 | 64.69 | 12.05 |      | 80.0 |         |
|           |                                                                      | Z | 1.17 | 60.00 | 7.51  |      | 80.0 |         |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.87 | 75.87 | 20.03 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.07 | 75.40 | 19.81 |      | 80.0 |         |
|           |                                                                      | Z | 2.80 | 71.83 | 17.80 |      | 80.0 |         |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.57 | 71.05 | 17.60 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.78 | 70.97 | 17.70 |      | 80.0 |         |
|           |                                                                      | Z | 2.79 | 68.23 | 15.59 |      | 80.0 |         |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.61 | 70.84 | 17.44 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.84 | 70.79 | 17.56 |      | 80.0 |         |
|           |                                                                      | Z | 2.82 | 68.03 | 15.41 |      | 80.0 |         |
| 10503-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X | 3.87 | 74.62 | 19.92 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.15 | 74.55 | 19.77 |      | 80.0 |         |
|           |                                                                      | Z | 2.95 | 71.29 | 18.21 |      | 80.0 |         |
| 10504-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.57 | 70.04 | 17.95 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.80 | 70.13 | 17.99 |      | 80.0 |         |
|           |                                                                      | Z | 3.01 | 68.26 | 16.69 |      | 80.0 |         |
| 10505-AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.64 | 69.79 | 17.85 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 3.88 | 69.88 | 17.89 |      | 80.0 |         |
|           |                                                                      | Z | 3.09 | 68.12 | 16.62 |      | 80.0 |         |
| 10506-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | X | 4.39 | 74.26 | 19.71 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.71 | 74.37 | 19.61 |      | 80.0 |         |
|           |                                                                      | Z | 3.46 | 71.26 | 18.30 |      | 80.0 |         |
| 10507-AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | X | 3.89 | 69.33 | 17.97 | 2.23 | 80.0 | ± 9.6 % |
|           |                                                                      | Y | 4.14 | 69.59 | 18.03 |      | 80.0 |         |
|           |                                                                      | Z | 3.38 | 67.80 | 17.02 |      | 80.0 |         |