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|-----------|---|---|------|-------|-------|------|------|---------|
| 10477-AAB | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.06 | 60.92 | 8.53 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.38 | 63.07 | 9.75 | | 80.0 | |
| | | Z | 1.19 | 61.22 | 8.82 | | 80.0 | |
| 10478-AAB | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 0.98 | 60.00 | 7.59 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 1.09 | 60.56 | 8.08 | | 80.0 | |
| | | Z | 1.07 | 60.00 | 7.77 | | 80.0 | |
| 10479-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 4.14 | 76.27 | 18.98 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 4.79 | 78.30 | 20.13 | | 80.0 | |
| | | Z | 3.76 | 74.09 | 18.13 | | 80.0 | |
| 10480-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.67 | 71.15 | 15.30 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 4.79 | 74.51 | 17.04 | | 80.0 | |
| | | Z | 3.56 | 70.15 | 15.03 | | 80.0 | |
| 10481-AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.10 | 68.67 | 13.94 | 3.23 | 80.0 | ± 9.6 % |
| | | Y | 4.07 | 71.92 | 15.71 | | 80.0 | |
| | | Z | 3.13 | 68.19 | 13.89 | | 80.0 | |
| 10482-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.13 | 66.78 | 14.04 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 2.63 | 69.43 | 15.68 | | 80.0 | |
| | | Z | 2.28 | 67.25 | 14.40 | | 80.0 | |
| 10483-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.80 | 67.01 | 13.58 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.57 | 70.12 | 15.47 | | 80.0 | |
| | | Z | 2.93 | 67.15 | 13.81 | | 80.0 | |
| 10484-AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.73 | 66.47 | 13.34 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.45 | 69.45 | 15.20 | | 80.0 | |
| | | Z | 2.87 | 66.70 | 13.61 | | 80.0 | |
| 10485-AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.55 | 68.83 | 15.94 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 2.98 | 70.92 | 17.16 | | 80.0 | |
| | | Z | 2.67 | 68.99 | 16.05 | | 80.0 | |
| 10486-AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.67 | 66.45 | 14.37 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.02 | 67.96 | 15.47 | | 80.0 | |
| | | Z | 2.81 | 66.75 | 14.64 | | 80.0 | |
| 10487-AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.70 | 66.22 | 14.25 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.04 | 67.69 | 15.34 | | 80.0 | |
| | | Z | 2.84 | 66.54 | 14.53 | | 80.0 | |
| 10488-AAB | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.02 | 69.31 | 16.93 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.39 | 70.86 | 17.76 | | 80.0 | |
| | | Z | 3.14 | 69.41 | 16.93 | | 80.0 | |
| 10489-AAB | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.17 | 67.21 | 16.05 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.40 | 68.06 | 16.65 | | 80.0 | |
| | | Z | 3.28 | 67.32 | 16.10 | | 80.0 | |
| 10490-AAB | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.27 | 67.16 | 16.05 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.50 | 67.96 | 16.63 | | 80.0 | |
| | | Z | 3.38 | 67.27 | 16.11 | | 80.0 | |
| 10491-AAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.39 | 68.71 | 16.86 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.69 | 69.88 | 17.49 | | 80.0 | |
| | | Z | 3.50 | 68.83 | 16.85 | | 80.0 | |
| 10492-AAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.59 | 66.97 | 16.31 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.79 | 67.64 | 16.77 | | 80.0 | |
| | | Z | 3.69 | 67.09 | 16.34 | | 80.0 | |



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|-----------|--|---|------|-------|-------|------|------|---------|
| 10493-AAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.66 | 66.91 | 16.30 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.86 | 67.55 | 16.75 | | 80.0 | |
| | | Z | 3.77 | 67.03 | 16.34 | | 80.0 | |
| 10494-AAB | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.57 | 69.75 | 17.16 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.95 | 71.16 | 17.86 | | 80.0 | |
| | | Z | 3.69 | 69.87 | 17.14 | | 80.0 | |
| 10495-AAB | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.60 | 67.26 | 16.48 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.81 | 68.00 | 16.94 | | 80.0 | |
| | | Z | 3.71 | 67.39 | 16.50 | | 80.0 | |
| 10496-AAB | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.70 | 67.12 | 16.46 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.90 | 67.79 | 16.90 | | 80.0 | |
| | | Z | 3.81 | 67.25 | 16.48 | | 80.0 | |
| 10497-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 1.56 | 63.22 | 11.36 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 1.97 | 65.90 | 13.24 | | 80.0 | |
| | | Z | 1.73 | 64.01 | 11.99 | | 80.0 | |
| 10498-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.39 | 60.03 | 8.67 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 1.73 | 61.98 | 10.36 | | 80.0 | |
| | | Z | 1.57 | 60.86 | 9.43 | | 80.0 | |
| 10499-AAA | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.41 | 60.00 | 8.53 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 1.69 | 61.56 | 10.00 | | 80.0 | |
| | | Z | 1.54 | 60.51 | 9.11 | | 80.0 | |
| 10500-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.73 | 68.91 | 16.30 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.11 | 70.67 | 17.33 | | 80.0 | |
| | | Z | 2.84 | 69.01 | 16.36 | | 80.0 | |
| 10501-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.90 | 66.88 | 15.08 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.20 | 68.06 | 15.95 | | 80.0 | |
| | | Z | 3.02 | 67.06 | 15.24 | | 80.0 | |
| 10502-AAA | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 2.96 | 66.81 | 14.99 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.26 | 67.97 | 15.86 | | 80.0 | |
| | | Z | 3.09 | 67.00 | 15.16 | | 80.0 | |
| 10503-AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.99 | 69.14 | 16.84 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.36 | 70.70 | 17.68 | | 80.0 | |
| | | Z | 3.11 | 69.25 | 16.84 | | 80.0 | |
| 10504-AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.16 | 67.12 | 15.99 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.39 | 67.99 | 16.60 | | 80.0 | |
| | | Z | 3.26 | 67.23 | 16.05 | | 80.0 | |
| 10505-AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.26 | 67.07 | 15.99 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.49 | 67.88 | 16.58 | | 80.0 | |
| | | Z | 3.36 | 67.18 | 16.05 | | 80.0 | |
| 10506-AAB | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 3.54 | 69.63 | 17.10 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.92 | 71.03 | 17.79 | | 80.0 | |
| | | Z | 3.67 | 69.75 | 17.08 | | 80.0 | |
| 10507-AAB | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.59 | 67.20 | 16.44 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.80 | 67.94 | 16.91 | | 80.0 | |
| | | Z | 3.70 | 67.33 | 16.46 | | 80.0 | |



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|-----------|---|---|------|-------|-------|------|-------|---------|
| 10508-AAB | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.69 | 67.05 | 16.42 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 3.89 | 67.73 | 16.86 | | 80.0 | |
| | | Z | 3.79 | 67.18 | 16.44 | | 80.0 | |
| 10509-AAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 4.00 | 69.12 | 16.94 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.31 | 70.17 | 17.46 | | 80.0 | |
| | | Z | 4.11 | 69.24 | 16.92 | | 80.0 | |
| 10510-AAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.11 | 67.23 | 16.60 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.31 | 67.87 | 16.99 | | 80.0 | |
| | | Z | 4.22 | 67.38 | 16.62 | | 80.0 | |
| 10511-AAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.18 | 67.07 | 16.58 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.37 | 67.66 | 16.94 | | 80.0 | |
| | | Z | 4.28 | 67.21 | 16.60 | | 80.0 | |
| 10512-AAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | X | 4.04 | 70.10 | 17.19 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.44 | 71.46 | 17.84 | | 80.0 | |
| | | Z | 4.16 | 70.23 | 17.17 | | 80.0 | |
| 10513-AAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 3.98 | 67.37 | 16.64 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.19 | 68.10 | 17.06 | | 80.0 | |
| | | Z | 4.09 | 67.53 | 16.66 | | 80.0 | |
| 10514-AAB | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | X | 4.03 | 67.08 | 16.58 | 2.23 | 80.0 | ± 9.6 % |
| | | Y | 4.22 | 67.73 | 16.97 | | 80.0 | |
| | | Z | 4.13 | 67.24 | 16.60 | | 80.0 | |
| 10515-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 0.98 | 62.80 | 14.38 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.97 | 62.85 | 14.44 | | 150.0 | |
| | | Z | 0.97 | 62.75 | 14.34 | | 150.0 | |
| 10516-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.54 | 67.42 | 15.76 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.55 | 68.23 | 16.12 | | 150.0 | |
| | | Z | 0.53 | 67.19 | 15.61 | | 150.0 | |
| 10517-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.81 | 64.28 | 14.78 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.82 | 64.48 | 14.91 | | 150.0 | |
| | | Z | 0.81 | 64.21 | 14.72 | | 150.0 | |
| 10518-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.50 | 66.67 | 16.13 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.56 | 66.63 | 16.14 | | 150.0 | |
| | | Z | 4.53 | 66.65 | 16.11 | | 150.0 | |
| 10519-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 4.67 | 66.89 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.75 | 66.87 | 16.26 | | 150.0 | |
| | | Z | 4.71 | 66.88 | 16.23 | | 150.0 | |
| 10520-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.52 | 66.84 | 16.16 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.60 | 66.83 | 16.18 | | 150.0 | |
| | | Z | 4.56 | 66.83 | 16.15 | | 150.0 | |
| 10521-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.46 | 66.82 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.53 | 66.83 | 16.17 | | 150.0 | |
| | | Z | 4.50 | 66.82 | 16.13 | | 150.0 | |
| 10522-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.52 | 66.94 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.59 | 66.90 | 16.25 | | 150.0 | |
| | | Z | 4.56 | 66.92 | 16.22 | | 150.0 | |



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| 10523-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.41 | 66.82 | 16.10 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.47 | 66.77 | 16.09 | | 150.0 | |
| | | Z | 4.44 | 66.79 | 16.07 | | 150.0 | |
| 10524-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.46 | 66.85 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.53 | 66.82 | 16.21 | | 150.0 | |
| | | Z | 4.50 | 66.83 | 16.19 | | 150.0 | |
| 10525-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) | X | 4.46 | 65.92 | 15.81 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.51 | 65.87 | 15.81 | | 150.0 | |
| | | Z | 4.49 | 65.89 | 15.79 | | 150.0 | |
| 10526-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) | X | 4.61 | 66.26 | 15.94 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.69 | 66.24 | 15.95 | | 150.0 | |
| | | Z | 4.65 | 66.25 | 15.92 | | 150.0 | |
| 10527-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) | X | 4.54 | 66.22 | 15.88 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.61 | 66.20 | 15.89 | | 150.0 | |
| | | Z | 4.57 | 66.21 | 15.87 | | 150.0 | |
| 10528-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) | X | 4.55 | 66.23 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.62 | 66.22 | 15.92 | | 150.0 | |
| | | Z | 4.59 | 66.22 | 15.90 | | 150.0 | |
| 10529-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.55 | 66.23 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.62 | 66.22 | 15.92 | | 150.0 | |
| | | Z | 4.59 | 66.22 | 15.90 | | 150.0 | |
| 10531-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) | X | 4.54 | 66.31 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.62 | 66.33 | 15.94 | | 150.0 | |
| | | Z | 4.58 | 66.32 | 15.90 | | 150.0 | |
| 10532-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | X | 4.40 | 66.17 | 15.85 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.48 | 66.18 | 15.87 | | 150.0 | |
| | | Z | 4.44 | 66.17 | 15.84 | | 150.0 | |
| 10533-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | X | 4.56 | 66.29 | 15.91 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 4.63 | 66.26 | 15.91 | | 150.0 | |
| | | Z | 4.60 | 66.27 | 15.89 | | 150.0 | |
| 10534-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle) | X | 5.10 | 66.34 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.15 | 66.35 | 15.99 | | 150.0 | |
| | | Z | 5.13 | 66.34 | 15.97 | | 150.0 | |
| 10535-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | X | 5.16 | 66.51 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.22 | 66.51 | 16.06 | | 150.0 | |
| | | Z | 5.19 | 66.51 | 16.04 | | 150.0 | |
| 10536-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | X | 5.03 | 66.46 | 16.02 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.09 | 66.47 | 16.02 | | 150.0 | |
| | | Z | 5.06 | 66.46 | 16.00 | | 150.0 | |
| 10537-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle) | X | 5.09 | 66.43 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.15 | 66.44 | 16.01 | | 150.0 | |
| | | Z | 5.12 | 66.43 | 15.99 | | 150.0 | |
| 10538-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle) | X | 5.17 | 66.44 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.24 | 66.47 | 16.07 | | 150.0 | |
| | | Z | 5.21 | 66.45 | 16.04 | | 150.0 | |
| 10540-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 5.10 | 66.43 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.17 | 66.48 | 16.08 | | 150.0 | |
| | | Z | 5.14 | 66.46 | 16.06 | | 150.0 | |



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| 10541-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | X | 5.08 | 66.33 | 16.00 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.14 | 66.35 | 16.01 | | 150.0 | |
| | | Z | 5.11 | 66.34 | 15.99 | | 150.0 | |
| 10542-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle) | X | 5.24 | 66.41 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.30 | 66.42 | 16.06 | | 150.0 | |
| | | Z | 5.27 | 66.42 | 16.04 | | 150.0 | |
| 10543-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | X | 5.31 | 66.43 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.38 | 66.46 | 16.10 | | 150.0 | |
| | | Z | 5.34 | 66.45 | 16.08 | | 150.0 | |
| 10544-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle) | X | 5.42 | 66.46 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.46 | 66.47 | 15.99 | | 150.0 | |
| | | Z | 5.44 | 66.47 | 15.97 | | 150.0 | |
| 10545-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle) | X | 5.60 | 66.86 | 16.14 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.65 | 66.87 | 16.14 | | 150.0 | |
| | | Z | 5.62 | 66.86 | 16.11 | | 150.0 | |
| 10546-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | X | 5.47 | 66.63 | 16.04 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.53 | 66.69 | 16.07 | | 150.0 | |
| | | Z | 5.50 | 66.67 | 16.03 | | 150.0 | |
| 10547-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle) | X | 5.54 | 66.68 | 16.06 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.60 | 66.73 | 16.07 | | 150.0 | |
| | | Z | 5.57 | 66.71 | 16.05 | | 150.0 | |
| 10548-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | X | 5.75 | 67.47 | 16.43 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.84 | 67.61 | 16.49 | | 150.0 | |
| | | Z | 5.78 | 67.52 | 16.42 | | 150.0 | |
| 10550-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle) | X | 5.50 | 66.68 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.55 | 66.69 | 16.07 | | 150.0 | |
| | | Z | 5.53 | 66.68 | 16.05 | | 150.0 | |
| 10551-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle) | X | 5.50 | 66.70 | 16.05 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.56 | 66.74 | 16.06 | | 150.0 | |
| | | Z | 5.53 | 66.73 | 16.04 | | 150.0 | |
| 10552-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle) | X | 5.43 | 66.53 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.47 | 66.54 | 15.97 | | 150.0 | |
| | | Z | 5.45 | 66.54 | 15.95 | | 150.0 | |
| 10553-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 5.50 | 66.55 | 16.01 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.56 | 66.59 | 16.02 | | 150.0 | |
| | | Z | 5.53 | 66.58 | 16.00 | | 150.0 | |
| 10554-AAA | IEEE 1602.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | X | 5.83 | 66.82 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.86 | 66.84 | 16.08 | | 150.0 | |
| | | Z | 5.85 | 66.83 | 16.06 | | 150.0 | |
| 10555-AAA | IEEE 1602.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.95 | 67.09 | 16.20 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.99 | 67.13 | 16.20 | | 150.0 | |
| | | Z | 5.97 | 67.11 | 16.18 | | 150.0 | |
| 10556-AAA | IEEE 1602.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 5.97 | 67.15 | 16.22 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.01 | 67.18 | 16.22 | | 150.0 | |
| | | Z | 5.99 | 67.16 | 16.20 | | 150.0 | |
| 10557-AAA | IEEE 1602.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.93 | 67.04 | 16.18 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.98 | 67.10 | 16.20 | | 150.0 | |
| | | Z | 5.95 | 67.07 | 16.17 | | 150.0 | |



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|-----------|---|---|------|-------|-------|------|-------|---------|
| 10558-AAA | IEEE 1602.11ac WiFi (160MHz, MCS4, 99pc duty cycle) | X | 5.98 | 67.19 | 16.27 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.03 | 67.25 | 16.30 | | 150.0 | |
| | | Z | 6.00 | 67.22 | 16.26 | | 150.0 | |
| 10560-AAA | IEEE 1602.11ac WiFi (160MHz, MCS6, 99pc duty cycle) | X | 5.97 | 67.05 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.03 | 67.11 | 16.26 | | 150.0 | |
| | | Z | 6.00 | 67.09 | 16.23 | | 150.0 | |
| 10561-AAA | IEEE 1602.11ac WiFi (160MHz, MCS7, 99pc duty cycle) | X | 5.90 | 67.03 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 5.95 | 67.07 | 16.28 | | 150.0 | |
| | | Z | 5.92 | 67.05 | 16.25 | | 150.0 | |
| 10562-AAA | IEEE 1602.11ac WiFi (160MHz, MCS8, 99pc duty cycle) | X | 6.00 | 67.34 | 16.42 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.07 | 67.46 | 16.47 | | 150.0 | |
| | | Z | 6.03 | 67.39 | 16.42 | | 150.0 | |
| 10563-AAA | IEEE 1602.11ac WiFi (160MHz, MCS9, 99pc duty cycle) | X | 6.12 | 67.33 | 16.37 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 6.33 | 67.84 | 16.62 | | 150.0 | |
| | | Z | 6.22 | 67.58 | 16.47 | | 150.0 | |
| 10564-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle) | X | 4.82 | 66.72 | 16.26 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.88 | 66.71 | 16.29 | | 150.0 | |
| | | Z | 4.85 | 66.70 | 16.25 | | 150.0 | |
| 10565-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | X | 5.04 | 67.16 | 16.59 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 5.12 | 67.16 | 16.62 | | 150.0 | |
| | | Z | 5.08 | 67.16 | 16.58 | | 150.0 | |
| 10566-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | X | 4.87 | 66.99 | 16.39 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.95 | 67.00 | 16.43 | | 150.0 | |
| | | Z | 4.91 | 66.99 | 16.38 | | 150.0 | |
| 10567-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | X | 4.91 | 67.40 | 16.77 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.98 | 67.39 | 16.78 | | 150.0 | |
| | | Z | 4.95 | 67.42 | 16.77 | | 150.0 | |
| 10568-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | X | 4.78 | 66.73 | 16.14 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.86 | 66.77 | 16.20 | | 150.0 | |
| | | Z | 4.82 | 66.72 | 16.12 | | 150.0 | |
| 10569-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | X | 4.87 | 67.52 | 16.84 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.92 | 67.45 | 16.82 | | 150.0 | |
| | | Z | 4.90 | 67.50 | 16.82 | | 150.0 | |
| 10570-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | X | 4.90 | 67.36 | 16.78 | 0.46 | 150.0 | ± 9.6 % |
| | | Y | 4.97 | 67.31 | 16.76 | | 150.0 | |
| | | Z | 4.94 | 67.35 | 16.75 | | 150.0 | |
| 10571-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 1.15 | 63.68 | 14.91 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.16 | 63.96 | 15.15 | | 130.0 | |
| | | Z | 1.16 | 63.74 | 14.90 | | 130.0 | |
| 10572-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 1.16 | 64.17 | 15.22 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.18 | 64.46 | 15.46 | | 130.0 | |
| | | Z | 1.17 | 64.22 | 15.21 | | 130.0 | |
| 10573-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 1.12 | 74.63 | 18.77 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.36 | 77.97 | 20.13 | | 130.0 | |
| | | Z | 1.14 | 74.59 | 18.64 | | 130.0 | |
| 10574-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 1.20 | 68.65 | 17.56 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 1.24 | 69.24 | 17.90 | | 130.0 | |
| | | Z | 1.22 | 68.76 | 17.56 | | 130.0 | |



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|-----------|---|---|------|-------|-------|------|-------|---------|
| 10575-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) | X | 4.59 | 66.43 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.66 | 66.45 | 16.30 | | 130.0 | |
| | | Z | 4.63 | 66.42 | 16.22 | | 130.0 | |
| 10576-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle) | X | 4.62 | 66.61 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.68 | 66.61 | 16.36 | | 130.0 | |
| | | Z | 4.65 | 66.59 | 16.29 | | 130.0 | |
| 10577-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | X | 4.81 | 66.89 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.89 | 66.92 | 16.54 | | 130.0 | |
| | | Z | 4.85 | 66.89 | 16.47 | | 130.0 | |
| 10578-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | X | 4.71 | 67.05 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.79 | 67.06 | 16.63 | | 130.0 | |
| | | Z | 4.75 | 67.05 | 16.58 | | 130.0 | |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | X | 4.46 | 66.25 | 15.84 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.55 | 66.36 | 15.95 | | 130.0 | |
| | | Z | 4.50 | 66.26 | 15.83 | | 130.0 | |
| 10580-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | X | 4.51 | 66.30 | 15.86 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.60 | 66.39 | 15.97 | | 130.0 | |
| | | Z | 4.55 | 66.30 | 15.85 | | 130.0 | |
| 10581-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | X | 4.60 | 67.07 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.68 | 67.08 | 16.55 | | 130.0 | |
| | | Z | 4.64 | 67.07 | 16.50 | | 130.0 | |
| 10582-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | X | 4.40 | 66.00 | 15.61 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.50 | 66.13 | 15.74 | | 130.0 | |
| | | Z | 4.45 | 66.01 | 15.61 | | 130.0 | |
| 10583-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | X | 4.59 | 66.43 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.66 | 66.45 | 16.30 | | 130.0 | |
| | | Z | 4.63 | 66.42 | 16.22 | | 130.0 | |
| 10584-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.62 | 66.61 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.68 | 66.61 | 16.36 | | 130.0 | |
| | | Z | 4.65 | 66.59 | 16.29 | | 130.0 | |
| 10585-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | X | 4.81 | 66.89 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.89 | 66.92 | 16.54 | | 130.0 | |
| | | Z | 4.85 | 66.89 | 16.47 | | 130.0 | |
| 10586-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.71 | 67.05 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.79 | 67.06 | 16.63 | | 130.0 | |
| | | Z | 4.75 | 67.05 | 16.58 | | 130.0 | |
| 10587-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.46 | 66.25 | 15.84 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.55 | 66.36 | 15.95 | | 130.0 | |
| | | Z | 4.50 | 66.26 | 15.83 | | 130.0 | |
| 10588-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.51 | 66.30 | 15.86 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.60 | 66.39 | 15.97 | | 130.0 | |
| | | Z | 4.55 | 66.30 | 15.85 | | 130.0 | |
| 10589-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | X | 4.60 | 67.07 | 16.52 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.68 | 67.08 | 16.55 | | 130.0 | |
| | | Z | 4.64 | 67.07 | 16.50 | | 130.0 | |
| 10590-AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.40 | 66.00 | 15.61 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.50 | 66.13 | 15.74 | | 130.0 | |
| | | Z | 4.45 | 66.01 | 15.61 | | 130.0 | |



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|-----------|---|---|------|-------|-------|------|-------|---------|
| 10591-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.75 | 66.52 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.81 | 66.52 | 16.40 | | 130.0 | |
| | | Z | 4.78 | 66.51 | 16.34 | | 130.0 | |
| 10592-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 4.89 | 66.84 | 16.48 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.97 | 66.86 | 16.53 | | 130.0 | |
| | | Z | 4.93 | 66.84 | 16.47 | | 130.0 | |
| 10593-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.81 | 66.73 | 16.35 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.89 | 66.77 | 16.41 | | 130.0 | |
| | | Z | 4.85 | 66.73 | 16.34 | | 130.0 | |
| 10594-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.86 | 66.91 | 16.51 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.94 | 66.93 | 16.56 | | 130.0 | |
| | | Z | 4.90 | 66.91 | 16.50 | | 130.0 | |
| 10595-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.83 | 66.85 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.91 | 66.88 | 16.46 | | 130.0 | |
| | | Z | 4.87 | 66.85 | 16.39 | | 130.0 | |
| 10596-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.76 | 66.83 | 16.40 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.85 | 66.87 | 16.46 | | 130.0 | |
| | | Z | 4.80 | 66.83 | 16.38 | | 130.0 | |
| 10597-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.71 | 66.72 | 16.27 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.79 | 66.78 | 16.35 | | 130.0 | |
| | | Z | 4.75 | 66.73 | 16.26 | | 130.0 | |
| 10598-AAA | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.70 | 66.97 | 16.55 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.78 | 67.01 | 16.60 | | 130.0 | |
| | | Z | 4.74 | 66.98 | 16.54 | | 130.0 | |
| 10599-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.41 | 67.02 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.48 | 67.08 | 16.61 | | 130.0 | |
| | | Z | 5.45 | 67.06 | 16.56 | | 130.0 | |
| 10600-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.53 | 67.40 | 16.73 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.61 | 67.47 | 16.78 | | 130.0 | |
| | | Z | 5.56 | 67.40 | 16.70 | | 130.0 | |
| 10601-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | X | 5.43 | 67.18 | 16.64 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.50 | 67.24 | 16.68 | | 130.0 | |
| | | Z | 5.46 | 67.19 | 16.61 | | 130.0 | |
| 10602-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 5.54 | 67.27 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.59 | 67.24 | 16.60 | | 130.0 | |
| | | Z | 5.55 | 67.21 | 16.54 | | 130.0 | |
| 10603-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.60 | 67.54 | 16.87 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.68 | 67.57 | 16.90 | | 130.0 | |
| | | Z | 5.63 | 67.52 | 16.83 | | 130.0 | |
| 10604-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.46 | 67.15 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.48 | 67.04 | 16.62 | | 130.0 | |
| | | Z | 5.46 | 67.05 | 16.58 | | 130.0 | |
| 10605-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.53 | 67.33 | 16.74 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.59 | 67.35 | 16.77 | | 130.0 | |
| | | Z | 5.55 | 67.31 | 16.70 | | 130.0 | |
| 10606-AAA | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.26 | 66.63 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.35 | 66.76 | 16.34 | | 130.0 | |
| | | Z | 5.30 | 66.67 | 16.24 | | 130.0 | |



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|-----------|---|---|------|-------|-------|------|-------|---------|
| 10607-AAA | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | X | 4.58 | 65.82 | 15.97 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.64 | 65.82 | 16.01 | | 130.0 | |
| | | Z | 4.61 | 65.80 | 15.95 | | 130.0 | |
| 10608-AAA | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.75 | 66.20 | 16.13 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.83 | 66.22 | 16.18 | | 130.0 | |
| | | Z | 4.79 | 66.19 | 16.11 | | 130.0 | |
| 10609-AAA | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | X | 4.64 | 66.03 | 15.95 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.72 | 66.07 | 16.02 | | 130.0 | |
| | | Z | 4.68 | 66.02 | 15.94 | | 130.0 | |
| 10610-AAA | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | X | 4.69 | 66.20 | 16.12 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.77 | 66.23 | 16.17 | | 130.0 | |
| | | Z | 4.73 | 66.19 | 16.11 | | 130.0 | |
| 10611-AAA | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 4.61 | 65.99 | 15.96 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.69 | 66.03 | 16.02 | | 130.0 | |
| | | Z | 4.64 | 65.99 | 15.95 | | 130.0 | |
| 10612-AAA | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle) | X | 4.61 | 66.12 | 16.00 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.70 | 66.18 | 16.06 | | 130.0 | |
| | | Z | 4.65 | 66.12 | 15.98 | | 130.0 | |
| 10613-AAA | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | X | 4.61 | 65.99 | 15.87 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.70 | 66.08 | 15.96 | | 130.0 | |
| | | Z | 4.65 | 66.00 | 15.86 | | 130.0 | |
| 10614-AAA | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle) | X | 4.56 | 66.21 | 16.12 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.64 | 66.25 | 16.18 | | 130.0 | |
| | | Z | 4.60 | 66.21 | 16.11 | | 130.0 | |
| 10615-AAA | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.60 | 65.81 | 15.72 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 4.69 | 65.87 | 15.81 | | 130.0 | |
| | | Z | 4.64 | 65.79 | 15.71 | | 130.0 | |
| 10616-AAA | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle) | X | 5.23 | 66.28 | 16.18 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.29 | 66.33 | 16.22 | | 130.0 | |
| | | Z | 5.26 | 66.29 | 16.17 | | 130.0 | |
| 10617-AAA | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.29 | 66.46 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.36 | 66.48 | 16.27 | | 130.0 | |
| | | Z | 5.32 | 66.45 | 16.21 | | 130.0 | |
| 10618-AAA | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.18 | 66.47 | 16.26 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.24 | 66.50 | 16.29 | | 130.0 | |
| | | Z | 5.21 | 66.46 | 16.24 | | 130.0 | |
| 10619-AAA | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.19 | 66.25 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.26 | 66.32 | 16.14 | | 130.0 | |
| | | Z | 5.22 | 66.26 | 16.07 | | 130.0 | |
| 10620-AAA | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.28 | 66.29 | 16.16 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.36 | 66.37 | 16.22 | | 130.0 | |
| | | Z | 5.31 | 66.31 | 16.14 | | 130.0 | |
| 10621-AAA | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | X | 5.29 | 66.47 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.35 | 66.48 | 16.39 | | 130.0 | |
| | | Z | 5.32 | 66.47 | 16.35 | | 130.0 | |
| 10622-AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | X | 5.30 | 66.62 | 16.44 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.36 | 66.63 | 16.45 | | 130.0 | |
| | | Z | 5.33 | 66.61 | 16.41 | | 130.0 | |



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| | | | | | | | | |
|-----------|---|---|------|-------|-------|------|-------|---------|
| 10623-AAA | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle) | X | 5.18 | 66.12 | 16.05 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.24 | 66.18 | 16.11 | | 130.0 | |
| | | Z | 5.21 | 66.13 | 16.03 | | 130.0 | |
| 10624-AAA | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle) | X | 5.37 | 66.33 | 16.23 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.43 | 66.38 | 16.27 | | 130.0 | |
| | | Z | 5.40 | 66.34 | 16.21 | | 130.0 | |
| 10625-AAA | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc duty cycle) | X | 5.66 | 67.10 | 16.66 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.80 | 67.35 | 16.80 | | 130.0 | |
| | | Z | 5.73 | 67.22 | 16.70 | | 130.0 | |
| 10626-AAA | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle) | X | 5.54 | 66.36 | 16.15 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.58 | 66.40 | 16.18 | | 130.0 | |
| | | Z | 5.56 | 66.37 | 16.13 | | 130.0 | |
| 10627-AAA | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle) | X | 5.76 | 66.90 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.82 | 66.93 | 16.41 | | 130.0 | |
| | | Z | 5.78 | 66.89 | 16.35 | | 130.0 | |
| 10628-AAA | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle) | X | 5.55 | 66.39 | 16.06 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.62 | 66.51 | 16.13 | | 130.0 | |
| | | Z | 5.58 | 66.43 | 16.05 | | 130.0 | |
| 10629-AAA | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle) | X | 5.63 | 66.46 | 16.09 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.71 | 66.59 | 16.17 | | 130.0 | |
| | | Z | 5.65 | 66.47 | 16.07 | | 130.0 | |
| 10630-AAA | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle) | X | 5.98 | 67.71 | 16.72 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.12 | 68.01 | 16.88 | | 130.0 | |
| | | Z | 6.03 | 67.80 | 16.73 | | 130.0 | |
| 10631-AAA | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle) | X | 5.93 | 67.68 | 16.90 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.03 | 67.84 | 16.98 | | 130.0 | |
| | | Z | 5.98 | 67.75 | 16.91 | | 130.0 | |
| 10632-AAA | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle) | X | 5.74 | 67.01 | 16.58 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.79 | 67.00 | 16.58 | | 130.0 | |
| | | Z | 5.76 | 66.99 | 16.55 | | 130.0 | |
| 10633-AAA | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle) | X | 5.62 | 66.59 | 16.20 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.68 | 66.67 | 16.24 | | 130.0 | |
| | | Z | 5.65 | 66.62 | 16.18 | | 130.0 | |
| 10634-AAA | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle) | X | 5.60 | 66.63 | 16.28 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.67 | 66.70 | 16.32 | | 130.0 | |
| | | Z | 5.64 | 66.66 | 16.27 | | 130.0 | |
| 10635-AAA | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle) | X | 5.47 | 65.91 | 15.63 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.56 | 66.05 | 15.73 | | 130.0 | |
| | | Z | 5.51 | 65.94 | 15.62 | | 130.0 | |
| 10636-AAA | IEEE 1602.11ac WiFi (160MHz, MCS0, 90pc duty cycle) | X | 5.95 | 66.72 | 16.24 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 5.99 | 66.78 | 16.28 | | 130.0 | |
| | | Z | 5.97 | 66.73 | 16.22 | | 130.0 | |
| 10637-AAA | IEEE 1602.11ac WiFi (160MHz, MCS1, 90pc duty cycle) | X | 6.10 | 67.09 | 16.41 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.14 | 67.14 | 16.44 | | 130.0 | |
| | | Z | 6.11 | 67.09 | 16.38 | | 130.0 | |
| 10638-AAA | IEEE 1602.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.10 | 67.06 | 16.37 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.15 | 67.12 | 16.41 | | 130.0 | |
| | | Z | 6.12 | 67.07 | 16.35 | | 130.0 | |



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|-----------|--|---|-------|--------|-------|------|-------|---------|
| 10639-AAA | IEEE 1602.11ac WiFi (160MHz, MCS3, 90pc duty cycle) | X | 6.07 | 67.01 | 16.39 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.13 | 67.09 | 16.44 | | 130.0 | |
| | | Z | 6.10 | 67.03 | 16.38 | | 130.0 | |
| 10640-AAA | IEEE 1602.11ac WiFi (160MHz, MCS4, 90pc duty cycle) | X | 6.07 | 66.99 | 16.32 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.14 | 67.11 | 16.39 | | 130.0 | |
| | | Z | 6.09 | 67.02 | 16.31 | | 130.0 | |
| 10641-AAA | IEEE 1602.11ac WiFi (160MHz, MCS5, 90pc duty cycle) | X | 6.13 | 66.94 | 16.31 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.17 | 66.99 | 16.35 | | 130.0 | |
| | | Z | 6.14 | 66.93 | 16.28 | | 130.0 | |
| 10642-AAA | IEEE 1602.11ac WiFi (160MHz, MCS6, 90pc duty cycle) | X | 6.17 | 67.20 | 16.62 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.22 | 67.26 | 16.65 | | 130.0 | |
| | | Z | 6.19 | 67.22 | 16.61 | | 130.0 | |
| 10643-AAA | IEEE 1602.11ac WiFi (160MHz, MCS7, 90pc duty cycle) | X | 6.00 | 66.86 | 16.34 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.05 | 66.94 | 16.39 | | 130.0 | |
| | | Z | 6.02 | 66.87 | 16.31 | | 130.0 | |
| 10644-AAA | IEEE 1602.11ac WiFi (160MHz, MCS8, 90pc duty cycle) | X | 6.13 | 67.25 | 16.56 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.22 | 67.46 | 16.67 | | 130.0 | |
| | | Z | 6.17 | 67.33 | 16.57 | | 130.0 | |
| 10645-AAA | IEEE 1602.11ac WiFi (160MHz, MCS9, 90pc duty cycle) | X | 6.30 | 67.39 | 16.59 | 0.46 | 130.0 | ± 9.6 % |
| | | Y | 6.61 | 68.18 | 16.99 | | 130.0 | |
| | | Z | 6.44 | 67.75 | 16.73 | | 130.0 | |
| 10646-AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7) | X | 11.76 | 96.35 | 31.88 | 9.30 | 60.0 | ± 9.6 % |
| | | Y | 19.05 | 107.46 | 35.85 | | 60.0 | |
| | | Z | 11.88 | 94.80 | 30.95 | | 60.0 | |
| 10647-AAB | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | X | 10.62 | 94.79 | 31.49 | 9.30 | 60.0 | ± 9.6 % |
| | | Y | 16.98 | 105.61 | 35.43 | | 60.0 | |
| | | Z | 10.96 | 93.72 | 30.71 | | 60.0 | |
| 10648-AAA | CDMA2000 (1x Advanced) | X | 0.66 | 63.03 | 10.35 | 0.00 | 150.0 | ± 9.6 % |
| | | Y | 0.70 | 63.32 | 10.86 | | 150.0 | |
| | | Z | 0.69 | 63.19 | 10.65 | | 150.0 | |

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



ANNEX B

DIPOLE CALIBRATION REPORTS



Product Service

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



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

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 **TüV SÜD UK**Certificate No: **D2450V2-715_Dec16**

CALIBRATION CERTIFICATE

Object **D2450V2 - SN:715**

Calibration procedure(s) **QA CAL-05.v9**
 Calibration procedure for dipole validation kits above 700 MHz

Calibration date: **December 09, 2016**


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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|-----------------------------|--------------------|-----------------------------------|------------------------|
| Power meter NRP | SN: 104778 | 06-Apr-16 (No. 217-02288/02289) | Apr-17 |
| Power sensor NRP-Z91 | SN: 103244 | 06-Apr-16 (No. 217-02288) | Apr-17 |
| Power sensor NRP-Z91 | SN: 103245 | 06-Apr-16 (No. 217-02289) | Apr-17 |
| Reference 20 dB Attenuator | SN: 5058 (20k) | 05-Apr-16 (No. 217-02292) | Apr-17 |
| Type-N mismatch combination | SN: 5047.2 / 06327 | 05-Apr-16 (No. 217-02295) | Apr-17 |
| Reference Probe EX3DV4 | SN: 7349 | 15-Jun-16 (No. EX3-7349_Jun16) | Jun-17 |
| DAE4 | SN: 601 | 30-Dec-15 (No. DAE4-601_Dec15) | Dec-16 |
| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
| Power meter EPM-442A | SN: GB37480704 | 07-Oct-15 (in house check Oct-16) | In house check: Oct-18 |
| Power sensor HP 8481A | SN: US37292783 | 07-Oct-15 (in house check Oct-16) | In house check: Oct-18 |
| Power sensor HP 8481A | SN: MY41092317 | 07-Oct-15 (in house check Oct-16) | In house check: Oct-18 |
| RF generator R&S SMT-06 | SN: 100972 | 15-Jun-15 (in house check Oct-16) | In house check: Oct-18 |
| Network Analyzer HP 8753E | SN: US37390585 | 18-Oct-01 (in house check Oct-16) | In house check: Oct-17 |

Calibrated by: **Johannes Kurikka** **Laboratory Technician** 

Approved by: **Katja Pokovic** **Technical Manager** 

Issued: December 13, 2016

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

Certificate No: D2450V2-715_Dec16

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Product Service

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



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

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****Glossary:**

| | |
|-------|---------------------------------|
| TSL | tissue simulating liquid |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A | not applicable or not measured |

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, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- 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"

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

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%.