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| 10168-<br>CAE                           | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)   | X | 3.80 | 72,47 | 19.91 | 3.01            | 150.0 | ± 9.6 % |
|---|--|---|------|-------|-------|-----------------|-------|---------|
|   |  | Y | 3.97 | 73.52 | 20.42 |                 | 150.0 |         |
|   |  | Z | 3.59 | 72.78 | 20.23 |                 | 150.0 |         |
| 10169-<br>CAD                           | LTE-FDD (SC-FDMA, 1 RB, 20 MHz,<br>QPSK)   | Х | 2.40 | 66.10 | 17.40 | 3.01            | 150.0 | ± 9.6 % |
|   |  | Y | 2.46 | 66.60 | 17.71 |                 | 150.0 |         |
|   |  | Z | 2.33 | 66.05 | 17.51 |                 | 150.0 |         |
| 10170-<br>CAD                           | LTE-FDD (SC-FDMA, 1 RB, 20 MHz,<br>16-QAM)   | X | 2.86 | 70.22 | 19.21 | 3.01            | 150.0 | ± 9.6 % |
|   |  | Y | 3.07 | 71.47 | 19.80 |                 | 150.0 |         |
|   |  | Z | 2.76 | 70.55 | 19.53 |                 | 150.0 |         |
| 10171-<br>AAD                           | LTE-FDD (SC-FDMA, 1 RB, 20 MHz,<br>64-QAM)   | X | 2.43 | 67.02 | 16.67 | 3.01            | 150.0 | ± 9.6 % |
| Craff ra                                |  | Y | 2.55 | 67.67 | 16.96 |                 | 150.0 |         |
|   |  | Z | 2.33 | 67.12 | 16.84 |                 | 150.0 |         |
| 10172-<br>CAD                           | LTE-TDD (SC-FDMA, 1 RB, 20 MHz,<br>QPSK)   | Х | 3.22 | 76.35 | 23.22 | 6.02            | 65.0  | ± 9.6 % |
| No.                                     | 200 State Control of the Control of  | Y | 2.88 | 74.18 | 22.38 |                 | 65.0  |         |
|   |  | Z | 2.74 | 74.43 | 22.80 |                 | 65.0  |         |
| 10173-<br>CAD                           | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)  | X | 4.36 | 80.46 | 22.94 | 6.02            | 65.0  | ± 9.6 % |
|   |  | Y | 4.63 | 81.45 | 23.36 |                 | 65.0  |         |
|   |  | Z | 3.93 | 80.61 | 23.43 |                 | 65.0  |         |
| 10174-<br>CAD                           | LTE-TDD (SC-FDMA, 1 RB, 20 MHz,<br>64-QAM)   | X | 3.95 | 78.13 | 21.47 | 6.02            | 65.0  | ± 9.6 % |
| T CONTRACTOR                            | - somowest   | Y | 3.58 | 76.48 | 20.90 |                 | 65.0  |         |
|   |  | Z | 3.41 | 77.60 | 21,68 |                 | 65.0  |         |
|   | LTE-FDD (SC-FDMA, 1 RB, 10 MHz,<br>QPSK)   | X | 2.38 | 65.87 | 17.19 | 3.01            | 150.0 | ± 9.6 % |
|   | 110000000000000000000000000000000000000  | Y | 2.43 | 66.33 | 17.47 |                 | 150.0 |         |
|   |  | Z | 2.30 | 65.82 | 17.28 |                 | 150.0 |         |
| 10176-<br>CAE                           | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)  | X | 2.86 | 70.24 | 19.22 | 3.01            | 150.0 | ± 9.6 % |
|   | V-50001000   | Y | 3.08 | 71.50 | 19.81 |                 | 150.0 |         |
|   |  | Z | 2.76 | 70.57 | 19.54 |                 | 150.0 |         |
| 10177-<br>CAG                           | LTE-FDD (SC-FDMA, 1 RB, 5 MHz,<br>QPSK)  | X | 2.39 | 65.97 | 17.26 | 3.01            | 150.0 | ± 9.6 % |
| TNO-CONT.                               |  | Y | 2.45 | 66.44 | 17.54 |                 | 150.0 |         |
|   |  | Z | 2.32 | 65.91 | 17.35 |                 | 150.0 |         |
| 10178-<br>CAE                           | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-<br>QAM)   | X | 2.85 | 70.12 | 19.14 | 3.01            | 150.0 | ±9.6 %  |
| *************************************** |  | Y | 3.06 | 71.36 | 19.72 |                 | 150.0 |         |
|   |  | Ż | 2.75 | 70.47 | 19.48 |                 | 150.0 |         |
| 10179-<br>CAE                           | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)  | X | 2.62 | 68.53 | 17.82 | 3.01            | 150.0 | ± 9.6 % |
|   |  | Y | 2.78 | 69.42 | 18.23 |                 | 150.0 |         |
| CONTRACT.                               |  | Z | 2.52 | 68.74 | 18.07 | 118-72          | 150.0 |         |
| 10180-<br>CAE                           | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-<br>QAM)   | X | 2.43 | 66.99 | 16.64 | 3.01            | 150.0 | ±9.6 %  |
|   |  | Y | 2.55 | 67.64 | 16.93 |                 | 150.0 |         |
| Mark 2000                               |  | Z | 2.33 | 67.10 | 16.82 |                 | 150.0 |         |
| 10181-<br>CAD                           | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)  | X | 2.39 | 65.96 | 17.25 | 3.01            | 150.0 | ± 9.6 % |
|   |  | Υ | 2.44 | 66.43 | 17.54 | 0               | 150.0 |         |
|   | A CONTRACTOR OF THE PROPERTY O | Z | 2.31 | 65.90 | 17.34 | - www.          | 150.0 |         |
| 10182-<br>CAD                           | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)  | X | 2.84 | 70.10 | 19.13 | 3.01            | 150.0 | ± 9.6 % |
|   |  | Y | 3.05 | 71.33 | 19.71 |                 | 150.0 |         |
| Octobros -                              |  | Z | 2.75 | 70.45 | 19.47 | and the same of | 150.0 | -       |
| 10183-<br>AAC                           | LTE-FDD (SC-FDMA, 1 RB, 15 MHz,<br>64-QAM)   | X | 2.43 | 66.97 | 16.63 | 3.01            | 150.0 | ± 9.6 % |
| AAC                                     |  | W | 2.55 | 07.00 | 10.00 |                 | 150.0 |         |
|   |  | Y | 2.55 | 67.62 | 16.92 |                 | 150.0 |         |

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| 10184-<br>CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz,<br>QPSK)          | X     | 2.39   | 65.99          | 17.27  | 3.01 | 150.0                                   | ± 9.6 % |
|---------------|--|-------|--|----------------|--|------|---|---------|
|               |  | Y     | 2.45   | 66.47          | 17.56  |      | 150.0                                   |         |
|               |  | Z     | 2.32   | 65.93          | 17.36  |      | 150.0                                   |         |
| 10185-<br>CAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-<br>QAM)       | X     | 2.85   | 70.16          | 19.17  | 3.01 | 150.0                                   | ± 9.6 % |
|               |  | Y     | 3.07   | 71.40          | 19.75  |      | 150.0                                   |         |
|               |  | Z     | 2.76   | 70.51          | 19.50  |      | 150.0                                   |         |
| 10186-        | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-               | X     | 2.44   | 67.02          | 16.66  | 3.01 | 150.0                                   | ±9.6 %  |
| AAD           | QAM)   | 72000 | 2000   | 2011/16/25     | 100000000000000000000000000000000000000  | 5.01 | 100000000000000000000000000000000000000 | I 5.0 % |
|               |  | Y     | 2,56   | 67.67          | 16.95  |      | 150.0                                   |         |
|               |  | Z     | 2.33   | 67.13          | 16.84  |      | 150.0                                   |         |
| 10187-<br>CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)           | X     | 2.40   | 66.06          | 17.35  | 3.01 | 150.0                                   | ±9.6 %  |
|               |  | Y     | 2.46   | 66.54          | 17.64  |      | 150.0                                   |         |
|               |  | Z     | 2.33   | 66.01          | 17.45  |      | 150.0                                   | - 116   |
| 10188-<br>CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)         | X     | 2.92   | 70.63          | 19.48  | 3.01 | 150.0                                   | ± 9.6 % |
| Orto          | 10 strain)                                       | Y     | 3.15   | 71.97          | 20.11  |      | 150.0                                   | 7       |
|               |  | Z     | 2.82   | 70.99          | - Contract C |      | The second section is a second second   |         |
| 10100         | LTE EDD (CO EDMA 4 DD 4 4 M                      |       | i accomitant programme in the company of the compan |                | 19.83  | 2.04 | 150.0                                   | 1000    |
| 10189-<br>AAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)         | ×     | 2.48   | 67.32          | 16.90  | 3.01 | 150.0                                   | ± 9.6 % |
|               |  | Y     | 2.60   | 68.01          | 17.21  |      | 150.0                                   |         |
|               |  | Z     | 2.37   | 67.44          | 17.08  |      | 150.0                                   |         |
| 10193-<br>CAC | IEEE 802.11n (HT Greenfield, 6.5 Mbps,<br>BPSK)  | X     | 4.36   | 66.79          | 16.12  | 0.00 | 150.0                                   | ± 9.6 % |
|               |  | Y     | 4.24   | 66.43          | 15.86  |      | 150.0                                   |         |
|               |  | Z     | 4.25   | 66.88          | 16.06  |      | 150.0                                   |         |
| 10194-<br>CAC | IEEE 802.11n (HT Greenfield, 39 Mbps,<br>16-QAM) | X     | 4.50   | 67.02          | 16.25  | 0.00 | 150.0                                   | ± 9.6 % |
| ONO           | 10 spring  | Y     | 4.38   | 66.66          | 16.00  |      | 150.0                                   |         |
|               |  | Z     | 4.38   | 67.06          | 16.19  |      | 150.0                                   |         |
| 10195-        | IEEE 802.11n (HT Greenfield, 65 Mbps.            | X     | 4.53   | 67.04          |  | 0.00 |   | 1000    |
| CAC           | 64-QAM)  | 50%   | 10,000,00  | C593/460_      | 16.27  | 0.00 | 150.0                                   | ±9.6 %  |
|               |  | Y     | 4.41   | 66.68          | 16.02  |      | 150.0                                   |         |
|               |  | Z     | 4.40   | 67.05          | 16.19  |      | 150.0                                   |         |
| 10196-<br>CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps,<br>BPSK)       | X     | 4.34   | 66.79          | 16.11  | 0.00 | 150.0                                   | ± 9.6 % |
|               |  | Y     | 4.22   | 66.42          | 15.84  |      | 150.0                                   | 0       |
|               |  | Z     | 4.23   | 66.84          | 16.03  |      | 150.0                                   |         |
| 10197-<br>CAC | IEEE 802.11n (HT Mixed, 39 Mbps, 16-<br>QAM)     | X     | 4.51   | 67.03          | 16.26  | 0.00 | 150.0                                   | ± 9.6 % |
| ONO           | GD 1111)   | Y     | 4.38   | 66.66          | 16.01  |      | 150.0                                   |         |
|               |  | Z     | 4.38   |                |  |      |   |         |
| 10198-        | IEEE 802.11n (HT Mixed, 65 Mbps, 64-             | X     | 4.53   | 67.05<br>67.04 | 16.19<br>16.27   | 0.00 | 150.0<br>150.0                          | ± 9.6 % |
| CAC           | QAM)   | V     | 4.40   | 00.07          | 10.00  |      | 450.0                                   |         |
|               |  | Y     | 4.40   | 66.67          | 16.02  |      | 150.0                                   |         |
| 10219-        | IEEE 802.11n (HT Mixed, 7.2 Mbps,                | X     | 4.39   | 67.04<br>66.83 | 16.19  | 0.00 | 150.0                                   | ± 9.6 % |
| CAC           | BPSK)  | - 123 | 771702   | 200 100        | 4.80   |      | 197.5                                   |         |
|               |  | Y     | 4.17   | 66.45          | 15.81  |      | 150.0                                   |         |
|               |  | Z     | 4.19   | 66.90          | 16.01  |      | 150.0                                   |         |
| 10220-<br>CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-<br>QAM)   | X     | 4.50   | 66.99          | 16.24  | 0.00 | 150.0                                   | ± 9.6 % |
| -777          |  | Y     | 4.38   | 66.63          | 16.00  |      | 150.0                                   |         |
|               |  | Z     | 4.37   | 67.02          | 16.18  |      | 150.0                                   | 7       |
| 10221-<br>CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-<br>QAM)   | Х     | 4.54   | 66.98          | 16.26  | 0.00 | 150.0                                   | ± 9.6 % |
|               |  | Y     | 4.42   | 66.63          | 16.01  |      | 150.0                                   |         |
|               |  | Z     | 4.41   | 67.00          | 16.19  |      | 150.0                                   |         |
| 10222-        | IEEE 802.11n (HT Mixed, 15 Mbps,                 | X     | 4.91   | 67.06          |  | 0.00 |   | +069/   |
| CAC           | BPSK)  | 10000 | I SCHOOL V   | 1112/111111    | 16.39  | 0.00 | 150.0                                   | ± 9.6 % |
|               |  | Y     | 4.81   | 66.75          | 16.20  |      | 150.0                                   |         |
|               |  | Z     | 4.81   | 67.01          | 16.35  |      | 150.0                                   |         |

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| CAC         QAM)           10225-<br>CAB         UMTS-F           10226-<br>CAA         LTE-TD           10227-<br>CAA         LTE-TD           CAA         QPSK)           10228-<br>CAB         LTE-TD           CAB         LTE-TD           10230-<br>CAB         LTE-TD           CAB         QAM)           10231-<br>CAD         LTE-TD           CAD         QAM)           10232-<br>CAD         LTE-TD           CAD         QAM)           10234-<br>CAD         LTE-TD           CAD         LTE-TD  | EE 802.11n (HT Mixed, 90 Mbps, 16-      | X | 5.18 | 67.25 | 16.50 | 0.00 | 150.0 | ± 9.6 %  |
|--|---|---|------|-------|-------|------|-------|----------|
| CAC QAM)  10225- CAB UMTS-F CAB  10226- CAA 16-QAM  10227- CAA 64-QAM  10228- CAA QPSK)  10229- CAB QAM)  10230- CAB QAM)  10231- CAB QAM)  10232- CAD QAM)  10233- CAD QAM)  10233- CAD QAM)  10234- CAD QAM)  10236- CAD LTE-TD CAD QAM)  10236- CAD LTE-TD CAD LTE-TD CAD QAM)  |   | Y | 5.07 | 66.94 | 16.31 |      | 150.0 |          |
| 10225- CAB  10225- CAB  10226- CAA  16-QAM  10227- CAA  10227- CAA  10228- CAA  10228- CAA  10229- CAB  10229- CAB  10230- CAB  10231- CAB  10231- CAB  10231- CAD  10232- CAD  10233- CAD  10233- CAD  10234- CAD  10234- CAD  10235- CAD  10236- CAD  10236- CAD  10237-  LTE-TDI CAD  10237- LTE-TDI CAD  10237 |   | Z | 5.03 | 67,10 | 16.40 |      | 150.0 |          |
| 10226- CAA 16-QAM  10227- CAA 64-QAM  10228- CAA QPSK)  10229- CAB QAM)  10230- CAB QAM)  10231- CAB QAM)  10231- CAD QAM)  10232- CAD QAM)  10233- CAD QAM)   | EE 802.11n (HT Mixed, 150 Mbps, 64-M)   | X | 4.95 | 67.17 | 16.38 | 0.00 | 150.0 | ± 9.6 %  |
| 10226- CAA 16-QAM  10227- CAA 64-QAM  10228- CAA QPSK)  10229- CAB QAM)  10230- CAB QAM)  10231- CAB QAM)  10231- CAD QAM)  10232- CAD QAM)  10233- CAD QAM)   |   | Y | 4.85 | 66.86 | 16.19 |      | 150.0 |          |
| 10226- CAA 16-QAM  10227- CAA 64-QAM  10228- CAA QPSK)  10229- CAB QAM)  10230- CAB QAM)  10231- CAB QAM)  10231- CAD QAM)  10232- CAD QAM)  10233- CAD QAM)   |   | Z | 4.85 | 67.15 | 16.34 |      | 150.0 |          |
| 10226- CAA 16-QAM  10227- CAA 64-QAM  10228- CAA QPSK)  10229- CAB QAM)  10230- CAB QAM)  10231- CAB QAM)  10231- CAD QAM)  10232- CAD QAM)  10233- CAD QAM)   | MTS-FDD (HSPA+)                         | X | 2.64 | 66.25 | 14.92 | 0.00 | 150.0 | 1000     |
| CAA 16-QAM  10227- CAA 64-QAM  10228- CAA QPSK)  10229- CAB QAM)  10230- CAB QAM)  10231- CAB QPSK)  10232- CAD QAM)  10233- CAD QAM)  10233- CAD QAM)  10233- CAD QAM)  10233- CAD QAM)  10234- CAD QAM)  10235- CAD QAM)  10236- CAD LTE-TD CAD  10236- CAD 16-QAM   | (HOPAT)                                 | - |      |       |       | 0.00 |       | ±9.6 %   |
| CAA 16-QAM  10227- LTE-TD CAA G4-QAM  10228- LTE-TD CAA QPSK)  10229- LTE-TD CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QAM)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QPSK)  10236- LTE-TD CAD 16-QAM  10236- LTE-TD CAD G4-QAM   |   | Y | 2.47 | 65.44 | 14.20 |      | 150.0 |          |
| CAA 16-QAM  10227- LTE-TD CAA 64-QAM  10228- LTE-TD CAA QPSK)  10229- LTE-TD CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QAM)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10236- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 16-QAM  | TOD (00 FD) (1 1 00 1 1 1 1 1           | Z | 2.51 | 66.11 | 14.44 |      | 150.0 |          |
| CAA 64-QAM  10228- LTE-TD CAA QPSK)  10229- LTE-TD CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QAM)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 16-QAM   | E-TDD (SC-FDMA, 1 RB, 1.4 MHz,<br>-QAM) | X | 4.57 | 81.37 | 23.38 | 6.02 | 65.0  | ± 9.6 %  |
| CAA 64-QAM  10228- LTE-TD CAA QPSK)  10229- LTE-TD CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QAM)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 16-QAM   |   | Y | 4.90 | 82.52 | 23.85 |      | 65.0  |          |
| CAA 64-QAM  10228- CAA QPSK)  10229- CAB QAM)  10230- CAB QAM)  10231- CAB QAM)  10231- CAD QAM)  10232- CAD QAM)  10233- CAD QAM)  10233- CAD QAM)  10234- CAD QAM)  10235- CAD LTE-TD CAD QAM)  10236- CAD LTE-TD CAD LTE-TD CAD LTE-TD CAD QAM)   |   | Z | 4.15 | 81.66 | 23.92 | -    | 65.0  |          |
| CAA QPSK)  10229- LTE-TD CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QAM)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 16-QAM   | E-TDD (SC-FDMA, 1 RB, 1.4 MHz, -QAM)    | X | 4.60 | 80.57 | 22.40 | 6.02 | 65.0  | ± 9.6 %  |
| CAA QPSK)  10229- LTE-TD CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QAM)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 16-QAM   |   | Y | 4.89 | 81.58 | 22.82 |      | 65.0  |          |
| CAA QPSK)  10229- LTE-TD CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QPSK)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10233- LTE-TD CAD QPSK)  10234- LTE-TD CAD L |   | Z | 4.14 | 80.85 | 22.92 |      | 65.0  |          |
| 10229- LTE-TDI CAB QAM)  10230- LTE-TDI CAB QAM)  10231- LTE-TDI CAB QPSK)  10232- LTE-TDI CAD QAM)  10233- LTE-TDI CAD QAM)  10234- LTE-TDI CAD QPSK)  10235- LTE-TDI CAD 16-QAM  10236- LTE-TDI CAD 64-QAM   | E-TDD (SC-FDMA, 1 RB, 1.4 MHz,          | X | 3.35 | 77.29 | 23.65 | 6.02 | 65.0  | ± 9.6 %  |
| CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QPSK)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QAM)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 16-QAM  |   | Y | 3.36 | 77.54 | 23.87 |      | 65.0  |          |
| CAB QAM)  10230- LTE-TD CAB QAM)  10231- LTE-TD CAB QPSK)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QAM)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 16-QAM  | 10.1 °                                  | Z | 2.92 | 75.79 | 23.43 |      | 65.0  |          |
| 10230- CAB QAM)  10231- CAB QPSK)  10232- CAD QAM)  10233- CAD QAM)  10233- CAD QAM)  10234- CAD QPSK)  10235- CAD 16-QAM  10236- CAD 64-QAM   | E-TDD (SC-FDMA, 1 RB, 3 MHz, 16-        | X | 4.39 | 80.55 | 22.98 | 6.02 | 65.0  | ± 9.6 %  |
| CAB QAM)  10231- LTE-TD QPSK)  10232- LTE-TD QAM)  10233- LTE-TD QAM)  10234- LTE-TD QPSK)  10235- LTE-TD QAM  10236- LTE-TD GAD 16-QAM  10236- LTE-TD GAD 64-QAM  | 3004/                                   | Y | 4.67 | 81.55 | 23.40 |      | 65.0  |          |
| CAB QAM)  10231- LTE-TD QPSK)  10232- LTE-TD QAM)  10233- LTE-TD QAM)  10234- LTE-TD QPSK)  10235- LTE-TD QAM  10236- LTE-TD GAD 16-QAM  10236- LTE-TD GAD 64-QAM  |   | Z | 3.96 | 80.71 | 23.47 |      | 65.0  |          |
| 10231- LTE-TD<br>CAB QPSK)  10232- LTE-TD<br>CAD QAM)  10233- LTE-TD<br>CAD QAM)  10234- LTE-TD<br>CAD QPSK)  10235- LTE-TD<br>CAD 16-QAM  10236- LTE-TD<br>CAD 64-QAM   | E-TDD (SC-FDMA, 1 RB, 3 MHz, 64-        | X | 4.37 | 79.68 | 21.99 | 6.02 | 65.0  | ± 9.6 %  |
| CAB QPSK)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QPSK)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 64-QAM  |   | Y | 4.61 | 80.55 | 22.37 |      | 65.0  |          |
| CAB QPSK)  10232- LTE-TD CAD QAM)  10233- LTE-TD CAD QPSK)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 64-QAM  |   | Z | 3.91 | 79.81 | 22.46 |      | 65.0  |          |
| 10232- LTE-TD<br>CAD QAM)  10233- LTE-TD<br>CAD QAM)  10234- LTE-TD<br>CAD QPSK)  10235- LTE-TD<br>CAD 16-QAM  10236- LTE-TD<br>CAD 64-QAM   | E-TDD (SC-FDMA, 1 RB, 3 MHz,            | X | 3.26 | 76.70 | 23.33 | 6.02 | 65.0  | ± 9.6 %  |
| CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 64-QAM  | 514                                     | Y | 3.26 | 76.88 | 23.51 |      | 65.0  |          |
| CAD QAM)  10233- LTE-TD CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 64-QAM  |   | Z | 2.84 | 75.20 | 23.10 |      | 65.0  |          |
| 10233- LTE-TD<br>CAD QAM)<br>10234- LTE-TD<br>CAD QPSK)<br>10235- LTE-TD<br>CAD 16-QAM<br>10236- LTE-TD<br>CAD 64-QAM  | E-TDD (SC-FDMA, 1 RB, 5 MHz, 16-        | X | 4.39 | 80.53 | 22.98 | 6.02 | 65.0  | ± 9.6 %  |
| CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 64-QAM  |   | Y | 4.66 | 81.53 | 23.40 |      | 65.0  |          |
| CAD QAM)  10234- LTE-TD CAD QPSK)  10235- LTE-TD CAD 16-QAM  10236- LTE-TD CAD 64-QAM  |   | Z | 3.96 | 80.69 | 23.47 |      | 65.0  |          |
| 10234- LTE-TD<br>CAD QPSK)<br>10235- LTE-TD<br>CAD 16-QAM<br>10236- LTE-TD<br>CAD 64-QAM   | E-TDD (SC-FDMA, 1 RB, 5 MHz, 64-        | X | 4.36 | 79.65 | 21.99 | 6.02 | 65.0  | ± 9.6 %  |
| CAD QPSK)  10235- LTE-TDI CAD 16-QAM  10236- LTE-TDI CAD 64-QAM  10237- LTE-TDI  |   | Y | 4.60 | 80.51 | 22.36 |      | 65.0  |          |
| CAD QPSK)  10235- LTE-TDI CAD 16-QAM  10236- LTE-TDI CAD 64-QAM  10237- LTE-TDI  |   | Z | 3.89 | 79.77 | 22.44 |      | 65.0  |          |
| 10235- LTE-TDI<br>CAD 16-QAM<br>10236- LTE-TDI<br>CAD 64-QAM<br>10237- LTE-TDI   | E-TDD (SC-FDMA, 1 RB, 5 MHz,            | X | 3.19 | 76.23 | 23.02 | 6.02 | 65.0  | ± 9.6 %  |
| 10236- LTE-TDI 64-QAM  |   | Y | 3.18 | 76.36 | 23.17 |      | 65.0  |          |
| 10236- LTE-TDI 64-QAM  |   | Z | 2.78 | 74.77 | 22.80 |      | 65.0  |          |
| 10236- LTE-TDI<br>CAD 64-QAM<br>10237- LTE-TDI   | E-TDD (SC-FDMA, 1 RB, 10 MHz,           | X | 4.38 | 80.55 | 22.98 | 6.02 | 65.0  | ± 9.6 %  |
| 10237- LTE-TD  | Sec. Mary                               | Y | 4.66 | 81.55 | 23.41 |      | 65.0  |          |
| 10237- LTE-TD  |   | Z | 3.96 | 80.70 | 23.48 |      | 65.0  |          |
| 10237- LTE-TD  | E-TDD (SC-FDMA, 1 RB, 10 MHz,           | X | 4.40 | 79.78 | 22.03 | 6.02 | 65.0  | ± 9.6 %  |
|  |   | Y | 4.64 | 80.65 | 22.40 |      | 65.0  |          |
|  |   | Z | 3.94 | 79.92 | 22.49 |      | 65.0  |          |
| - (d) (d)  | E-TDD (SC-FDMA, 1 RB, 10 MHz,           | X | 3.25 | 76.71 | 23.34 | 6.02 | 65.0  | ± 9.6 %  |
|  | MIM.                                    | Y | 3.26 | 76.89 | 23.52 |      | 65.0  |          |
|  |   | Z | 2.83 | 75.20 | 23.10 |      | 65.0  |          |
| 10238- LTE-TD  | E-TDD (SC-FDMA, 1 RB, 15 MHz.           | X | 4.37 | 80.51 | 22.96 | 6.02 | 65.0  | ± 9.6 %  |
| CAD 16-QAM   |   | Y | 4.65 | 81.50 | 23.39 |      | 65.0  | _ 3.0 70 |
|  |   | Z | 3.95 | 80.66 | 23.46 |      | 65.0  |          |

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| 10239-<br>CAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz,<br>64-QAM)   | X    | 4.34    | 79.61 | 21.97 | 6.02   | 65.0        | ± 9.6 %  |
|---------------|--|------|---------|-------|-------|--------|-------------|----------|
|               | The state of the s | Y    | 4.58    | 80.47 | 22.35 |        | 65.0        |          |
|               |  | Z    | 3.88    | 79.72 | 22.43 |        | 65.0        |          |
| 10240-        | LTE-TDD (SC-FDMA, 1 RB, 15 MHz,  | X    | 3.25    | 76.69 | 23.33 | 6.02   | 65.0        | ± 9.6 %  |
| CAD           | QPSK)  | - 77 | 2.05    | 70.07 | 00.54 |        | 00.0        |          |
|               |  | Y    | 3.25    | 76.87 | 23.51 |        | 65.0        |          |
| 40044         | LEE TOO YOU FOLLS  | Z    | 2.83    | 75.19 | 23.10 | 0.00   | 65.0        |          |
| 10241-<br>CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)   | ×    | 5.67    | 76.94 | 23.64 | 6.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 5.73    | 77.33 | 23.85 |        | 65.0        | 100      |
|               |  | Z    | 5.41    | 77.63 | 24.19 |        | 65.0        |          |
| 10242-<br>CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)   | Х    | 5.51    | 76.48 | 23.38 | 6.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 5.15    | 75.22 | 22.87 |        | 65.0        |          |
|               |  | Z    | 5.17    | 76.81 | 23.79 |        | 65.0        |          |
| 10243-<br>CAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz,<br>QPSK)  | Х    | 4.66    | 73.35 | 22.88 | 6.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 4.37    | 72.03 | 22,31 |        | 65.0        |          |
|               |  | Z    | 4.40    | 73.35 | 23.12 |        | 65.0        |          |
| 10244-<br>CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)   | X    | 2.90    | 67.06 | 13.06 | 3.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 2.71    | 66.26 | 12.47 |        | 65.0        |          |
|               |  | Z    | 2.39    | 65.15 | 11.38 |        | 65.0        |          |
| 10245-<br>CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)   | X    | 2.85    | 66.61 | 12.78 | 3.98   | 65.0        | ± 9.6 %  |
| 0.10          | 0.7 (2.11)   | Y    | 2.68    | 65.84 | 12.20 |        | 65.0        |          |
|               |  | Z    | 2.36    | 64.77 | 11.12 |        | 65.0        |          |
| 10246-<br>CAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz,<br>QPSK)  | X    | 3.01    | 71.40 | 15.89 | 3.98   | 65.0        | ± 9.6 %  |
| 0,10          |  | Y    | 2.36    | 67.99 | 13.82 |        | 65.0        |          |
|               |  | Z    | 2.41    | 68.64 | 13.94 |        | 65.0        |          |
| 10247-<br>CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)   | Х    | 3.36    | 69.51 | 15.75 | 3.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 2.95    | 67.61 | 14.45 |        | 65.0        |          |
|               |  | Z    | 2.97    | 68.07 | 14.42 | 11 - 1 | 65.0        |          |
| 10248-<br>CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)   | Х    | 3.34    | 68.90 | 15.44 | 3.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 2.95    | 67.15 | 14.22 |        | 65.0        |          |
|               |  | Z    | 2.92    | 67.38 | 14.07 |        | 65.0        |          |
| 10249-<br>CAD | LTE-TDD (SC-FDMA, 50% RB, 5 MHz,<br>QPSK)  | Х    | 4.26    | 76.83 | 19.56 | 3.98   | 65.0        | ± 9.6 %  |
| UND           | GI OIL   | Y    | 3.47    | 73.55 | 17.79 |        | 65.0        |          |
|               |  | Z    | 3.81    | 75.50 | 18.55 |        | 65.0        |          |
| 10250-<br>CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)  | X    | 4.36    | 73.05 | 19.62 | 3.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 4.02    | 71.77 | 18.85 |        | 65.0        |          |
|               |  | Z    | 4.18    | 72.90 | 19.29 |        | 65.0        |          |
| 10251-<br>CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)  | X    | 4.16    | 70.97 | 18.24 | 3.98   | 65.0        | ± 9.6 %  |
| J. I.D        | Total as Section   | Y    | 3.84    | 69.74 | 17.45 |        | 65.0        |          |
|               |  | Z    | 3.91    | 70.51 | 17.72 |        | 65.0        |          |
| 10252-<br>CAD | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)  | X    | 4.83    | 77.80 | 21.42 | 3.98   | 65.0        | ± 9.6 %  |
|               |  | Y    | 4.26    | 75.76 | 20.36 |        | 65.0        |          |
|               |  | Z    | 4.64    | 77.86 | 21.33 |        | 65.0        |          |
| 10253-<br>CAD | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)  | X    | 4.40    | 70.58 | 18.61 | 3.98   | 65.0        | ± 9.6 %  |
| UND           | TO SOME  | Y    | 4.13    | 69.58 | 18.00 |        | 65.0        |          |
|               |  | Z    | 4.22    | 70.40 | 18,37 |        | 65.0        |          |
| 10254-        | LTE-TDD (SC-FDMA, 50% RB, 15 MHz.  | X    | 4.70    | 71.50 | 19.34 | 3.98   | 65.0        | ± 9.6 %  |
| CAD           | 64-QAM)  | Y    | 7.04.00 |       |       | 0.00   | TO A COUNTY | 2 3.0 70 |
|               |  |      | 4.41    | 70.53 | 18.77 |        | 65.0        |          |
|               |  | Z    | 4.01    | 71.38 | 19.13 |        | 65.0        |          |

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| 10255-<br>CAD    | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)       | X     | 4.76    | 74.95     | 20.56        | 3.98    | 65.0    | ± 9.6 %  |
|------------------|---|-------|---------|-----------|--------------|---------|---------|----------|
| CAD              | QF3K)   | Y     | 4.35    | 73.52     | 19.81        |         | er o    |          |
|                  |   | Z     | 4.59    | 75.06     | 20.58        |         | 65.0    |          |
| 10256-           | LTE-TDD (SC-FDMA, 100% RB, 1.4                | X     | 2.08    | 63.27     | 9.80         | 3.98    | 65.0    | ± 9.6 %  |
| CAA              | MHz, 16-QAM)                                  | ^     | 2.00    | 03.27     | 5.00         | 3.30    | 00.0    | I 9.0 76 |
|                  | 10 34 117                                     | Y     | 1.95    | 62.60     | 9.21         |         | 65.0    |          |
|                  |   | Z     | 1.70    | 61.73     | 8.15         |         | 65.0    |          |
| 10257-           | LTE-TDD (SC-FDMA, 100% RB, 1.4                | X     | 2.07    | 62.91     | 9.50         | 3.98    | 65.0    | ± 9.6 %  |
| CAA              | MHz, 64-QAM)                                  |       |         |           | 0.00         | 0.00    | 00.0    | 20,070   |
| mmedit et i      |   | Y     | 1.94    | 62.29     | 8.92         |         | 65.0    |          |
|                  |   | Z     | 1.69    | 61.46     | 7.88         |         | 65.0    |          |
| 10258-           | LTE-TDD (SC-FDMA, 100% RB, 1.4                | X     | 2.01    | 65.63     | 11.91        | 3.98    | 65.0    | ±9.6 %   |
| CAA              | MHz, QPSK)                                    |       |         |           |              |         |         |          |
|                  |   | Y     | 1.65    | 63.35     | 10.17        |         | 65.0    |          |
|                  |   | Z     | 1.59    | 63.25     | 9.83         |         | 65.0    |          |
| 10259-           | LTE-TDD (SC-FDMA, 100% RB, 3 MHz,             | X     | 3.78    | 71.05     | 17.26        | 3.98    | 65.0    | ±9.6 %   |
| CAB              | 16-QAM)                                       |       |         |           |              |         |         |          |
|                  |   | Y     | 3.37    | 69.33     | 16.13        |         | 65.0    |          |
|                  |   | Z     | 3.46    | 70.13     | 16.31        |         | 65.0    |          |
| 10260-           | LTE-TDD (SC-FDMA, 100% RB, 3 MHz,             | X     | 3.81    | 70.78     | 17.12        | 3.98    | 65.0    | ± 9.6 %  |
| CAB              | 64-QAM)                                       | 1.0   |         | 00.15     | 40.00        |         | 0.5.5   |          |
|                  |   | Y     | 3.41    | 69.12     | 16.02        |         | 65.0    |          |
| 40004            | LTE TOD /CO FOUL 4000 FO A 111                | Z     | 3.48    | 69.84     | 16.15        | 2.00    | 65.0    | 1000     |
| 10261-           | LTE-TDD (SC-FDMA, 100% RB, 3 MHz,             | X     | 4.32    | 76.55     | 20.03        | 3.98    | 65.0    | ± 9.6 %  |
| CAB              | QPSK)   | · ·   | 2.00    | 70.07     | 10.01        |         | 00.0    |          |
|                  |   | Y     | 3.68    | 73.97     | 18.61        |         | 65.0    |          |
| 10000            | LTE TOO (SC FOMA 4009) DR FAILE               | Z     | 4.03    | 75.96     | 19.43        | 2.00    | 65.0    | +000     |
| 10262-<br>CAD    | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)     | X     | 4.35    | 72.98     | 19.56        | 3.98    | 65.0    | ± 9.6 %  |
|                  |   | Y     | 4.00    | 71.69     | 18.79        |         | 65.0    |          |
|                  |   | Z     | 4.16    | 72.81     | 19.23        | 1000000 | 65.0    |          |
| 10263-<br>CAD    | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)     | X     | 4.15    | 70.95     | 18.23        | 3.98    | 65.0    | ± 9.6 %  |
|                  |   | Y     | 3.83    | 69.72     | 17.45        |         | 65.0    |          |
|                  |   | Z     | 3.90    | 70.49     | 17.72        |         | 65.0    | 20000    |
| 10264-<br>CAD    | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)       | X     | 4.78    | 77.59     | 21.30        | 3.98    | 65.0    | ±9.6 %   |
| - F. C. A. T. L. |   | Y     | 4.21    | 75.55     | 20.24        |         | 65.0    |          |
|                  |   | Z     | 4.59    | 77.63     | 21.21        |         | 65.0    |          |
| 10265-<br>CAD    | LTE-TDD (SC-FDMA, 100% RB, 10<br>MHz, 16-QAM) | X     | 4.45    | 70.90     | 18.87        | 3.98    | 65.0    | ±9.6 %   |
| OI IO            | 10 10 10 10 10 10 10 10 10 10 10 10 10 1      | Y     | 4.17    | 69.87     | 18.27        |         | 65.0    | 17       |
|                  |   | Z     | 4.26    | 70.67     | 18.67        |         | 65.0    |          |
| 10266-<br>CAD    | LTE-TDD (SC-FDMA, 100% RB, 10<br>MHz, 64-QAM) | X     | 4.79    | 71.96     | 19.72        | 3.98    | 65.0    | ± 9.6 %  |
|                  |   | Y     | 4.50    | 70.98     | 19.16        |         | 65.0    |          |
|                  |   | Z     | 4.60    | 71.84     | 19.58        |         | 65.0    |          |
| 10267-<br>CAD    | LTE-TDD (SC-FDMA, 100% RB, 10<br>MHz, QPSK)   | X     | 4.98    | 75.63     | 20.70        | 3.98    | 65.0    | ±9.6 %   |
| Urill'           | 1711 (MA) (ME) (ME) (ME)                      | Y     | 4.53    | 74.10     | 19.92        |         | 65.0    |          |
|                  |   | Z     | 4.81    | 75.72     | 20.78        |         | 65.0    |          |
| 10268-           | LTE-TDD (SC-FDMA, 100% RB, 15                 | X     | 5.11    | 71.08     | 19.43        | 3.98    | 65.0    | ± 9.6 %  |
| CAD              | MHz, 16-QAM)                                  | (2.0) | =397.00 | VA.2323   | E520000      | 2,00    | 10000   | 23.0 70  |
|                  |   | Z     | 4.84    | 70.20     | 18.97        |         | 65.0    |          |
| 10269-           | LTE-TDD (SC-FDMA, 100% RB, 15                 | X     | 5.13    | 70.76     | 19.32        | 3.98    | 65.0    | ± 9.6 %  |
| CAD              | MHz, 64-QAM)                                  | Y     | 4.87    | 69.92     | 18.86        |         | 65.0    |          |
|                  |   | Z     | 4.96    | 70.66     | 19.25        |         | 65.0    |          |
| 10270-           | LTE-TDD (SC-FDMA, 100% RB, 15                 | X     | 5.11    | 73.33     | 19.25        | 3.98    | 65.0    | ±9.6%    |
| CAD              | MHz, QPSK)                                    | 3500  | BREALON | Western's | - CONTRACTOR | 3.80    | 1300000 | 2 3.0 %  |
|                  |   | Y     | 4.76    | 72.19     | 19.29        |         | 65.0    |          |
|                  |   | 2     | 4.96    | 73.43     | 19.98        |         | 65.0    |          |

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| 10274-<br>CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP<br>Rel8.10)       | X    | 2,48            | 66.86    | 14.99   | 0.00   | 150.0  | ± 9.6 % |
|---------------|--|------|-----------------|----------|---|--------|--|---------|
|               |  | Y    | 2.30            | 65.90    | 14.17   |        | 150.0  |         |
|               |  | Z    | 2.37            | 66.79    | 14.57   |        | 150.0  |         |
| 10275-<br>CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP<br>Rel8.4)        | ×    | 1.53            | 68.05    | 15.40   | 0.00   | 150.0  | ± 9.6 % |
|               |  | Y    | 1.32            | 66.12    | 13.91   |        | 150.0  |         |
|               |  | Z    | 1.45            | 67.75    | 14.99   |        | 150.0  |         |
| 10277-        | PHS (QPSK)   | X    | 1.30            | 58.93    | 4.20  | 9.03   | 50.0   | ±9.6 %  |
| CAA           | 77.5 (3. 5.7)                                      | Y    | 1.32            | 58.56    | 3.87  | 150000 | 50.0   | 20.0 // |
|               |  | Z    | 1.18            | 58.32    | 3.49  |        |  |         |
| 10278-        | PHS (QPSK, BW 884MHz, Rolloff 0.5)                 | X    | 2.49            | 64.91    |   | 0.02   | 50.0   | 1000    |
| CAA           | PHS (QFSK, BW 604MFIZ, ROHOH U.5)                  | 1000 | 11 1570 501 111 | 95000000 | 10.26   | 9.03   | 50.0   | ±9.6 %  |
|               |  | Y    | 2.32            | 63.55    | 9.26  |        | 50.0   |         |
| TERRET        |  | Z    | 2.17            | 63.27    | 8.86  |        | 50.0   |         |
| 10279-<br>CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38)                | ×    | 2.57            | 65.18    | 10.47   | 9.03   | 50.0   | ± 9.6 % |
|               |  | Y    | 2.38            | 63.76    | 9.44  |        | 50.0   |         |
|               |  | Z    | 2.22            | 63.44    | 9.03  |        | 50.0   |         |
| 10290- CD     | CDMA2000, RC1, SO55, Full Rate                     | ×    | 1.01            | 65.74    | 11.23   | 0.00   | 150.0  | ± 9.6 % |
| SPECIFIC      |  | Y    | 0.67            | 61.70    | 8.06  |        | 150.0  |         |
|               |  | Z    | 0.69            | 62.65    | 8.67  |        | 150.0  |         |
| 10291-<br>AAB | CDMA2000, RC3, SO55, Full Rate                     | ×    | 0.64            | 64.08    | 10.26   | 0.00   | 150.0  | ±9.6 %  |
| 10000         |  | Y    | 0.41            | 60.32    | 6.85  |        | 150.0  |         |
|               |  | Z    | 0.48            | 61.84    | 8.06  |        | 150.0  |         |
| 10292-<br>AAB | CDMA2000, RC3, SO32, Full Rate                     | X    | 0.93            | 69.17    | 13.09   | 0.00   | 150.0  | ± 9.6 % |
|               |  | Y    | 0.46            | 61.72    | 7.96  |        | 150.0  |         |
|               |  | Z    | 0.63            | 65.19    | 10.18   |        | 150.0  |         |
| 10293-<br>AAB | CDMA2000, RC3, SO3, Full Rate                      | X    | 2.58            | 81.84    | 18.38   | 0.00   | 150.0  | ±9.6 %  |
|               |  | Y    | 0.61            | 64.42    | 9.84  |        | 150.0  |         |
|               |  | Z    | 1.45            | 74.16    | 14.40   |        | 150.0  |         |
| 10295-<br>AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr.              | ×    | 16.38           | 93.11    | 24.71   | 9.03   | 50.0   | ± 9.6 % |
|               |  | Y    | 16.06           | 90.60    | 23.14   |        | 50.0   |         |
|               |  | Z    | 41.75           | 104.48   | 26.91   |        | 50.0   |         |
| 10297-<br>AAC | LTE-FDD (SC-FDMA, 50% RB, 20 MHz,<br>QPSK)         | X    | 2.56            | 69.49    | 16.58   | 0.00   | 150.0  | ± 9.6 % |
|               |  | Y    | 2.33            | 68.15    | 15.68   |        | 150.0  |         |
|               |  | z    | 2.43            | 69.17    | 16.39   |        | 150.0  |         |
| 10298-<br>AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz,<br>QPSK)          | X    | 1.18            | 65.35    | 11.77   | 0.00   | 150.0  | ± 9.6 % |
|               |  | Y    | 0.89            | 62.40    | 9.35  |        | 150.0  |         |
|               |  | Z    | 0.90            | 63.00    | 9.64  |        | 150.0  |         |
| 10299-<br>AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)           | X    | 1.36            | 63.05    | 9.42  | 0.00   | 150.0  | ± 9.6 % |
| , , , ,       | 100  | Y    | 1.26            | 62.26    | 8.62  |        | 150.0  |         |
|               |  | Z    | 1.05            | 61.24    | 7.54  |        | 150.0  |         |
| 10300-<br>AAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)           | X    | 1.15            | 60.99    | 7.59  | 0.00   | 150.0  | ± 9.6 % |
| rviv          | O'T WOMIN)   | Y    | 1.07            | 60.46    | 6.94  |        | 150.0  |         |
|               |  | Z    | 0.89            | 59.75    | 5.99  |        | 150.0  |         |
| 10301-<br>AAA | IEEE 802.16e WIMAX (29:18, 5ms, 10MHz, QPSK, PUSC) | X    | 4.25            | 64.73    | 16.86   | 4.17   | 50.0   | ±9.6 %  |
| AAA           | TOWN L. GEON, FOOD)                                | Υ    | 4.21            | 64.78    | 16.74   |        | 50.0   |         |
|               |  | Z    | 4.10            | 64.79    | THE RESERVE AND ADDRESS OF THE PARTY OF THE |        | The state of the last of the l |         |
| 10302-        | IEEE 802.16e WiMAX (29:18, 5ms,                    | X    | 4.74            |          | 16.69   | 4.00   | 50.0   | 4000    |
| AAA           | 10MHz, QPSK, PUSC, 3 CTRL symbols)                 |      | 20-1-20         | 65.43    | 17.63   | 4.96   | 50.0   | ± 9.6 % |
|               |  | Y    | 4.66            | 65.24    | 17,38   |        | 50.0   |         |
|               |  | Z    | 4.60            | 65.49    | 17.44   |        | 50.0   |         |

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| 10303-<br>AAA        | Trees are the trust of the trees of the tree | 1 22 1 |              | -              | -                |                  |                |          |
|----------------------|--|--------|--------------|----------------|------------------|------------------|----------------|----------|
|                      | IEEE 802.16e WIMAX (31:15, 5ms, 10MHz, 64QAM, PUSC)  | ×      | 4.49         | 65.00          | 17.39            | 4.96             | 50.0           | ± 9.6 %  |
|                      |  | Y      | 4.44         | 65.13          | 17.34            |                  | 50.0           |          |
|                      |  | Z      | 4.36         | 65.13          | 17.21            |                  | 50.0           |          |
| 10304-<br>AAA        | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, 64QAM, PUSC)  | X      | 4.34         | 65.04          | 16.98            | 4.17             | 50.0           | ± 9.6 %  |
| 7///                 | TOWITZ, 04QAW, FOSC)   | Y      | 4.25         | 64.81          | 16.70            |                  | 50.0           |          |
|                      |  | Z      | 4.21         | 65.16          | 16.70            |                  | 50.0           |          |
| 10305-               | IEEE 802.16e WiMAX (31:15, 10ms,   | X      | 3.71         | 65.40          | 17.85            | 6.02             |                | +069     |
| AAA                  | 10MHz, 64QAM, PUSC, 15 symbols)  |        |              |                |                  | 6.02             | 35.0           | ± 9.6 %  |
|                      |  | Y      | 3.72         | 65.71          | 17.67            |                  | 35.0           |          |
|                      |  | Z      | 3,59         | 65.50          | 17.36            |                  | 35.0           |          |
| 10306-<br>AAA        | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols)   | ×      | 4.14         | 65.15          | 17.96            | 6.02             | 35.0           | ± 9.6 %  |
|                      |  | Y      | 4.12         | 65.33          | 17.82            |                  | 35.0           |          |
|                      |  | Z      | 4.02         | 65.33          | 17.66            |                  | 35.0           |          |
| 10307-<br>AAA        | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols)  | X      | 4.01         | 65.07          | 17.81            | 6.02             | 35.0           | ± 9.6 %  |
|                      |  | Y      | 3.99         | 65.26          | 17.66            |                  | 35.0           |          |
| LT IN CASE OF STREET |  | Z      | 3.89         | 65.22          | 17.49            |                  | 35.0           |          |
| 10308-<br>AAA        | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC)   | X      | 3.97         | 65.21          | 17.93            | 6.02             | 35.0           | ± 9.6 %  |
|                      | 17.111.124.117.78.7111.117.78.79.11  | Y      | 3.96         | 65.42          | 17.79            |                  | 35.0           |          |
|                      |  | Z      | 3.86         | 65.37          | 17.62            |                  | 35.0           |          |
| 10309-               | IEEE 802.16e WiMAX (29:18, 10ms,   | X      | 4.16         | 65.22          | 18.05            | 6.02             | 35.0           | ±9.6 %   |
| AAA                  | 10MHz, 16QAM, AMC 2x3, 18 symbols)   | (0.00) | New Year     | 222012         | 53300            | 0.02             | 13355          | 1 9.0 %  |
|                      |  | Y      | 4.14         | 65.39          | 17.90            |                  | 35.0           |          |
|                      | 1000 000 100 100 100 100 100 100 100 10  | Z      | 4.03         | 65.36          | 17,74            | 0.00             | 35.0           |          |
| 10310-<br>AAA        | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3, 18 symbols)   | X      | 4.09         | 65.15          | 17.92            | 6.02             | 35.0           | ± 9.6 %  |
|                      |  | Y      | 4.07         | 65.35          | 17.79            |                  | 35.0           |          |
|                      | Wales and the second second second   | Z      | 3.97         | 65.35          | 17.65            |                  | 35.0           | - West-  |
|                      | LTE-FDD (SC-FDMA, 100% RB, 15<br>MHz, QPSK)  | X      | 2.92         | 68.73          | 16.23            | 0.00             | 150.0          | ± 9.6 %  |
|                      |  | Y      | 2.68         | 67.45          | 15.43            |                  | 150.0          |          |
|                      |  | Z      | 2.78         | 68.38          | 16.08            |                  | 150.0          |          |
| 10313-<br>AAA        | IDEN 1:3   | X      | 2.23         | 70.71          | 15.35            | 6.99             | 70.0           | ±9.6 %   |
| 7001                 |  | Y      | 1.69         | 66.90          | 13.17            |                  | 70.0           |          |
|                      |  | Z      | 2.30         | 71.64          | 15.93            |                  | 70.0           |          |
| 10314-<br>AAA        | IDEN 1:6   | X      | 4.08         | 80.89          | 22.31            | 10.00            | 30.0           | ± 9.6 %  |
| rivit                |  | Y      | 3.04         | 75.07          | 19.42            |                  | 30.0           |          |
|                      |  | Z      | 4.65         | 83.62          | 23.48            |                  | 30.0           |          |
| 10315-<br>AAB        | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1<br>Mbps, 96pc duty cycle)   | X      | 1.04         | 63.55          | 14.98            | 0.17             | 150.0          | ± 9.6 %  |
| , , ,                | mops, sope daily elone)  | Y      | 0.94         | 62.52          | 14.02            |                  | 150.0          |          |
|                      |  | Z      | 1.03         | 63.50          | 14.81            |                  | 150.0          |          |
| 10316-<br>AAB        | IEEE 802.11g WiFi 2.4 GHz (ERP-<br>OFDM, 6 Mbps, 96pc duty cycle)  | X      | 4.37         | 66.68          | 16.19            | 0.17             | 150.0          | ±9.6 %   |
| PARIO                | Or Divi, o Wobs, sope duty cycle)  | Y      | 4.26         | 66.34          | 15.95            |                  | 150.0          |          |
|                      |  | Z      | 4.26         | 66.72          | 16.11            |                  | 150.0          |          |
| 10317-               | IEEE 802.11a WiFi 5 GHz (OFDM, 6   | X      | 4.20         | 66.68          | 16.11            | 0.17             | 150.0          | ±9.6 %   |
| 10317-               | Mbps, 96pc duty cycle)   | 250    |              |                | 1225222          | 0.17             | ENG-300        | £ 9.6 %  |
| AAC                  |  | Y      | 4.26         | 66.34          | 15.95            |                  | 150.0          |          |
| AAC                  |  | Z      | 4.26         | 66.72          | 16.11            |                  | 150.0          |          |
|                      |  |        | 4 40         | 67.02          | 16.23            | 0.00             | 150.0          | ±9.6 %   |
| 10400-               | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle)  | X      | 4.46         | 25/1820/1944   | National Company | IL N. ACADOM.    |                |          |
| 10400-               |  | X      | 4.46         | 66.64          | 15.97            | II for acceptant | 150.0          | 10000000 |
| 10400-               |  | Y      | 12000000     | NAMES OF A     | 111-112-1101     | 11.0000          | 150.0<br>150.0 |          |
| 10400-<br>AAD        | 99pc duty cycle)  IEEE 802.11ac WiFi (40MHz, 64-QAM,   | 152-05 | 4.33         | 66,64          | 15.97            | 0.00             |                | ± 9.6 %  |
| 10400-<br>AAD        | 99pc duty cycle)   | Y      | 4.33<br>4.31 | 66.64<br>66.98 | 15.97<br>16.13   | 0.00             | 150.0          | ± 9.6 %  |

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| 10402-<br>AAD          | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle)  | Х    | 5.47                                    | 67.39     | 16.42     | 0.00          | 150.0    | ±9.6 %       |
|------------------------|--|------|---|-----------|-----------|---------------|----------|--------------|
| MAD                    | 99pc daty cycle)   | Y    | 5.37                                    | 67.08     | 16.25     |               | 150.0    |              |
|                        |  | Z    | 5.37                                    | 67.35     | 16.23     |               | 150.0    |              |
| 10403-                 | CDMA2000 (1xEV-DO, Rev. 0)   | X    | 1.01                                    | 65.74     | 11.23     | 0.00          | 115.0    | ± 9.6 %      |
| AAB                    | ODM/2000 (TACY-DO, Nev. 0)   |      | 1.00                                    | 00.74     | 11.60     | 0.00          | 110.0    | 2 0.0 70     |
| 7.0.102                |  | Y    | 0.67                                    | 61.70     | 8.06      |               | 115.0    |              |
|                        |  | Z    | 0.69                                    | 62.65     | 8.67      |               | 115.0    |              |
| 10404-                 | CDMA2000 (1xEV-DO, Rev. A)   | X    | 1.01                                    | 65.74     | 11.23     | 0.00          | 115.0    | ±9.6 %       |
| AAB                    | SOMPLESSO (TALT DO, TICKTY)  | 30   | 1.01                                    | 00.77     | 21,44     | 0.00          | 110.0    | 20.0 /0      |
|                        |  | Y    | 0.67                                    | 61.70     | 8.06      |               | 115.0    |              |
|                        |  | Z    | 0.69                                    | 62.65     | 8.67      |               | 115.0    |              |
| 10406-                 | CDMA2000, RC3, SO32, SCH0, Full  | X    | 13.40                                   | 94.87     | 22.42     | 0.00          | 100.0    | ± 9.6 %      |
| AAB                    | Rate   | 2062 | 23-28%                                  | 153415250 | ATTACAS ( |               | 116525   | -3-E3EM3     |
| 0-0-11                 |  | Y    | 37.24                                   | 104.89    | 24.38     |               | 100.0    |              |
|                        |  | Z    | 100.00                                  | 114.79    | 25.79     |               | 100.0    |              |
| 10410-<br>AAD          | LTE-TDD (SC-FDMA, 1 RB, 10 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9,<br>Subframe Conf=4)  | ×    | 2.95                                    | 79.35     | 18.40     | 3.23          | 80.0     | ± 9.6 %      |
|                        | - Continue Contract  | Y    | 3.69                                    | 82.30     | 19.32     |               | 80.0     |              |
|                        |  | Z    | 3.87                                    | 84.90     | 20.56     |               | 80.0     |              |
| 10415-                 | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1   | X    | 1.00                                    | 63.14     | 14.62     | 0.00          | 150.0    | ±9.6 %       |
| AAA                    | Mbps, 99pc duty cycle)   | 25.5 | 111111111111111111111111111111111111111 | 2000      | 1000000   | 1000          | 1        |              |
|                        |  | Y    | 0.91                                    | 62.12     | 13.65     |               | 150.0    |              |
|                        |  | Z    | 0.99                                    | 63.08     | 14.44     |               | 150.0    |              |
| 10416-                 | IEEE 802.11g WiFi 2.4 GHz (ERP-  | X    | 4.35                                    | 66.77     | 16.19     | 0.00          | 150.0    | ± 9.6 %      |
| AAA                    | OFDM, 6 Mbps, 99pc duty cycle)   | 1000 | THORESON                                | (CEN)     | 1969866 U |               | 25922922 | SSECTION     |
| 2000                   |  | Y    | 4.23                                    | 66.41     | 15.93     |               | 150.0    |              |
|                        |  | Z    | 4.24                                    | 66.81     | 16.11     |               | 150.0    |              |
| 10417-<br>AAB          | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6<br>Mbps, 99pc duty cycle)   | ×    | 4,35                                    | 66.77     | 16.19     | 0.00          | 150.0    | ±9.6 %       |
|                        |  | Y    | 4.23                                    | 66.41     | 15.93     |               | 150.0    |              |
|                        |  | Z    | 4.24                                    | 66.81     | 16.11     |               | 150.0    |              |
| 10418-<br>AAA          | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 6 Mbps, 99pc duty cycle, Long<br>preambule)  | X    | 4.35                                    | 66.98     | 16.25     | 0.00          | 150.0    | ± 9.6 %      |
|                        |  | Y    | 4.23                                    | 66.61     | 15.99     |               | 150.0    |              |
| 47403410034            | THE SECTION OF THE SE | Z    | 4.23                                    | 67.03     | 16.19     | 1. University | 150.0    | - Washington |
| 10419-<br>AAA          | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 6 Mbps, 99pc duty cycle, Short<br>preambule)   | X    | 4.36                                    | 66.91     | 16.23     | 0.00          | 150.0    | ±9.6 %       |
|                        | - International Control of the Contr | Y    | 4.24                                    | 66.55     | 15.97     |               | 150.0    |              |
|                        |  | Z    | 4.25                                    | 66.96     | 16.17     |               | 150.0    |              |
| 10422-<br>AAB          | IEEE 802.11n (HT Greenfield, 7.2 Mbps,<br>BPSK)  | X    | 4.47                                    | 66.89     | 16.24     | 0.00          | 150.0    | ± 9.6 %      |
|                        |  | Y    | 4,35                                    | 66.53     | 15.99     |               | 150.0    |              |
|                        |  | Z    | 4.35                                    | 66.92     | 16.18     |               | 150.0    |              |
| 10423-<br>AAB          | IEEE 802.11n (HT Greenfield, 43.3<br>Mbps, 16-QAM)   | ×    | 4.59                                    | 67.14     | 16.33     | 0.00          | 150.0    | ± 9.6 %      |
|                        |  | Y    | 4.47                                    | 66.78     | 16.08     |               | 150.0    |              |
|                        |  | Z    | 4.46                                    | 67.16     | 16.25     |               | 150.0    |              |
| 10424-                 | IEEE 802.11n (HT Greenfield, 72.2  | X    | 4.52                                    | 67.09     | 16,31     | 0.00          | 150.0    | ± 9.6 %      |
| AAB                    | Mbps, 64-QAM)  |      |   |           | 0         |               |          |              |
|                        |  | Y    | 4.40                                    | 66.73     | 16.05     |               | 150.0    |              |
| NAME OF TAXABLE PARTY. |  | Z    | 4.39                                    | 67.09     | 16.23     | -             | 150.0    |              |
| 10425-<br>AAB          | IEEE 802.11n (HT Greenfield, 15 Mbps,<br>BPSK)   | ×    | 5,15                                    | 67.27     | 16.49     | 0.00          | 150.0    | ± 9.6 %      |
|                        |  | Y    | 5.05                                    | 66.98     | 16.31     |               | 150.0    |              |
|                        |  | Z    | 5.01                                    | 67.17     | 16.41     |               | 150.0    |              |
| 10426-<br>AAB          | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)  | ×    | 5.17                                    | 67.36     | 16,53     | 0.00          | 150.0    | ± 9.6 %      |
|                        |  | Y    | 5.08                                    | 67.12     | 16.38     |               | 150.0    |              |
|                        |  | Z    | 5.05                                    | 67.33     | 16.49     |               | 150.0    |              |

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| 70100                                   |  |   |            |   |          |        |          |         |
|---|--|---|------------|---|----------|--------|----------|---------|
| 10427-<br>AAB                           | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)   | X | 5.13       | 67.15                                   | 16.42    | 0.00   | 150.0    | ± 9.6 % |
|   |  | Y | 5.03       | 66.85                                   | 16.24    |        | 150.0    |         |
| VANCOUNT I                              | VALUE AND THE PARTY OF THE PART | Z | 5.01       | 67.11                                   | 16.38    |        | 150.0    |         |
| 10430-<br>AAB                           | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)   | X | 4.23       | 72.27                                   | 18.34    | 0.00   | 150.0    | ± 9.6 % |
| 2.3.98                                  |  | Y | 3.99       | 71.49                                   | 17.71    |        | 150.0    |         |
|   |  | Z | 4.17       | 72.80                                   | 18.15    |        | 150.0    |         |
| 10431-                                  | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)  | X | 3.96       | 67.36                                   | 16.06    | 0.00   | 150.0    | ±9.6 %  |
| AAB                                     | ETE-1 DD (OT DMA, 10 MF12, E-1M 3.1)   | Ŷ | D88535     | 220000000000000000000000000000000000000 | 0.790.00 | 0.00   | AVESSOCS | 1 9.0 % |
|   |  |   | 3.81       | 66.88                                   | 15.67    |        | 150.0    |         |
| 10100                                   | 175 500 (050)11 45101 5 7146 0   | Z | 3.81       | 67.37                                   | 15.87    |        | 150.0    |         |
| 10432-<br>AAB                           | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)  | X | 4.29       | 67.19                                   | 16.23    | 0.00   | 150.0    | ± 9.6 % |
|   |  | Y | 4.15       | 66.79                                   | 15.93    |        | 150.0    |         |
| 24244                                   |  | Z | 4.15       | 67.22                                   | 16.13    |        | 150.0    |         |
| 10433-<br>AAB                           | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)  | X | 4.54       | 67.13                                   | 16.33    | 0.00   | 150.0    | ± 9.6 % |
|   |  | Y | 4.42       | 66.76                                   | 16.08    |        | 150.0    |         |
|   |  | Z | 4.41       | 67.14                                   | 16.25    |        | 150.0    |         |
| 10434- W-CDMA (B                        | W-CDMA (BS Test Model 1, 64 DPCH)  | X | 4.34       | 73.15                                   | 18.13    | 0.00   | 150.0    | ± 9.6 % |
|   |  | Y | 3.97       | 71.83                                   | 17.20    |        | 150.0    |         |
|   |  | Z | 4.17       | 73.19                                   | 17.60    |        | 150.0    |         |
| 10435-                                  | LTE-TDD (SC-FDMA, 1 RB, 20 MHz,  | X | 2.84       | 78.74                                   | 18.13    | 3.23   | 80.0     | ±9.6 %  |
| AAC                                     | QPSK, UL Subframe=2,3,4,7,8,9)   | Y | - Contract |   |          | 3.23   |          | I 9.0 % |
|   |  |   | 3.48       | 81.45                                   | 18.98    |        | 80.0     |         |
| 40447                                   | LTE FOR OFFILE FALL FALLS  | Z | 3.64       | 83.98                                   | 20.20    |        | 80.0     |         |
| 10447-<br>AAB                           | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1,<br>Clipping 44%)  | X | 3.20       | 67.15                                   | 14.91    | 0.00   | 150.0    | ± 9.6 % |
|   |  | Y | 2.99       | 66.28                                   | 14.17    |        | 150.0    |         |
|   |  | Z | 2.97       | 66.77                                   | 14.26    |        | 150.0    |         |
| 10448-<br>AAB                           | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1,<br>Clippin 44%)  | X | 3.83       | 67.16                                   | 15.94    | 0.00   | 150.0    | ±9.6 %  |
|   |  | Y | 3.68       | 66.67                                   | 15.55    |        | 150.0    |         |
|   |  | Z | 3.69       | 67.18                                   | 15.75    |        | 150.0    |         |
| 10449-<br>AAB                           | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1,<br>Cliping 44%)  | X | 4.13       | 67.03                                   | 16.13    | 0.00   | 150.0    | ± 9.6 % |
| .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 345-000-00-00-00-00-00-00-00-00-00-00-00-0   | Y | 4.00       | 66.61                                   | 15.83    |        | 150.0    |         |
|   |  | Z | 4.00       | 67.05                                   | 16.03    |        | 150.0    |         |
| 10450-<br>AAB                           | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1,<br>Clipping 44%)   | X | 4.34       | 66.91                                   | 16.19    | 0.00   | 150.0    | ±9.6 %  |
| -                                       |  | Y | 4.22       | 66.53                                   | 15.92    |        | 150.0    |         |
|   |  | Z | 4.23       | 66.92                                   | 16.11    |        | 150.0    |         |
| 10451-<br>AAA                           | W-CDMA (BS Test Model 1, 64 DPCH,<br>Clipping 44%)   | X | 2,99       | 66.88                                   | 14.14    | 0.00   | 150.0    | ± 9.6 % |
|   | - Control of the Cont | Y | 2.74       | 65.78                                   | 13.23    |        | 150.0    |         |
|   |  | Z | 2.69       | 66.07                                   | 13.18    |        | 150.0    |         |
| 10456-<br>AAB                           | IEEE 802.11ac WiFi (160MHz, 64-QAM, 99pc duty cycle)   | X | 6.06       | 67.78                                   | 16.63    | 0.00   | 150.0    | ± 9.6 % |
| 7.4.00                                  |  | Y | 6.00       | 67.55                                   | 16.51    |        | 150.0    |         |
|   |  | Z | 6.07       | 68.05                                   | 16.78    |        | 150.0    |         |
| 10457-                                  | UMTS-FDD (DC-HSDPA)  | X | 3.71       | 65,53                                   | 15.92    | 0.00   | 150.0    | ±9.6 %  |
| AAA                                     | Since of the last internal   | Y | 3.61       | 65.20                                   | 15.66    | 7.4.44 | 150.0    | 3.0.00  |
|   |  | Z | 3.65       | 65.68                                   | 15.87    |        | 150.0    |         |
| 10458-                                  | CDMA2000 (1xEV-DO, Rev. B, 2   | X | 3.70       | 71.13                                   | 16.64    | 0.00   | 150.0    | ± 9.6 % |
| AAA                                     | carriers)  |   |            |   |          |        | 100.0    |         |
|   |  | Y | 3.25       | 69.16                                   | 15.28    |        | 150.0    |         |
|   |  | Z | 3.15       | 69.17                                   | 14.95    | 12722  | 150.0    |         |
| 10459-<br>NAA                           | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)   | X | 4.84       | 69,11                                   | 17.84    | 0.00   | 150.0    | ± 9.6 % |
|   |  |   |            |   |          |        |          |         |
| AAA                                     |  | Y | 4.69       | 68.77                                   | 17.48    |        | 150.0    |         |

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| 10460-        | UMTS-FDD (WCDMA, AMR)  | Х  | 0.88         | 68.39          | 16.07         | 0.00 | 150.0      | ±9.6 %    |
|---------------|--|----|--------------|----------------|---------------|------|------------|-----------|
| AAA           |  | W  | 0.70         | 05.50          | 40.77         |      | 450.0      |           |
|               |  | Y  | 0.70         | 65.56          | 13.77         |      | 150.0      |           |
| 10101         | 1 TE TOD (00 FD11) 1 CO 1 1 1 1 1  | Z  | 0.84         | 67.99          | 15.62         | 0.00 | 150.0      | 1500      |
| 10461-<br>AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)  | ×  | 1.57         | 72.49          | 16.91         | 3.29 | 80.0       | ± 9.6 %   |
| 1 P. Ser Call |  | Y  | 2.31         | 77.86          | 18.85         |      | 80.0       |           |
|               |  | Z  | 1.89         | 76.90          | 18.97         |      | 80.0       |           |
| 10462-<br>AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz,<br>16-QAM, UL Subframe=2,3,4,7,8,9)   | X  | 0.65         | 60.00          | 7.36          | 3.23 | 80.0       | ± 9.6 %   |
| -             |  | Y  | 0.67         | 60.00          | 7.26          |      | 80.0       |           |
|               |  | Z  | 0.57         | 60.00          | 7.02          |      | 80.0       |           |
| 10463-<br>AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X  | 0.67         | 60.00          | 6.67          | 3.23 | 80.0       | ± 9.6 %   |
|               | 01 20 1111 02 300113110 210111110101   | Y  | 0.68         | 60.00          | 6.58          |      | 80.0       |           |
|               |  | Z  | 0.60         | 60.00          | 6.22          |      | 80.0       |           |
| 10464-        | LTE-TDD (SC-FDMA, 1 RB, 3 MHz,   | X  | 1.23         | 69.24          | 14.93         | 3.23 | 80.0       | ± 9.6 %   |
| AAA           | QPSK, UL Subframe=2,3,4,7,8,9)   |    | 11000000     | 101/2/01/27    | CV-Dolese L   | 0.20 |            | 1 3.0 /0  |
|               |  | Y  | 1.59         | 72.66          | 16.19         |      | 80.0       |           |
| 4040=         | 175 700 000 50111 1 50 5111  | Z  | 1.42         | 72.83          | 16.69         | 0.00 | 80.0       | 1 2 2 2 2 |
| 10465-<br>AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-<br>QAM, UL Subframe=2,3,4,7,8,9)  | ×  | 0.65         | 60.00          | 7.28          | 3.23 | 80.0       | ± 9.6 %   |
|               |  | Y  | 0.67         | 60.00          | 7.19          |      | 80.0       |           |
|               |  | Z  | 0.57         | 60.00          | 6.95          | -    | 80.0       |           |
| 10466-<br>AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-<br>QAM, UL Subframe=2,3,4,7,8,9)  | X  | 0.67         | 60.00          | 6.62          | 3.23 | 80.0       | ± 9.6 %   |
|               | The state of the s | Y  | 0.69         | 60.00          | 6.54          |      | 80.0       |           |
|               |  | Z  | 0.60         | 60.00          | 6.18          |      | 80.0       |           |
| 10467-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9)   | X  | 1.28         | 69.83          | 15.22         | 3.23 | 80.0       | ± 9.6 %   |
|               |  | Y  | 1.71         | 73.64          | 16.62         |      | 80.0       |           |
|               |  | Z  | 1.51         | 73.74          | 17.10         |      | 80.0       |           |
| 10468-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-<br>QAM, UL Subframe=2,3,4,7,8,9)  | X  | 0.65         | 60.00          | 7.31          | 3.23 | 80.0       | ± 9.6 %   |
| 1110          |  | Y  | 0.66         | 60.00          | 7.22          |      | 80.0       |           |
|               |  | Z  | 0.57         | 60.00          | 6.98          |      | 80.0       |           |
| 10469-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-<br>QAM, UL Subframe=2,3,4,7,8,9)  | X  | 0.67         | 60.00          | 6.62          | 3.23 | 80.0       | ± 9.6 %   |
| 1010          | as an or chordina alatinialay  | Y  | 0.68         | 60.00          | 6.54          |      | 80.0       |           |
|               |  | Z  | 0.60         | 60.00          | 6.18          |      | 80.0       |           |
| 10470-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9)  | X  | 1.27         | 69.83          | 15.21         | 3.23 | 80.0       | ± 9.6 %   |
| AAC           | Q/ O(, OC Oubitatio=2,0,4,7,0,0)   | Y  | 1.71         | 73.66          | 16.62         |      | 80.0       |           |
|               |  | Z  | 1.50         | 73.77          | 17.11         |      | 80.0       |           |
| 10471-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-<br>QAM, UL Subframe=2,3,4,7,8,9)   | X  | 0.65         | 60.00          | 7.29          | 3.23 | 80.0       | ± 9.6 %   |
| . 510         | Se 111/1 OE SOUNGING - E,O,T,1,O,O)  | Y  | 0.66         | 60.00          | 7.20          |      | 80.0       |           |
|               |  | Z  | 0.57         | 60.00          | 6.96          |      | 80.0       |           |
| 10472-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-<br>QAM, UL Subframe=2,3,4,7,8,9)   | X  | 0.67         | 60.00          | 6.60          | 3.23 | 80.0       | ± 9.6 %   |
| rino          | Se iiii, Oc Gustamo-2,5,4,7,6,5)   | Y  | 0.68         | 60.00          | 6.52          |      | 80.0       |           |
|               |  | Z  | 0.31         | 55.91          | 4.03          |      | 80.0       |           |
| 10473-        | LTE-TDD (SC-FDMA, 1 RB, 15 MHz.  | X  | 1.27         | 69.80          | 15.19         | 3.23 | 80.0       | ± 9.6 %   |
| AAC           | QPSK, UL Subframe=2,3,4,7,8,9)   |    | 2000         |                | 111271001     | 3.23 | GREEKE THE | 19.0 %    |
|               |  | Y  | 1.70         | 73.59          | 16.59         |      | 80.0       |           |
| 10474-        | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-  | X  | 1.50<br>0.65 | 73.71<br>60.00 | 17.08<br>7.29 | 3.23 | 80.0       | ± 9.6 %   |
| AAC           | QAM, UL Subframe=2,3,4,7,8,9)  | 34 | 0.00         | 00.00          | 7.00          |      | 00.0       |           |
|               |  | Y  | 0.66         | 60.00          | 7.20          |      | 80.0       |           |
| 10.177        | 1 TE TOO 100 FOUR 1 CO 101 II  | Z  | 0.57         | 60.00          | 6.96          |      | 80.0       |           |
| 10475-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-<br>QAM, UL Subframe=2,3,4,7,8,9)   | ×  | 0.67         | 60.00          | 6.60          | 3.23 | 80.0       | ± 9.6 %   |
|               |  | Y  | 0.68         | 60.00          | 6.52          |      | 80.0       |           |
|               |  | Z  | 0.31         | 55.90          | 4.03          |      | 80.0       |           |

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| 10477-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-<br>QAM, UL Subframe=2,3,4,7,8,9) | Х    | 0.65 | 60.00 | 7.26  | 3.23 | 80.0 | ± 9.6 % |
|---------------|--|------|------|-------|-------|------|------|---------|
|               |  | Y    | 0.66 | 60.00 | 7.17  |      | 80.0 |         |
|               |  | Z    | 0.57 | 60.00 | 6.93  |      | 80.0 |         |
| 10478-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-<br>QAM, UL Subframe=2,3,4,7,8,9) | Х    | 0.67 | 60.00 | 6.59  | 3.23 | 80.0 | ± 9.6 % |
| 177           |  | Y    | 0.68 | 60.00 | 6.51  |      | 80.0 |         |
| 0000000       |  | Z    | 0.31 | 55.89 | 4.01  |      | 80.0 |         |
| 10479-<br>AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | Х    | 3.24 | 76.16 | 18.67 | 3.23 | 80.0 | ± 9.6 % |
|               |  | Y    | 4.42 | 80.82 | 20.23 |      | 80.0 |         |
|               |  | Z    | 4.39 | 82.21 | 20.82 |      | 80.0 |         |
| 10480-<br>AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | Х    | 2.03 | 66.76 | 12.73 | 3.23 | 80.0 | ± 9.6 % |
|               | 100000000000000000000000000000000000000                              | Y    | 2.05 | 66.92 | 12.60 |      | 80.0 |         |
|               |  | Z    | 1.85 | 67.01 | 12.43 |      | 80.0 |         |
| 10481-<br>AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | X    | 1.62 | 63.96 | 11.04 | 3.23 | 80.0 | ± 9.6 % |
|               |  | Y    | 1.57 | 63.66 | 10.70 |      | 80.0 |         |
|               |  | Z    | 1.32 | 63.18 | 10.24 |      | 80.0 |         |
| 10482-<br>AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9)   | X    | 1.53 | 65.20 | 12.69 | 2.23 | 80.0 | ±9.6 %  |
| MINE O        |  | Y    | 1.10 | 61.56 | 10.21 |      | 80.0 |         |
|               |  | Z    | 1.14 | 62.42 | 10.54 |      | 80.0 |         |
| 10483-<br>AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz,<br>16-QAM, UL Subframe=2,3,4,7,8,9) | X    | 1.45 | 61.38 | 9.71  | 2.23 | 80.0 | ±9.6 %  |
| 20201012      |  | Y    | 1.32 | 60.52 | 8.97  |      | 80.0 |         |
|               |  | Z    | 1.16 | 60.00 | 8.17  |      | 80.0 |         |
|               | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X    | 1.44 | 61.07 | 9,53  | 2.23 | 80.0 | ± 9.6 % |
|               |  | Y    | 1.32 | 60.25 | 8.82  |      | 80.0 |         |
|               |  | Z    | 1.19 | 60.00 | 8.15  |      | 80.0 |         |
| 10485-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9)   | X    | 2.16 | 69.31 | 16.02 | 2.23 | 80.0 | ± 9.6 % |
|               |  | Y    | 1.69 | 66.06 | 14.04 |      | 80.0 |         |
|               |  | Z    | 1.93 | 68.38 | 15.12 |      | 80.0 |         |
| 10486-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz,<br>16-QAM, UL Subframe=2,3,4,7,8,9) | X    | 2.10 | 65.45 | 13.37 | 2.23 | 80.0 | ± 9.6 % |
| CANADA.       |  | Y    | 1.71 | 62.92 | 11.64 |      | 80.0 |         |
|               |  | Z    | 1.73 | 63.60 | 11.80 |      | 80.0 |         |
| 10487-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | X    | 2.11 | 65.08 | 13,16 | 2.23 | 80.0 | ± 9.6 % |
|               |  | Y    | 1.73 | 62.69 | 11.49 |      | 80.0 |         |
|               |  | Z    | 1.73 | 63.23 | 11.57 |      | 80.0 |         |
| 10488-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | X    | 2.58 | 69.55 | 17.35 | 2.23 | 80.0 | ± 9.6 % |
|               |  | Υ    | 2.27 | 67.73 | 16.25 |      | 80.0 |         |
|               |  | Z    | 2.45 | 69.44 | 17.18 |      | 80.0 |         |
| 10489-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X    | 2.75 | 67.17 | 16.06 | 2.23 | 80.0 | ± 9.6 % |
|               |  | Υ    | 2.49 | 65.86 | 15.18 |      | 80.0 |         |
|               |  | Z    | 2.63 | 67.13 | 15.78 |      | 80.0 |         |
| 10490-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | Х    | 2.83 | 67.06 | 16.01 | 2.23 | 80.0 | ± 9.6 % |
|               |  | Y    | 2.57 | 65.81 | 15.15 |      | 80.0 |         |
|               |  | Z    | 2.69 | 66.99 | 15.69 |      | 80.0 |         |
| 10491-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9)  | X    | 2.92 | 68.61 | 17.17 | 2.23 | 80.0 | ± 9.6 % |
|               |  | Y    | 2.65 | 67.28 | 16.37 |      | 80.0 |         |
|               |  | Z    | 2.77 | 68.48 | 17.08 |      | 80.0 |         |
| 10492-<br>AAC | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | Х    | 3.13 | 66.69 | 16.33 | 2.23 | 80.0 | ± 9.6 % |
| AAC           |  | Y    | 2.92 | 65.77 | 15.72 |      | 80.0 |         |
|               |  | 2012 | 6.34 | 03.77 | 10.72 |      | 00.0 |         |

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| 10493-   | LTE-TDD (SC-FDMA, 50% RB, 15 MHz.  | - | 3.19 | 66.60 | 16.28 | 2.23     | 80.0 | +000       |
|--|--|---|------|-------|-------|----------|------|------------|
| AAC  | 64-QAM, UL Subframe=2,3,4,7,8,9)   | × | 3.19 | 00.00 | 10.26 | 2.23     | 80.0 | ±9.6 %     |
| - CA   | The state of the s | Y | 2.99 | 65.70 | 15.69 |          | 80.0 |            |
|  |  | Z | 3.07 | 66.59 | 16.12 |          | 80.0 |            |
| 10494-<br>AAC  | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | × | 3.09 | 69.75 | 17.58 | 2.23     | 80.0 | ±9.6 %     |
| T. P. L. P.  | Decree of the control | Y | 2.78 | 68.23 | 16.72 |          | 80.0 |            |
|  |  | Z | 2.93 | 69.54 | 17.51 |          | 80.0 |            |
| 10495-   | LTE-TDD (SC-FDMA, 50% RB, 20 MHz,  | X | 3.15 | 66.91 | 16.53 | 2.23     | 80.0 | ±9.6 %     |
| AAC  | 16-QAM, UL Subframe=2,3,4,7,8,9)   | Y | 2.94 | 65.97 | 15.94 | 10000000 | 80.0 | LESCON AND |
|  |  | Z | 3.03 | 66.87 | 16.43 |          | 80.0 |            |
| 10496-<br>AAC  | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 3.24 | 66.76 | 16.49 | 2.23     | 80.0 | ± 9.6 %    |
|  |  | Y | 3.04 | 65.88 | 15.93 |          | 80.0 |            |
|  |  | Z | 3.12 | 66.74 | 16.39 |          | 80.0 |            |
| 10497-<br>AAA  | LTE-TDD (SC-FDMA, 100% RB, 1.4<br>MHz, QPSK, UL Subframe=2,3,4,7,8,9)  | Х | 0.93 | 60.00 | 8.57  | 2.23     | 80.0 | ± 9.6 %    |
|  | mining an only of ordering allowing the  | Y | 0.90 | 60.00 | 7.78  |          | 80.0 |            |
|  |  | Z | 0.86 | 60.00 | 7.53  |          | 80.0 |            |
| 10498-   | LTE-TDD (SC-FDMA, 100% RB, 1.4   | X | 1.10 | 60.00 | 7.25  | 2.23     | 80.0 | ±9.6 %     |
| AAA  | MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)   |   | 1.10 | 00.00 | 7.25  | 2.23     | 50.0 | 13.0 %     |
|  |  | Y | 1.08 | 60.00 | 6.57  |          | 80.0 |            |
|  |  | 2 | 1.05 | 60.00 | 6.14  |          | 80.0 | -12        |
| 10499-<br>AAA  | LTE-TDD (SC-FDMA, 100% RB, 1.4<br>MHz, 64-QAM, UL  | X | 1.12 | 60.00 | 7.08  | 2.23     | 80.0 | ± 9.6 %    |
|  | Subframe=2,3,4,7,8,9)  | Y | 1.11 | 60.00 | 6.40  |          | 80.0 |            |
|  |  | Z | 1.08 | 60.00 | 5.96  |          | 80.0 |            |
|  | LTE-TDD (SC-FDMA, 100% RB, 3 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9)  | X | 2.33 | 69.42 | 16.57 | 2.23     | 80.0 | ± 9.6 %    |
|  |  | Y | 1.93 | 66.88 | 15.00 |          | 80.0 |            |
|  |  | Z | 2.16 | 69.02 | 16.03 |          | 80.0 |            |
| 10501-<br>AAA  | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.42 | 66.55 | 14.60 | 2.23     | 80.0 | ± 9.6 %    |
|  |  | Y | 2.06 | 64.46 | 13.19 |          | 80.0 |            |
|  |  | Z | 2.16 | 65.57 | 13.59 |          | 80.0 |            |
| 10502-<br>AAA  | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.46 | 66.38 | 14.43 | 2.23     | 80.0 | ± 9.6 %    |
| Laura de la constante de la co |  | Y | 2.09 | 64.32 | 13.03 |          | 80.0 |            |
|  |  | Z | 2.17 | 65.33 | 13.38 |          | 80.0 |            |
| 10503-<br>AAC  | LTE-TDD (SC-FDMA, 100% RB, 5 MHz,<br>QPSK, UL Subframe=2,3,4,7,8,9)  | X | 2.55 | 69.37 | 17.25 | 2.23     | 80.0 | ± 9.6 %    |
|  |  | Y | 2.24 | 67.56 | 16.15 |          | 80.0 |            |
|  |  | Z | 2.42 | 69.25 | 17.08 |          | 80.0 |            |
| 10504-<br>AAC  | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.73 | 67.07 | 16.00 | 2.23     | 80.0 | ± 9.6 %    |
|  |  | Y | 2.48 | 65.76 | 15.11 |          | 80.0 |            |
|  |  | Z | 2.61 | 67.02 | 15.71 |          | 80.0 |            |
| 10505-<br>AAC  | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | X | 2.82 | 66.97 | 15.95 | 2.23     | 80.0 | ± 9.6 %    |
|  |  | Y | 2.56 | 65.72 | 15.09 |          | 80.0 |            |
|  |  | Z | 2.68 | 66.89 | 15.62 |          | 80.0 |            |
| 10506-<br>AAC  | LTE-TDD (SC-FDMA, 100% RB, 10<br>MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X | 3.07 | 69.63 | 17.51 | 2.23     | 80.0 | ± 9.6 %    |
|  |  | Y | 2.76 | 68.11 | 16.65 |          | 80.0 |            |
| F0300000   | CONTROL TO SECURE A SECURITION OF THE SECURITION | Z | 2.91 | 69.41 | 17.44 | - Lander | 80.0 |            |
| 10507-<br>AAC  | LTE-TDD (SC-FDMA, 100% RB, 10<br>MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)  | X | 3.14 | 66.85 | 16.49 | 2.23     | 80.0 | ±9.6 %     |
|  |  |   |      |       |       |          |      |            |
|  | Southern Electrical  | Y | 2.93 | 65.91 | 15.90 |          | 80.0 |            |

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| 10508-<br>AAC | LTE-TDD (SC-FDMA, 100% RB, 10<br>MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)  | X      | 3.23 | 66.69          | 16.44          | 2.23 | 80.0           | ± 9.6 % |
|---------------|--|--------|------|----------------|----------------|------|----------------|---------|
|               |  | Y      | 3.03 | 65.82          | 15.89          |      | 80.0           |         |
|               |  | Z      | 3.11 | 66.67          | 16.35          |      | 80.0           |         |
| 10509-<br>AAC | LTE-TDD (SC-FDMA, 100% RB, 15<br>MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | Х      | 3.52 | 68.96          | 17.25          | 2.23 | 80.0           | ± 9.6 % |
|               | We make the second of the seco | Y      | 3.24 | 67.75          | 16.57          |      | 80.0           |         |
|               |  | Z      | 3.37 | 68.79          | 17.22          |      | 80.0           |         |
| 10510-<br>AAC | LTE-TDD (SC-FDMA, 100% RB, 15<br>MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)  | Х      | 3.62 | 66.72          | 16.61          | 2.23 | 80.0           | ± 9.6 % |
|               | A CONTRACTOR OF THE PROPERTY O | Y      | 3.43 | 65.94          | 16.15          |      | 80.0           |         |
|               |  | Z      | 3.50 | 66.61          | 16.55          |      | 80.0           |         |
| 10511-<br>AAC | LTE-TDD (SC-FDMA, 100% RB, 15<br>MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)  | X      | 3.70 | 66.58          | 16.58          | 2.23 | 80.0           | ± 9.6 % |
|               |  | Y      | 3.51 | 65.85          | 16.14          |      | 80.0           |         |
| ar TV         |  | Z      | 3.58 | 66.51          | 16.52          |      | 80.0           |         |
| 10512-<br>AAC | LTE-TDD (SC-FDMA, 100% RB, 20<br>MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | X      | 3.56 | 70.02          | 17.57          | 2.23 | 80.0           | ± 9.6 % |
|               |  | Y      | 3.23 | 68.54          | 16.78          |      | 80.0           |         |
|               |  | Z      | 3.39 | 69.70          | 17.50          |      | 80.0           |         |
| 10513-<br>AAC | LTE-TDD (SC-FDMA, 100% RB, 20<br>MHz, 16-QAM, UL<br>Subframe=2,3,4,7,8,9)  | X      | 3.50 | 66.80          | 16.66          | 2.23 | 80.0           | ±9.6 %  |
|               |  | Y      | 3.31 | 65.98          | 16.18          |      | 80.0           |         |
|               | A MANAGEMENT AND A STATE OF THE | Z      | 3.39 | 66.65          | 16.59          |      | 80.0           |         |
| 10514-<br>AAC | LTE-TDD (SC-FDMA, 100% RB, 20<br>MHz, 64-QAM, UL<br>Subframe=2,3,4,7,8,9)  | Х      | 3.56 | 66.53          | 16.58          | 2.23 | 80.0           | ± 9.6 % |
|               |  | Y      | 3.38 | 65.75          | 16.13          |      | 80.0           |         |
|               |  | Z      | 3.45 | 66.40          | 16.52          |      | 80.0           |         |
| 10515-<br>AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2<br>Mbps, 99pc duty cycle)   | X      | 0.96 | 63.31          | 14.68          | 0.00 | 150.0          | ± 9.6 % |
|               |  | Y      | 0.87 | 62.23          | 13.64          |      | 150.0          |         |
|               |  | Z      | 0.95 | 63.24          | 14.49          | -    | 150.0          |         |
| 10516-<br>AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5<br>Mbps, 99pc duty cycle)   | X      | 0.59 | 70.32          | 17.28          | 0.00 | 150.0          | ± 9.6 % |
|               |  | Y      | 0.43 | 66.45          | 13.92          |      | 150.0          |         |
| -             |  | Z      | 0.56 | 69.40          | 16.67          | -    | 150.0          |         |
| 10517-<br>AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11<br>Mbps, 99pc duty cycle)  | X      | 0.81 | 65.09          | 15.27          | 0.00 | 150.0          | ±9.6 %  |
|               |  | Y      | 0.69 | 63.42          | 13.73          |      | 150.0          |         |
|               |  | Z      | 0.79 | 64.83          | 14.98          |      | 150.0          | -       |
| 10518-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9<br>Mbps, 99pc duty cycle)   | X      | 4.34 | 66.88          | 16.18          | 0.00 | 150.0          | ± 9.6 % |
|               |  | Y      | 4.22 | 66.51          | 15.92          |      | 150.0          |         |
| 10519-        | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12  | Z<br>X | 4.23 | 66.93<br>67.04 | 16.12<br>16.27 | 0.00 | 150.0          | ±9.6 %  |
| AAB           | Mbps, 99pc duty cycle)   |        | 4.55 |                | 40.00          |      | 400.0          |         |
|               |  | Y      | 4.36 | 66.68          | 16.01          |      | 150.0          |         |
|               |  | Z      | 4.35 | 67.07          | 16.19          |      | 150.0          |         |
| 10520-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18<br>Mbps, 99pc duty cycle)  | X      | 4.34 | 66.97          | 16.18          | 0.00 | 150.0          | ± 9.6 % |
|               |  | Y      | 4.22 | 66.59          | 15.92          |      | 150.0          |         |
| 10521-        | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24  | X      | 4.22 | 66.99<br>66.94 | 16.11          | 0.00 | 150.0<br>150.0 | ±9.6 %  |
| AAB           | Mbps, 99pc duty cycle)   | Y      | AAE  | 66 E4          | 15.00          |      | 450.0          |         |
|               |  | Z      | 4.15 | 66.54<br>66.93 | 15.89          |      | 150.0          |         |
| 10522-        | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36  | X      | 4.13 | 67.05          | 16.25          | 0.00 | 150.0          | ± 9.6 % |
| AAB           | Mbps, 99pc duty cycle)   | Y      | 4.19 | 66.65          | 15.97          | 0.00 | 150.0          | 1 5.0 % |
|               |  | Z      | 4.18 | 66.98          | 16.13          |      | 150.0          |         |
|               |  | 4      | 4.10 | 00.00          | 10.10          |      | 100.0          |         |

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| 10523-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)   | X | 4.26 | 67.08 | 16.19 | 0.00 | 150.0 | ± 9.6 % |
|---------------|--|---|------|-------|-------|------|-------|---------|
| and the       |  | Y | 4.13 | 66.69 | 15.91 |      | 150.0 |         |
|               |  | Z | 4.15 | 67.15 | 16.14 |      | 150.0 |         |
| 10524-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54<br>Mbps, 99pc duty cycle)  | X | 4.28 | 67.03 | 16.25 | 0.00 | 150.0 | ±9.6 %  |
|               | N-2-1-3-0-V  | Y | 4.15 | 66.64 | 15.98 |      | 150.0 |         |
|               |  | Z | 4.14 | 67.03 | 16.17 |      | 150.0 |         |
| 10525-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)  | X | 4.31 | 66.15 | 15.88 | 0.00 | 150.0 | ± 9.6 % |
|               |  | Y | 4.19 | 65.75 | 15.61 |      | 150.0 |         |
|               |  | Z | 4.20 | 66.20 | 15.83 |      | 150.0 |         |
| 10526-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)  | X | 4.43 | 66.41 | 15.99 | 0.00 | 150.0 | ± 9.6 % |
|               |  | Y | 4.30 | 66.01 | 15.72 |      | 150.0 |         |
|               |  | Z | 4.30 | 66.42 | 15.92 |      | 150.0 | V       |
| 10527-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)  | X | 4.36 | 66.39 | 15.93 | 0.00 | 150.0 | ± 9.6 % |
|               |  | Y | 4.23 | 65.97 | 15.65 |      | 150.0 |         |
|               |  | Z | 4.24 | 66.40 | 15.86 |      | 150.0 |         |
| 10528-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)  | X | 4.38 | 66.40 | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|               |  | Y | 4.25 | 65.99 | 15.69 |      | 150.0 |         |
|               |  | Z | 4.25 | 66.41 | 15.89 |      | 150.0 |         |
| 10529-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)  | × | 4.38 | 66.40 | 15.96 | 0.00 | 150.0 | ± 9.6 % |
|               | 1 11 M = 51 - 51 - M   | Y | 4.25 | 65.99 | 15.69 |      | 150.0 |         |
|               |  | Z | 4.25 | 66.41 | 15.89 |      | 150.0 |         |
| 10531-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)  | Х | 4.34 | 66.42 | 15.94 | 0.00 | 150.0 | ± 9.6 % |
|               |  | Y | 4.21 | 65.99 | 15.65 |      | 150.0 |         |
|               |  | Z | 4.20 | 66.38 | 15.85 |      | 150.0 |         |
| 10532-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)  | X | 4.23 | 66.28 | 15.87 | 0.00 | 150.0 | ± 9.6 % |
|               | - A  | Y | 4.09 | 65.84 | 15.58 |      | 150.0 |         |
|               |  | Z | 4.10 | 66.26 | 15.79 |      | 150.0 |         |
| 10533-<br>AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)  | X | 4.38 | 66.48 | 15.97 | 0.00 | 150.0 | ± 9.6 % |
|               | 1  | Y | 4.25 | 66.07 | 15.69 |      | 150.0 |         |
|               |  | Z | 4.25 | 66.50 | 15.90 |      | 150.0 |         |
| 10534-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)  | X | 4.94 | 66.38 | 16.03 | 0.00 | 150.0 | ± 9.6 % |
|               |  | Y | 4.83 | 66.04 | 15.82 |      | 150.0 |         |
|               |  | Z | 4.83 | 66.34 | 15.98 |      | 150.0 |         |
| 10535-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)  | X | 4.98 | 66.50 | 16.09 | 0.00 | 150.0 | ± 9.6 % |
| me or         | The Account Committee of the Committee o | Y | 4.87 | 66,15 | 15.88 |      | 150.0 |         |
|               |  | Z | 4.85 | 66.43 | 16.03 |      | 150.0 |         |
| 10536-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)  | X | 4.87 | 66.51 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
| Transition    |  | Y | 4.76 | 66.13 | 15.84 |      | 150.0 |         |
|               |  | Z | 4.75 | 66.43 | 16.01 |      | 150.0 |         |
| 10537-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)  | X | 4.94 | 66.51 | 16.07 | 0.00 | 150.0 | ± 9.6 % |
|               | 1370,25 E300011 - 5500001  | Y | 4.83 | 66.19 | 15.88 |      | 150.0 |         |
|               |  | Z | 4.83 | 66.50 | 16.04 |      | 150.0 |         |
| 10538-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)  | X | 5.00 | 66.46 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|               | 2-015.05000000000000000000000000000000000  | Y | 4.89 | 66.12 | 15.88 |      | 150.0 |         |
|               |  | Z | 4.87 | 66.39 | 16.02 |      | 150.0 |         |
| 10540-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)  | X | 4.93 | 66.42 | 16.08 | 0.00 | 150.0 | ± 9.6 % |
|               |  |   |      |       |       |      |       |         |
|               | 100000000000000000000000000000000000000  | Y | 4.82 | 66.06 | 15.87 |      | 150.0 |         |

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| 10541-                                  | IEEE 802.11ac WiFi (40MHz, MCS7,   | X | 4.92         | 66.35          | 16.03 | 0.00 | 150.0          | ± 9.6 % |
|---|--|---|--------------|----------------|-------|------|----------------|---------|
| AAB                                     | 99pc duty cycle)   | Y | 4.81         | 65.99          | 15.82 |      | 150.0          |         |
|   |  | Z | 4.81         | 66.31          | 15.98 |      | 150.0          |         |
| 10542-<br>AAB                           | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle)  | × | 5.07         | 66.45          | 16.09 | 0.00 | 150.0          | ± 9.6 % |
| 20.10                                   | oope daily dydicy  | Y | 4.96         | 66.11          | 15.90 |      | 150.0          |         |
|   |  | Z | 4.95         | 66.40          | 16.04 |      | 150.0          |         |
| 10543-<br>AAB                           | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle)  | X | 5,15         | 66.53          | 16.16 | 0.00 | 150.0          | ± 9.6 % |
|   | ospo dalij ojunoj  | Y | 5.05         | 66.25          | 16.00 |      | 150.0          |         |
|   |  | Z | 5.03         | 66.51          | 16.13 |      | 150.0          |         |
| 10544-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle)  | × | 5.29         | 66.46          | 16.02 | 0.00 | 150.0          | ± 9.6 % |
| CONTROL STATE                           | - CONTROL OF CONTROL O | Y | 5.19         | 66.11          | 15.83 |      | 150.0          |         |
|   |  | Z | 5.19         | 66.38          | 15.97 |      | 150.0          |         |
| 10545-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle)  | × | 5.46         | 66.89          | 16.19 | 0.00 | 150.0          | ± 9.6 % |
| and the second                          |  | Y | 5.37         | 66.61          | 16.04 |      | 150.0          |         |
|   |  | Z | 5.35         | 66.81          | 16.15 |      | 150.0          |         |
| 10546-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle)  | × | 5.32         | 66.57          | 16.05 | 0.00 | 150.0          | ± 9.6 % |
|   | West of the second seco | Y | 5.22         | 66.23          | 15.86 |      | 150.0          |         |
|   |  | Z | 5.22         | 66.48          | 15.99 |      | 150.0          |         |
| 10547-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle)  | × | 5.40         | 66.70          | 16.10 | 0.00 | 150.0          | ± 9.6 % |
|   |  | Y | 5.32         | 66.42          | 15.95 |      | 150.0          |         |
|   |  | Z | 5.33         | 66.71          | 16.11 |      | 150.0          |         |
| 10548-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle)  | X | 5.53         | 67.27          | 16.37 | 0.00 | 150.0          | ±9.6 %  |
|   |  | Y | 5.44         | 66.98          | 16.21 |      | 150.0          |         |
|   |  | Z | 5.38         | 67.07          | 16.27 |      | 150.0          |         |
| 10550-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle)  | × | 5.38         | 66.78          | 16.16 | 0.00 | 150.0          | ± 9.6 % |
|   |  | Y | 5.31         | 66.53          | 16.02 |      | 150.0          |         |
| *************************************** |  | Z | 5.31         | 66.81          | 16.17 |      | 150.0          |         |
| 10551-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle)  | × | 5.31         | 66,54          | 16.01 | 0.00 | 150.0          | ± 9.6 % |
|   |  | Y | 5.20         | 66.17          | 15.81 |      | 150.0          |         |
| -                                       |  | Z | 5.19         | 66.41          | 15.94 |      | 150.0          |         |
| 10552-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle)  | × | 5.30         | 66.58          | 16.03 | 0.00 | 150.0          | ± 9.6 % |
|   |  | Y | 5.19         | 66,23          | 15.83 |      | 150.0          |         |
|   |  | Z | 5.20         | 66.53          | 15.99 |      | 150.0          |         |
| 10553-<br>AAB                           | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle)  | X | 5.35         | 66.52          | 16.03 | 0.00 | 150.0          | ± 9.6 % |
|   |  | Y | 5.24         | 66.17          | 15.83 |      | 150.0          |         |
| 7000                                    |  | Z | 5.24         | 66.44          | 15.97 |      | 150.0          | 1676    |
| 10554-<br>AAC                           | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle)   | X | 5.71         | 66.79          | 16.10 | 0.00 | 150.0          | ± 9.6 % |
|   |  | Y | 5.62         | 66.47          | 15.93 |      | 150.0          |         |
|   |  | Z | 5.63         | 66.70          | 16.05 | 0.00 | 150.0          |         |
| 10555-<br>AAC                           | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle)   | X | 5.80         | 67.00          | 16.19 | 0.00 | 150.0          | ±9.6 %  |
|   |  | Y | 5.71         | 66.69          | 16.02 |      | 150.0          |         |
| 10556-                                  | IEEE 802.11ac WiFi (160MHz, MCS2,  | X | 5.70<br>5.84 | 66.87<br>67.12 | 16.12 | 0.00 | 150.0<br>150.0 | ± 9.6 % |
| AAC                                     | 99pc duty cycle)   |   | E 70         | 00 OF          | 40.00 |      | 150.0          |         |
|   |  | Y | 5.76         | 66.85          | 16.09 |      | 150.0          |         |
| 10557                                   | IEEE 902 44 oo WIEI /400 H II - 1400 C   | Z | 5.75         | 67.04          | 16.20 | 0.00 | 150.0          | +000    |
| 10557-<br>AAC                           | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle)   | X | 5.79         | 66.99          | 16.19 | 0.00 | 150.0          | ± 9.6 % |
|   |  | Y | 5.70         | 66.66          | 16.02 |      | 150.0          |         |
|   |  | Z | 5.70         | 66.88          | 16.14 |      | 150.0          |         |

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| 10558-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle)                  | X  | 5.80 | 67.03 | 16.23 | 0.00 | 150.0 | ± 9.6 % |
|---------------|---|----|------|-------|-------|------|-------|---------|
|               |   | Y  | 5.69 | 66.67 | 16.04 |      | 150.0 |         |
|               |   | Z  | 5.67 | 66.84 | 16.13 |      | 150.0 |         |
| 10560-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle)                  | X  | 5.82 | 66.97 | 16.24 | 0.00 | 150.0 | ± 9.6 % |
|               | L.V.  | Y  | 5.72 | 66.63 | 16.06 |      | 150.0 |         |
|               |   | Z  | 5.71 | 66.83 | 16.16 |      | 150.0 |         |
| 10561-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle)                  | Х  | 5.76 | 66.95 | 16.26 | 0.00 | 150.0 | ± 9.6 % |
|               |   | Y  | 5.66 | 66.63 | 16.09 |      | 150.0 |         |
|               |   | Z  | 5.65 | 66.81 | 16.18 |      | 150.0 |         |
| 10562-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle)                  | Х  | 5.80 | 67.11 | 16.34 | 0.00 | 150.0 | ± 9.6 % |
|               |   | Y  | 5.70 | 66.75 | 16.15 |      | 150.0 |         |
|               |   | Z  | 5.68 | 66.93 | 16.24 |      | 150.0 |         |
| 10563-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle)                  | X  | 5.91 | 67.11 | 16.30 | 0.00 | 150.0 | ± 9.6 % |
|               | 1001 - 0233 - 31  | Y  | 5,83 | 66.82 | 16.15 |      | 150.0 |         |
|               |   | Z  | 5.80 | 66.98 | 16.24 |      | 150.0 |         |
| 10564-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 9 Mbps, 99pc duty cycle)  | ×  | 4.65 | 66.88 | 16.30 | 0.46 | 150.0 | ± 9.6 % |
|               |   | Y  | 4.54 | 66.54 | 16.07 |      | 150.0 |         |
|               |   | Z  | 4.53 | 66.91 | 16.24 |      | 150.0 |         |
| 10565-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 12 Mbps, 99pc duty cycle) | X  | 4.85 | 67.29 | 16.62 | 0.46 | 150.0 | ± 9.6 % |
|               |   | Y  | 4.73 | 66.97 | 16.40 |      | 150.0 |         |
|               |   | Z  | 4.71 | 67.32 | 16.56 |      | 150.0 |         |
| 10566-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 18 Mbps, 99pc duty cycle) | Х  | 4.68 | 67.10 | 16.42 | 0.46 | 150.0 | ± 9.6 % |
| 71-1          |   | Y  | 4.56 | 66.75 | 16.18 |      | 150.0 |         |
|               |   | Z  | 4.55 | 67.11 | 16.35 |      | 150.0 |         |
| 10567-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 24 Mbps, 99pc duty cycle) | Х  | 4.72 | 67.51 | 16.80 | 0.46 | 150.0 | ± 9.6 % |
|               | 9 // II-2 / // // A   | Y  | 4.60 | 67.16 | 16.57 |      | 150.0 |         |
|               |   | Z  | 4.59 | 67.52 | 16.75 |      | 150.0 |         |
| 10568-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 36 Mbps, 99pc duty cycle) | X  | 4.57 | 66.80 | 16.14 | 0.46 | 150.0 | ± 9.6 % |
|               |   | Y  | 4.45 | 66.43 | 15.88 |      | 150.0 | -       |
|               |   | Z  | 4.42 | 66.71 | 16.01 |      | 150.0 |         |
| 10569-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 48 Mbps, 99pc duty cycle) | X  | 4.71 | 67.75 | 16.95 | 0.46 | 150.0 | ± 9.6 % |
|               |   | Y  | 4.59 | 67.42 | 16.73 |      | 150.0 |         |
|               |   | Z  | 4.60 | 67.83 | 16.93 |      | 150.0 |         |
| 10570-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 54 Mbps, 99pc duty cycle) | X  | 4.71 | 67.51 | 16.83 | 0.46 | 150.0 | ± 9.6 % |
| 100           | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2                             | Y  | 4.59 | 67.18 | 16.60 |      | 150.0 |         |
|               |   | Z  | 4.57 | 67.54 | 16.78 |      | 150.0 |         |
| 10571-<br>AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1<br>Mbps, 90pc duty cycle)        | Х  | 1.08 | 63.64 | 15.05 | 0.46 | 130.0 | ± 9.6 % |
|               |   | Y  | 0.98 | 62.63 | 14.12 |      | 130.0 |         |
|               |   | Z  | 1.06 | 63.58 | 14.89 |      | 130.0 |         |
| 10572-<br>AAA | IEEE 802,11b WiFi 2.4 GHz (DSSS, 2<br>Mbps, 90pc duty cycle)        | X  | 1.08 | 64.13 | 15.38 | 0.46 | 130.0 | ± 9.6 % |
|               |   | Y  | 0.98 | 63.05 | 14.41 |      | 130.0 |         |
|               |   | Z  | 1.07 | 64.06 | 15.22 | -    | 130.0 | i gu    |
| 10573-<br>AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5<br>Mbps, 90pc duty cycle)      | X  | 1.08 | 77.41 | 20.56 | 0.46 | 130.0 | ± 9.6 % |
|               |   | Y  | 0.73 | 71.46 | 16.79 |      | 130.0 |         |
|               |   | Z  | 0.99 | 75.97 | 19.89 |      | 130.0 |         |
| 10574-<br>AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11<br>Mbps, 90pc duty cycle)       | X  | 1.10 | 68.88 | 18.01 | 0.46 | 130.0 | ± 9.6 % |
|               |   | Y  | 0.95 | 66.93 | 16.52 |      | 130.0 |         |
|               |   | T. | 0.00 | 00.33 | 10.02 |      | 130.0 |         |

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| 10575-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 6 Mbps, 90pc duty cycle)   | X      | 4.42    | 66.59   | 16.28      | 0.46 | 130.0   | ± 9.6 %   |
|---------------|--|--------|---------|---------|------------|------|---------|-----------|
| interior .    |  | Y      | 4.31    | 66.26   | 16.05      |      | 130.0   |           |
|               |  | Z      | 4.30    | 66.63   | 16.21      |      | 130.0   |           |
| 10576-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 9 Mbps, 90pc duty cycle)   | X      | 4.45    | 66.80   | 16.37      | 0.46 | 130.0   | ± 9.6 %   |
|               |  | Y      | 4.34    | 66.48   | 16.14      |      | 130.0   |           |
|               |  | Z      | 4.33    | 66.87   | 16.32      |      | 130.0   |           |
| 10577-        | IEEE 802.11g WiFi 2.4 GHz (DSSS-   | X      | 4.61    | 67.03   | 16.52      | 0.46 | 130.0   | ± 9.6 %   |
| AAA           | OFDM, 12 Mbps, 90pc duty cycle)  | Y      | 4.49    | 66.71   | 16.29      | 0.40 | 130.0   | 1 3.0 %   |
|               |  | Z      | 4.48    | 67.07   |            |      |         |           |
| 10578-        | IEEE 802.11g WiFi 2.4 GHz (DSSS-   | X      |         |         | 16.45      | 0.40 | 130.0   | 2000      |
| AAA           | OFDM, 18 Mbps, 90pc duty cycle)  | 1552   | 4.51    | 67.18   | 16.63      | 0.46 | 130.0   | ±9.6 %    |
|               |  | Y      | 4.40    | 66.85   | 16.40      |      | 130.0   |           |
|               |  | Z      | 4.39    | 67.23   | 16.57      |      | 130.0   |           |
| 10579-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 24 Mbps, 90pc duty cycle)  | Х      | 4.26    | 66.33   | 15.85      | 0.46 | 130.0   | ±9.6 %    |
|               |  | Y      | 4.14    | 65.96   | 15.59      |      | 130.0   |           |
|               |  | Z      | 4.13    | 66.29   | 15.75      |      | 130.0   |           |
| 10580-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 36 Mbps, 90pc duty cycle)  | X      | 4.29    | 66.37   | 15.87      | 0.46 | 130.0   | ± 9.6 %   |
|               |  | Y      | 4.17    | 66.01   | 15.60      |      | 130.0   |           |
|               | CONTRACTOR OF THE STATE OF THE  | Z      | 4.14    | 66.28   | 15.72      |      | 130.0   | d synason |
| 10581-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 48 Mbps, 90pc duty cycle)  | X      | 4.43    | 67.26   | 16.60      | 0.46 | 130.0   | ± 9.6 %   |
|               |  | Y      | 4.31    | 66.92   | 16.36      |      | 130.0   |           |
| III W         | Large sall and the sale in the | Z      | 4.31    | 67.34   | 16.57      |      | 130.0   |           |
| 10582-<br>AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-<br>OFDM, 54 Mbps, 90pc duty cycle)  | Х      | 4.19    | 66.09   | 15.63      | 0.46 | 130.0   | ±9.6 %    |
|               |  | Y      | 4.07    | 65.73   | 15.36      |      | 130.0   |           |
|               |  | Z      | 4.05    | 66.04   | 15.51      |      | 130.0   |           |
| 10583-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6<br>Mbps, 90pc duty cycle)   | X      | 4.42    | 66.59   | 16.28      | 0.46 | 130.0   | ± 9.6 %   |
|               |  | Y      | 4.31    | 66.26   | 16.05      |      | 130.0   |           |
|               |  | Z      | 4.30    | 66.63   | 16.21      |      | 130.0   |           |
| 10584-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9<br>Mbps, 90pc duty cycle)   | х      | 4.45    | 66.80   | 16.37      | 0.46 | 130.0   | ± 9.6 %   |
|               |  | Y      | 4.34    | 66.48   | 16,14      |      | 130.0   | -         |
|               |  | Z      | 4.33    | 66.87   | 16.32      |      | 130.0   |           |
| 10585-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12<br>Mbps, 90pc duty cycle)  | X      | 4.61    | 67.03   | 16.52      | 0.46 | 130.0   | ± 9.6 %   |
| 9 112         | 111010100000000000000000000000000000000  | Y      | 4.49    | 66.71   | 16.29      |      | 130.0   |           |
|               |  | Z      | 4.48    | 67.07   | 16.45      |      | 130.0   |           |
| 10586-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18<br>Mbps, 90pc duty cycle)  | X      | 4.51    | 67.18   | 16.63      | 0.46 | 130.0   | ± 9.6 %   |
|               | 1  | Y      | 4.40    | 66.85   | 16.40      |      | 130.0   |           |
|               |  | Z      | 4.39    | 67.23   | 16.57      |      | 130.0   |           |
| 10587-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24<br>Mbps, 90pc duty cycle)  | X      | 4.26    | 66.33   | 15.85      | 0.46 | 130.0   | ± 9.6 %   |
|               | 4  | Y      | 4.14    | 65.96   | 15.59      |      | 130.0   |           |
|               |  | Z      | 4.13    | 66.29   | 15.75      |      | 130.0   |           |
| 10588-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36<br>Mbps, 90pc duty cycle)  | X      | 4.29    | 66.37   | 15.87      | 0.46 | 130.0   | ± 9.6 %   |
|               |  | Y      | 4.17    | 66.01   | 15.60      |      | 130.0   |           |
|               |  | Z      | 4.14    | 66.28   | 15.72      |      | 130.0   |           |
| 10589-<br>AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48<br>Mbps, 90pc duty cycle)  | X      | 4.43    | 67.26   | 16.60      | 0.46 | 130.0   | ± 9.6 %   |
| 7712          | mopo, oopo dati ojatoj   | Y      | 4.31    | 66.92   | 16.36      |      | 130.0   |           |
|               |  | Z      | 4.31    | 67.34   | 16.57      |      | 130.0   |           |
| 10590-        | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54  | X      | 4.19    | 66.09   | 15.63      | 0.46 | 130.0   | ±9.6 %    |
| AAB           | Mbps, 90pc duty cycle)   | 111550 | 0.00000 | 5005000 | 7050078051 | V.40 | 0.00000 | 1 3.0 76  |
|               |  | Y      | 4.07    | 65.73   | 15.36      |      | 130.0   |           |
|               |  | Z      | 4.05    | 66.04   | 15.51      |      | 130.0   |           |

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| 10591-<br>AAB | IEEE 802.11n (HT Mixed, 20MHz,<br>MCS0, 90pc duty cycle)   | X      | 4.58    | 66.69    | 16.41       | 0.46           | 130.0      | ± 9.6 %      |
|---------------|--|--------|---------|----------|-------------|----------------|------------|--------------|
|               |  | Y      | 4.47    | 66.39    | 16.20       |                | 130.0      |              |
|               |  | Z      | 4.47    | 66.76    | 16.36       |                | 130.0      |              |
| 10592-<br>AAB | IEEE 802.11n (HT Mixed, 20MHz,<br>MCS1, 90pc duty cycle)   | X      | 4.69    | 66.97    | 16.53       | 0.46           | 130.0      | ± 9.6 %      |
|               | moon, sopo and of sion   | Y      | 4.58    | 66.66    | 16.32       |                | 130.0      |              |
|               |  | Z      | 4.56    | 67.00    | 16.47       |                | 130.0      |              |
| 10593-        | IEEE 802.11n (HT Mixed, 20MHz,   | X      | 4.61    | 66.84    | 16.38       | 0.46           | 130.0      | ± 9.6 %      |
| AAB           | MCS2, 90pc duty cycle)   | 7500   | 1100517 | 120250   | 1000000     | 0.40           | FRANCE.    | 1 9.0 %      |
|               |  | Y      | 4.49    | 66.52    | 16.16       |                | 130.0      |              |
|               |  | Z      | 4.48    | 66.87    | 16.32       |                | 130.0      |              |
| 10594-<br>AAB | IEEE 802.11n (HT Mixed, 20MHz,<br>MCS3, 90pc duty cycle)   | X      | 4.66    | 67.02    | 16.56       | 0.46           | 130.0      | ± 9.6 %      |
|               | The state of the s | Y      | 4.55    | 66.71    | 16.34       |                | 130.0      |              |
|               |  | Z      | 4.54    | 67.06    | 16.50       |                | 130.0      |              |
| 10595-<br>AAB | IEEE 802.11n (HT Mixed, 20MHz,<br>MCS4, 90pc duty cycle)   | X      | 4.63    | 67.00    | 16.46       | 0.46           | 130.0      | ± 9.6 %      |
| 167212        |  | Y      | 4.51    | 66.68    | 16.25       |                | 130.0      |              |
|               |  | Z      | 4.50    | 67.04    | 16.41       | 41             | 130.0      |              |
| 10596-        | IEEE 802.11n (HT Mixed, 20MHz,   | X      | 4.56    | 66.95    | 16.45       | 0.46           | 130.0      | ± 9.6 %      |
| AAB           | MCS5, 90pc duty cycle)   | 72747  | Means   | 10130836 | 135563611.  | TREMESE:       | 23174362   | 10/70/560900 |
| 77920         | STATE OF THE STATE | Y      | 4.44    | 66.62    | 16.22       |                | 130.0      |              |
|               |  | Z      | 4.42    | 66.95    | 16.38       |                | 130.0      |              |
| 10597-<br>AAB | IEEE 802.11n (HT Mixed, 20MHz,<br>MCS6, 90pc duty cycle)   | ×      | 4.51    | 66.82    | 16.30       | 0.46           | 130.0      | ± 9.6 %      |
| 0.10          | mood, dopo daty dyddy  | Y      | 4.39    | 66.48    | 16.06       |                | 130.0      |              |
|               |  | Z      | 4.38    | 66.82    | 16.22       |                | 130.0      |              |
| 10598-<br>AAB | IEEE 802.11n (HT Mixed, 20MHz,<br>MCS7, 90pc duty cycle)   | ×      | 4,51    | 67.06    | 16.58       | 0.46           | 130.0      | ± 9.6 %      |
| 70.0          | moor, supe daty cycley   | Y      | 4.39    | 66.73    | 16.35       |                | 130.0      |              |
|               |  | Z      | 4.39    | 67.10    | 16.52       |                | 130.0      |              |
| 10599-<br>AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle)  | ×      | 5.26    | 67,16    | 16.67       | 0.46           | 130.0      | ± 9.6 %      |
| MAD           | Wicoo, sope duty cycle)  | Y      | 5.19    | 66.95    | 16.55       |                | 130.0      |              |
|               |  | Z      | 5.18    | 67.23    | 16.69       |                | 130.0      |              |
| 10600-<br>AAB | IEEE 802.11n (HT Mixed, 40MHz,<br>MCS1, 90pc duty cycle)   | X      | 5.35    | 67.49    | 16.81       | 0.46           | 130.0      | ± 9.6 %      |
| MD            | MCS1, Sope daty cycle)   | Y      | 5.29    | 67.35    | 16.72       |                | 130.0      |              |
|               |  | Z      | 5.23    | 67.44    | 16.76       |                | 130.0      |              |
| 10601-<br>AAB | IEEE 802.11n (HT Mixed, 40MHz,<br>MCS2, 90pc duty cycle)   | X      | 5.26    | 67.29    | 16.73       | 0.46           | 130.0      | ± 9.6 %      |
| MMD           | MC32, Supe duty cycle)   | Y      | 5.19    | 67.12    | 16.62       |                | 130.0      |              |
|               |  |        | 5.20    | 67.45    | 16.79       |                | 130.0      |              |
| 10602-        | IEEE 802.11n (HT Mixed, 40MHz,   | Z<br>X | 5.35    | 67.45    | 16.64       | 0.46           | 130.0      | ± 9.6 %      |
| AAB           | MCS3, 90pc duty cycle)   | Y      | 5,27    | 67.40    | 16.52       |                | 120.0      | -            |
|               |  |        |         | 67.10    | 16.53       |                | 130.0      |              |
| 10000         | IEEE 900 11a /UT March 40M/  | Z      | 5.22    | 67.23    | 16.59       | 0.40           | 130.0      | 1000         |
| 10603-<br>AAB | IEEE 802.11n (HT Mixed, 40MHz,<br>MCS4, 90pc duty cycle)   | X      | 5.42    | 67.60    | 16.94       | 0.46           | 130.0      | ± 9.6 %      |
|               |  | Y      | 5,33    | 67,37    | 16.81       |                | 130.0      |              |
|               |  | Z      | 5.26    | 67.44    | 16.84       |                | 130.0      |              |
| 10604-<br>AAB | IEEE 802.11n (HT Mixed, 40MHz,<br>MCS5, 90pc duty cycle)   | ×      | 5.29    | 67.20    | 16.71       | 0.46           | 130.0      | ± 9.6 %      |
| ~~~           | ALTONO DE LA CONTROLE  | Y      | 5.19    | 66.89    | 16.54       |                | 130.0      |              |
|               |  | Z      | 5.14    | 67.01    | 16.59       |                | 130.0      |              |
| 10605-<br>AAB | IEEE 802.11n (HT Mixed, 40MHz,<br>MCS6, 90pc duty cycle)   | ×      | 5.34    | 67.34    | 16.78       | 0.46           | 130.0      | ± 9.6 %      |
|               |  | Y      | 5.26    | 67.13    | 16.66       |                | 130.0      |              |
|               |  | Z      | 5.20    | 67.25    | 16.72       |                | 130.0      |              |
|               |  |        | 5.14    | 66.81    | 16.37       | 0.46           | 130.0      | ± 9.6 %      |
|               | IEEE 802.11n (HT Mixed, 40MHz,<br>MCS7, 90nc duty cycle)   | X      | 200     | 3000     | DESCRIBE OF | - Construction | - Williams | X41000000    |
| 10606-<br>AAB | MCS7, 90pc duty cycle)   | Y      | 5.06    | 66.62    | 16.25       | 1000000        | 130.0      | 201202100    |

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|                 |  |   |      |       | -     |             |       |           |
|-----------------|--|---|------|-------|-------|-------------|-------|-----------|
| 10607-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle)  | × | 4.43 | 66.05 | 16.06 | 0.46        | 130.0 | ± 9.6 %   |
| 1.7             |  | Y | 4.31 | 65.70 | 15.83 |             | 130.0 |           |
|                 |  | Z | 4.32 | 66.12 | 16.02 |             | 130.0 |           |
| 10608-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle)  | X | 4.56 | 66.36 | 16.20 | 0.46        | 130.0 | ± 9.6 %   |
|                 | - I - I - I - I - I - I - I - I - I - I  | Y | 4.44 | 66.01 | 15.97 |             | 130.0 |           |
|                 |  | Z | 4.43 | 66.38 | 16.15 |             | 130.0 |           |
| 10609-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle)  | × | 4.46 | 66.19 | 16.02 | 0.46        | 130.0 | ± 9.6 %   |
| ride collection |  | Y | 4.34 | 65.83 | 15.77 |             | 130.0 |           |
|                 |  | Z | 4.33 | 66.21 | 15.96 |             | 130.0 |           |
| 10610-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle)  | × | 4.51 | 66.37 | 16.19 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.39 | 66.01 | 15.96 |             | 130.0 |           |
|                 |  | Z | 4.38 | 66.40 | 16.14 |             | 130.0 |           |
| 10611-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle)  | × | 4.42 | 66.15 | 16.03 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.30 | 65.79 | 15.79 |             | 130.0 |           |
|                 |  | Z | 4.29 | 66.16 | 15.97 | 40,000      | 130.0 | - Inches  |
| 10612-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc duty cycle)  | X | 4.41 | 66.27 | 16.06 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.28 | 65.89 | 15.81 |             | 130.0 |           |
|                 | Control of the Contro | Z | 4.26 | 66.23 | 15.98 | harantifen. | 130.0 |           |
| 10613-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle)  | X | 4.40 | 66.08 | 15.90 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.28 | 65.70 | 15.65 |             | 130.0 |           |
| (C              |  | Z | 4.26 | 66.05 | 15.81 | 00000       | 130.0 |           |
| 10614-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc duty cycle)  | X | 4.38 | 66.33 | 16.17 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.25 | 65.95 | 15.92 |             | 130.0 |           |
|                 | A WAR I STATE THE TAX TO THE WINDOWS AND A 1994 THE TAX  | Z | 4.25 | 66.33 | 16.10 | A           | 130.0 |           |
| 10615-<br>AAB   | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle)  | X | 4,41 | 65.98 | 15.79 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.29 | 65.61 | 15.54 |             | 130.0 |           |
| macues.         | AND HERE THE PERSON AND SERVICE THE PERSON   | Z | 4.27 | 65.99 | 15.72 |             | 130.0 |           |
| 10616-<br>AAB   | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc duty cycle)  | × | 5.07 | 66.34 | 16.25 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.97 | 66.04 | 16.07 |             | 130.0 |           |
|                 |  | Z | 4.96 | 66.31 | 16.21 |             | 130.0 |           |
| 10617-<br>AAB   | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle)  | × | 5.10 | 66.45 | 16.28 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 5.00 | 66.15 | 16.11 |             | 130.0 |           |
|                 |  | Z | 4.98 | 66.39 | 16.23 |             | 130.0 | - 18/8-90 |
| 10618-<br>AAB   | IEEE 802.11ac WiFI (40MHz, MCS2, 90pc duty cycle)  | × | 5.02 | 66.53 | 16.33 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.91 | 66.19 | 16.14 |             | 130.0 |           |
|                 |  | Z | 4.89 | 66.45 | 16.27 |             | 130.0 | - 000     |
| 10619-<br>AAB   | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle)  | × | 5.04 | 66.36 | 16.18 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 4.96 | 66.11 | 16.03 |             | 130.0 |           |
|                 | Haraman Marie and Haraman Resident   | Z | 4.94 | 66.38 | 16.17 | 1000        | 130.0 |           |
| 10620-<br>AAB   | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle)  | × | 5.11 | 66.35 | 16.22 | 0.46        | 130.0 | ± 9.6 %   |
|                 |  | Y | 5.01 | 66.06 | 16.05 |             | 130.0 |           |
|                 |  | Z | 4.98 | 66.26 | 16.16 |             | 130.0 |           |
| 10621-<br>AAB   | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle)  | × | 5.12 | 66.47 | 16.41 | 0.46        | 130.0 | ±9.6 %    |
|                 |  | Y | 5.02 | 66,16 | 16.23 |             | 130.0 |           |
|                 |  | Z | 5.00 | 66.43 | 16.37 |             | 130.0 | No. II    |
| 10622-<br>AAB   | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle)  | × | 5.10 | 66.55 | 16.44 | 0.46        | 130.0 | ±9.6 %    |
|                 | * * * * * * * * * * * * * * * * * * *  | Y | 5.00 | 66.25 | 16.27 |             | 130.0 |           |
|                 |  | Z |      | 66.50 |       |             |       |           |

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| 10623-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle)  | Х | 5.00    | 66.11        | 16.08      | 0.46 | 130.0  | ± 9.6 % |
|---------------|--|---|---------|--------------|------------|------|--------|---------|
|               |  | Y | 4.90    | 65.81        | 15.90      |      | 130.0  |         |
|               |  | Z | 4.89    | 66.10        | 16.05      |      | 130.0  | 1 50    |
| 10624-<br>AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle)  | X | 5.19    | 66.37        | 16.28      | 0.46 | 130.0  | ± 9.6 % |
|               |  | Y | 5.10    | 66.09        | 16.12      |      | 130.0  |         |
|               |  | 2 | 5.07    | 66.34        | 16.24      |      | 130.0  |         |
| 10625-        | IEEE 802.11ac WiFi (40MHz, MCS9,   | X | 5.27    | 66.50        | 16.40      | 0.46 | 130.0  | ± 9.6 % |
| AAB           | 90pc duty cycle)   | Y | 5.19    | 66.27        | 16.28      | 3,30 | 130.0  | 20.0.0  |
|               |  | Z | 5.16    | 66.52        | 16.40      |      | 130.0  |         |
| 10626-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle)  | X | 5.40    | 66.37        | 16.20      | 0.46 | 130.0  | ± 9.6 % |
| 7410          | Sope daty cycle)   | Y | 5.31    | 66.07        | 16,04      |      | 130.0  |         |
|               |  | Z | 5.31    | 66.31        | 16.17      |      | 130.0  |         |
| 10627-        | IEEE 802.11ac WiFi (80MHz, MCS1,   | X | 5.62    | 66.96        | 16.47      | 0.46 | 130.0  | ± 9.6 % |
| AAB           | 90pc duty cycle)   | Y | 7003850 | DESERVER III | (1000011A) | 0.40 | 377755 | £ 9.0 % |
|               |  |   | 5.56    | 66.76        | 16.37      |      | 130.0  |         |
| 10000         | IEEE 000 44 MIEI 1004 H III 14000  | Z | 5.52    | 66.91        | 16.44      | 0.40 | 130.0  | 1500    |
| 10628-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle)  | × | 5.39    | 66.34        | 16.09      | 0.46 | 130.0  | ± 9.6 % |
|               |  | Y | 5.30    | 66.04        | 15.92      |      | 130.0  |         |
|               |  | Z | 5.29    | 66.26        | 16.04      |      | 130.0  |         |
| 10629-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle)  | × | 5.50    | 66.54        | 16.19      | 0.46 | 130.0  | ± 9.6 % |
|               |  | Y | 5,44    | 66.36        | 16.08      |      | 130.0  |         |
|               |  | Z | 5.44    | 66.63        | 16.23      |      | 130.0  |         |
| 10630-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle)  | × | 5.71    | 67.39        | 16.62      | 0.46 | 130.0  | ± 9.6 % |
| 7.5           |  | Y | 5.64    | 67.17        | 16.50      |      | 130.0  |         |
|               |  | Z | 5.54    | 67.11        | 16.48      | -    | 130.0  |         |
| 10631-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle)  | × | 5.70    | 67.46        | 16.84      | 0.46 | 130.0  | ± 9.6 % |
|               | Contract to the state of the st | Y | 5.61    | 67.18        | 16.70      |      | 130.0  |         |
|               |  | Z | 5.56    | 67.29        | 16.76      |      | 130.0  |         |
| 10632-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle)  | × | 5.63    | 67.17        | 16.72      | 0.46 | 130.0  | ± 9.6 % |
| 10-11         | Total Section 1  | Y | 5.58    | 67.02        | 16.64      |      | 130.0  |         |
|               | CLEU LA  | Z | 5.57    | 67.27        | 16.77      |      | 130.0  |         |
| 10633-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle)  | × | 5.42    | 66.43        | 16.17      | 0.46 | 130.0  | ± 9.6 % |
|               |  | Y | 5.32    | 66.10        | 15.99      |      | 130.0  |         |
|               |  | Z | 5.30    | 66.32        | 16.11      |      | 130.0  |         |
| 10634-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle)  | X | 5.45    | 66.63        | 16.32      | 0.46 | 130.0  | ± 9.6 % |
| HILLS.        |  | Y | 5.35    | 66.31        | 16.16      |      | 130.0  |         |
|               |  | Z | 5.35    | 66.57        | 16.29      |      | 130.0  |         |
| 10635-<br>AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle)  | X | 5.30    | 65.85        | 15.65      | 0.46 | 130.0  | ± 9.6 % |
| -             |  | Y | 5.21    | 65.54        | 15.48      |      | 130.0  |         |
|               |  | Ż | 5.19    | 65.76        | 15.60      |      | 130.0  |         |
| 10636-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc duty cycle)   | × | 5.84    | 66.72        | 16.29      | 0.46 | 130.0  | ± 9.6 % |
| 70200E-       |  | Y | 5.76    | 66.45        | 16.15      |      | 130.0  |         |
|               |  | Z | 5.76    | 66.66        | 16.26      |      | 130.0  |         |
| 10637-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc duty cycle)   | × | 5.95    | 67.01        | 16.43      | 0.46 | 130.0  | ± 9.6 % |
|               |  | Y | 5.88    | 66.76        | 16.30      |      | 130.0  |         |
|               |  | Z | 5.85    | 66.89        | 16.37      |      | 130.0  |         |
| 10638-        | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle)   | X | 5.98    | 67.09        | 16.44      | 0.46 | 130.0  | ± 9.6 % |
| AAC           |  |   |         |              |            |      |        |         |
| AAC           | sope daty cycle)   | Y | 5.91    | 66.84        | 16.31      |      | 130.0  |         |

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| 10639-        | IEEE 802.11ac WiFi (160MHz, MCS3,  | X | 5.93  | 66.96 | 16.42 | 0.46  | 130.0 | ± 9.6 % |
|---------------|--|---|-------|-------|-------|-------|-------|---------|
| AAC           | 90pc duty cycle)   | 1 |       |       |       |       | 100.0 | 20.070  |
|               |  | Y | 5.85  | 66.68 | 16.27 |       | 130.0 |         |
| 10010         | IEEE 000 44 - 11/15 (40014) - 1400   | Z | 5.84  | 66.87 | 16.37 |       | 130.0 |         |
| 10640-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle)   | X | 5.89  | 66.83 | 16.30 | 0.46  | 130.0 | ± 9.6 % |
|               |  | Y | 5.79  | 66.50 | 16.13 |       | 130.0 |         |
| 10011         |  | Z | 5.76  | 66.65 | 16.20 |       | 130.0 |         |
| 10641-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc duty cycle)   | X | 5.99  | 66.93 | 16.36 | 0.46  | 130.0 | ± 9.6 % |
|               |  | Y | 5.93  | 66.70 | 16.25 |       | 130.0 |         |
| 10010         | 1555 000 44 1455 7150 E  | Z | 5.89  | 66.83 | 16.32 |       | 130.0 |         |
| 10642-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc duty cycle)   | X | 6.01  | 67.13 | 16.63 | 0.46  | 130.0 | ± 9.6 % |
|               |  | Y | 5.93  | 66.84 | 16.49 |       | 130.0 |         |
| 10643-        | UFFF 000 44 - 140FF (4004 H) 440 FF  | Z | 5.91  | 67.00 | 16.57 |       | 130.0 | -       |
| AAC           | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc duty cycle)   | X | 5.86  | 66.81 | 16.36 | 0.46  | 130.0 | ± 9.6 % |
|               |  | Y | 5.78  | 66.52 | 16.22 |       | 130.0 |         |
| 10011         | IEEE AAA 11 MEE  | Z | 5.75  | 66.66 | 16.29 |       | 130.0 |         |
| 10644-<br>AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc duty cycle)   | X | 5.91  | 66.99 | 16,47 | 0.46  | 130.0 | ± 9.6 % |
|               |  | Y | 5.82  | 66.67 | 16.31 |       | 130.0 |         |
| 1001-         |  | Z | 5.80  | 66.82 | 16.38 |       | 130.0 |         |
| 10645-<br>AAC | IEEE 802.11ac WIFI (160MHz, MCS9, 90pc duty cycle)   | X | 6.04  | 67.04 | 16.47 | 0.46  | 130.0 | ± 9.6 % |
|               |  | Y | 5.97  | 66.82 | 16.36 |       | 130.0 |         |
|               |  | Z | 5.92  | 66.90 | 16.40 |       | 130.0 |         |
| 10646-<br>AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | X | 5.85  | 87.94 | 30.48 | 9.30  | 60.0  | ± 9.6 % |
|               |  | Y | 5.37  | 85.81 | 29.63 |       | 60.0  |         |
|               |  | Z | 4,49  | 83.14 | 29.09 |       | 60.0  |         |
| 10647-<br>AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)   | X | 5.17  | 85.51 | 29.66 | 9.30  | 60.0  | ± 9.6 % |
|               |  | Y | 4.78  | 83.60 | 28.89 |       | 60.0  |         |
|               |  | Z | 4.02  | 80.87 | 28.26 |       | 60.0  |         |
| 10648-<br>AAA | CDMA2000 (1x Advanced)   | X | 0.51  | 61.76 | 8.43  | 0.00  | 150.0 | ±9.6 %  |
|               |  | Y | 0.38  | 60.00 | 6.13  |       | 150.0 |         |
|               |  | Z | 0.38  | 60.10 | 6.48  |       | 150.0 |         |
| 10652-<br>AAB | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1,<br>Clipping 44%)  | X | 3.13  | 65.98 | 15.78 | 2.23  | 80.0  | ±9.6 %  |
|               | 1 - 30/A - 7/2 31 <del>4</del>   | Y | 2.93  | 65.12 | 15.15 |       | 80.0  |         |
|               |  | Z | 3.02  | 66.07 | 15.57 |       | 80.0  |         |
| 10653-<br>AAB | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1,<br>Clipping 44%)   | X | 3.69  | 65.40 | 16.13 | 2.23  | 80.0  | ± 9.6 % |
|               | - 22(19)1 - 17 - 19)1  | Y | 3.54  | 64.83 | 15.74 |       | 80.0  |         |
|               |  | Z | 3.60  | 65.47 | 16.04 |       | 80.0  |         |
| 10654-<br>AAB | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1,<br>Clipping 44%)   | X | 3.72  | 65.03 | 16.17 | 2.23  | 80.0  | ± 9.6 % |
| INCOM.        | TO THE STATE OF TH | Y | 3.58  | 64.50 | 15.83 |       | 80.0  |         |
|               |  | Z | 3.65  | 65.07 | 16.11 |       | 80.0  |         |
| 10655-<br>AAB | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1,<br>Clipping 44%)   | X | 3.80  | 64.95 | 16.21 | 2.23  | 80.0  | ± 9.6 % |
| tree from the | 1 m x 1 m m x 1 200 m 2 m 1 m 1 m / 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m  | Y | 3.67  | 64.43 | 15.88 |       | 80.0  |         |
|               |  | Z | 3.74  | 64.95 | 16.16 | 124   | 80.0  |         |
| 10658-<br>AAA | Pulse Waveform (200Hz, 10%)  | × | 4.43  | 71.88 | 12.89 | 10.00 | 50.0  | ±9.6 %  |
| THE TRANSPORT |  | Y | 2.96  | 67.08 | 10.79 |       | 50.0  |         |
|               |  | Z | 4.92  | 73.02 | 13.29 |       | 50.0  |         |
| 10659-<br>AAA | Pulse Waveform (200Hz, 20%)  | × | 21.85 | 87.99 | 16.66 | 6.99  | 60.0  | ± 9.6 % |
| A-14-14EF7    |  | Y | 1.49  | 64.48 | 8.54  |       | 60.0  |         |
|               |  |   |       |       |       |       |       |         |

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February 26, 2018

| 10660-<br>AAA | Pulse Waveform (200Hz, 40%)  | × | 100.00 | 100.24 | 18.17 | 3.98 | 80.0  | ± 9.6 %    |
|---------------|--|---|--------|--------|-------|------|-------|------------|
|               |  | Y | 0.44   | 60.00  | 5.03  |      | 80.0  |            |
|               | ALLOW THE THE PROPERTY OF THE PARTY OF THE P | Z | 100.00 | 101.16 | 18.48 |      | 80.0  | CONTRACTOR |
| 10661-<br>AAA | Pulse Waveform (200Hz, 60%)  | X | 100.00 | 101.13 | 17.57 | 2.22 | 100.0 | ± 9.6 %    |
|               |  | Y | 0.24   | 60.00  | 3.65  |      | 100.0 |            |
| V=2.50.70     |  | Z | 100.00 | 102.26 | 17.94 |      | 100.0 |            |
| 10662-<br>AAA | Pulse Waveform (200Hz, 80%)  | X | 100.00 | 99.08  | 15.66 | 0.97 | 120.0 | ± 9.6 %    |
|               |  | Y | 3.24   | 108.92 | 7.51  |      | 120.0 |            |
|               |  | Z | 100.00 | 98.42  | 15.34 |      | 120.0 |            |

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

# 1.1. 150 Dipole Calibration Certificate

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





S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
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

CCIC-HTW (Auden)

Certificate No: CLA150-4024\_Feb18

| Diject  | CLA150 - SN: 402  | 24   |  |
|---|---|--|--|
| Calibration procedure(s)  | QA CAL-15.v8<br>Calibration process   | dure for system validation source  | s below 700 MHz  |
| Calibration date:   | February 21, 2018   | 3  |  |
| This calibration certificate docume<br>The measurements and the uncer   | ents the traceability to natio<br>tainties with confidence pr                                   | onal standards, which realize the physical unit<br>obability are given on the following pages and  | is of measurements (SI).<br>If are part of the certificate.  |
| All calibrations have been conduc<br>Calibration Equipment used (M&T  |   | y facility: environment temperature (22 ± 3)°C   | and humidity < 70%.  |
|   | ID #  | Cal Date (Certificate No.)   | Scheduled Calibration  |
| Primary Standards   | SN: 104778  | 04-Apr-17 (No. 217-02521/02522)  | Apr-18   |
| Power meter NRP   | SN: 104778<br>SN: 103244  | 04-Apr-17 (No. 217-02521/12522)  | Apr-18   |
| ower sensor NRP-Z91   | SN: 103244<br>SN: 103245  | 04-Apr-17 (No. 217-02522)  | Apr-18   |
| ower sensor NRP-Z91   |   | 07-Apr-17 (No. 217-02528)  | Apr-18   |
| Reference 20 dB Attenuator  | SN: 5277 (20x)  | 07-Apr-17 (No. 217-02529)  | Apr-18   |
| ype-N mismatch combination  | SN: 5047.2 / 06327  | 30-Dec-17 (No. EX3-3877_Dec17)   | Dec-18   |
|   | SN: 3877<br>SN: 654   | 24-Jul-17 (No. DAE4-654_Jul17)   | Jul-18   |
|   | 314. 004  |  |  |
| DAE4  | ID#   | Check Date (in house)  | Scheduled Check  |
| OAE4<br>Secondary Standards   | 14578508556<br>1445557  | Check Date (in house)<br>06-Apr-16 (No. 217-02285/02284)   | In house check: Jun-18   |
| OAE4<br>Secondary Standards<br>Power meter E4419B   | ID#   | The state of the s | In house check: Jun-18<br>In house check: Jun-18   |
| DAE4 Secondary Standards Power meter E4419B Power sensor E4412A   | ID#<br>SN: GB41293874   | 06-Apr-16 (No. 217-02285/02284)  | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18   |
| DAE4 Secondary Standards Power meter E44198 Power sensor E4412A Power sensor E4412A   | ID #<br>SN: GB41293874<br>SN: MY41498087  | 06-Apr-16 (No. 217-02285/02284)<br>06-Apr-16 (No. 217-02285)   | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18                           |
| DAE4 Secondary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A RF generator HP 8648C   | ID #<br>SN: GB41293874<br>SN: MY41498087<br>SN: 000110210                                       | 06-Apr-16 (No. 217-02285/02284)<br>06-Apr-16 (No. 217-02285)<br>06-Apr-16 (No. 217-02284   | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18   |
| Reference Probe EX3DV4 DAE4  Secondary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A RF generator HP 8648C Network Analyzer HP 8753E | ID #<br>SN: GB41293874<br>SN: MY41499067<br>SN: 000110210<br>SN: US3642U01700                   | 06-Apr-16 (No. 217-02285/02284)<br>06-Apr-16 (No. 217-02285)<br>06-Apr-16 (No. 217-02284<br>04-Aug-99 (in house check Jun-16)<br>18-Oct-01 (in house check Oct-17)<br>Function   | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18                           |
| Secondary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A RF generator HP 8648C  | ID #<br>SN: GB41293874<br>SN: MY41499067<br>SN: 000110210<br>SN: US3642U01700<br>SN: US37390585 | 06-Apr-16 (No. 217-02285/02284)<br>06-Apr-16 (No. 217-02285)<br>06-Apr-16 (No. 217-02284<br>04-Aug-99 (in house check Jun-16)<br>18-Oct-01 (in house check Oct-17)   | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Oct-18 |

Certificate No: CLA150-4024\_Feb18

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





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

Accreditation No.: SCS 0108

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

Glossary:

TSL ConvF

N/A

tissue simulating liquid

sensitivity in TSL / NORM x,y,z 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

 EC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016

c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010

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

#### Additional Documentation:

e) 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 source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss: This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. 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%.

Certificate No: CLA150-4024\_Feb18

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#### Measurement Conditions

DASY system configuration, as far as not given on page 1

| DASY Version         | DASY5                  | V52.10.0                         |
|----------------------|------------------------|----------------------------------|
| Extrapolation        | Advanced Extrapolation |                                  |
| Phantom              | ELI4 Flat Phantom      | Shell thickness: 2 ± 0.2 mm      |
| EUT Positioning      | Touch Position         |                                  |
| Zoom Scan Resolution | dx, dy = mm, dz = mm   | Graded Ratio = 1.4 (Z direction) |
| Frequency            | 150 MHz ± 1 MHz        | The second                       |

Head TSL parameters
The following parameters and calculations were applied.

|   | Temperature     | Permittivity | Conductivity     |
|---|-----------------|--------------|------------------|
| Nominal Head TSL parameters             | 22.0 °C         | 52.3         | 0.76 mho/m       |
| Measured Head TSL parameters            | (22.0 ± 0.2) °C | 50.3 ± 6 %   | 0.76 mho/m ± 6 % |
| Head TSL temperature change during test | < 0.5 °C        |              |                  |

#### SAR result with Head TSL

| SAR averaged over 1 cm3 (1 g) of Head TSL | Condition        |                          |
|---|------------------|--------------------------|
| SAR measured                              | 1 W input power  | 3.71 W/kg                |
| SAR for nominal Head TSL parameters       | normalized to 1W | 3.68 W/kg ± 18.4 % (k=2) |

| SAR averaged over 10 cm3 (10 g) of Head TSL | condition        |                          |
|---|------------------|--------------------------|
| SAR measured                                | 1 W input power  | 2.47 W/kg                |
| SAR for nominal Head TSL parameters         | normalized to 1W | 2.45 W/kg ± 18.0 % (k=2) |

#### **Body TSL parameters**

|   | Temperature     | Permittivity | Conductivity     |
|---|-----------------|--------------|------------------|
| Nominal Body TSL parameters             | 22.0 °C         | 61.9         | 0.80 mho/m       |
| Measured Body TSL parameters            | (22.0 ± 0.2) °C | 62.1 ± 6 %   | 0.81 mho/m ± 6 % |
| Body TSL temperature change during test | < 0.5 °C        |              |                  |

#### SAR result with Body TSL

| SAR averaged over 1 cm3 (1 g) of Body TSL | Condition        |                          |
|---|------------------|--------------------------|
| SAR measured                              | 1 W input power  | 3.78 W/kg                |
| SAR for nominal Body TSL parameters       | normalized to 1W | 3.75 W/kg ± 18.4 % (k=2) |

| SAR averaged over 10 cm3 (10 g) of Body TSL | condition        |                          |
|---|------------------|--------------------------|
| SAR measured                                | 1 W input power  | 2.52 W/kg                |
| SAR for nominal Body TSL parameters         | normalized to 1W | 2.50 W/kg ± 18.0 % (k=2) |

# Appendix (Additional assessments outside the scope of SCS 0108)

## Antenna Parameters with Head TSL

| Impedance, transformed to feed point | 44.4 Ω + 3.2 jΩ |
|--------------------------------------|-----------------|
| Return Loss                          | - 23.2 dB       |

#### Antenna Parameters with Body TSL

| Impedance, transformed to feed point | 48.7 Ω + 7.0 jΩ |  |
|--------------------------------------|-----------------|--|
| Return Loss                          | - 22.9 dB       |  |

#### Additional EUT Data

| Manufactured by | SPEAG         |  |
|-----------------|---------------|--|
| Manufactured on | July 10, 2017 |  |

#### **DASY5 Validation Report for Head TSL**

Date: 21.02.2018

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: CLA150; Type: CLA150; Serial: CLA150 - SN: 4024

Communication System: UID 0 - CW; Frequency: 150 MHz

Medium parameters used: f = 150 MHz;  $\sigma = 0.76$  S/m;  $\varepsilon_r = 50.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

- Probe: EX3DV4 SN3877; ConvF(12.12, 12.12, 12.12); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 24.07.2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

#### CLA Calibration for HSL-LF Tissue/CLA150, touch configuration, Pin=1W/Area Scan

(81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 5.21 W/kg

## CLA Calibration for HSL-LF Tissue/CLA150, touch configuration, Pin=1W/Zoom Scan,

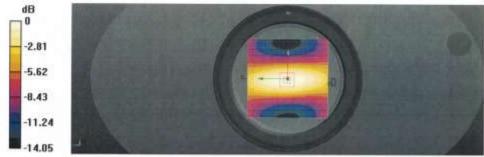
dist=1.4mm (8x10x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 82.22 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 6.91 W/kg

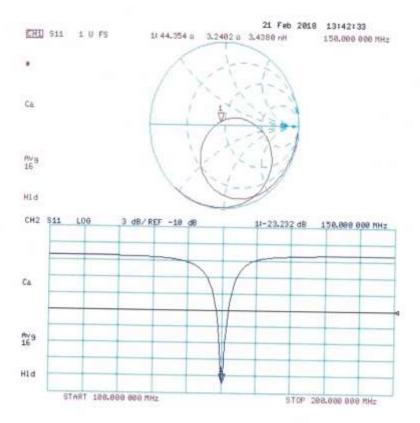
SAR(1 g) = 3.71 W/kg; SAR(10 g) = 2.47 W/kg

Maximum value of SAR (measured) = 5.18 W/kg



0 dB = 5.21 W/kg = 7.17 dBW/kg

# Impedance Measurement Plot for Head TSL



## DASY5 Validation Report for Body TSL

Date: 21.02.2018

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: CLA150; Type: CLA150; Serial: CLA150 - SN: 4024

Communication System: UID 0 - CW; Frequency: 150 MHz

Medium parameters used: f = 150 MHz;  $\sigma$  = 0.81 S/m;  $\epsilon_{c}$  = 62.1;  $\rho$  = 1000 kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

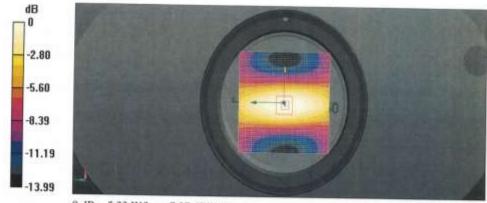
- Probe: EX3DV4 SN3877; ConvF(11.57, 11.57, 11.57); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 24.07.2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

# CLA Calibration for MSL-LF Tissue/CLA150, touch configuration, Pin=1W/Area Scan (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm Maximum value of SAR (interpolated) = 5.33 W/kg

CLA Calibration for MSL-LF Tissue/CLA150, touch configuration, Pin=1W/Zoom Scan, dist=1.4mm (8x10x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm Reference Value = 80.56 V/m; Power Drift = -0.08 dB

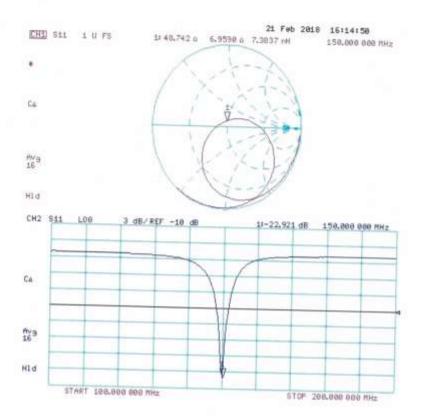
Peak SAR (extrapolated) = 7.08 W/kg

SAR(1 g) = 3.78 W/kg; SAR(10 g) = 2.52 W/kgMaximum value of SAR (measured) = 5.28 W/kg



0 dB = 5.33 W/kg = 7.27 dBW/kg

# Impedance Measurement Plot for Body TSL



## 1.2. 450 Dipole Calibration Certificate

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





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

Accreditation No.: SCS 0108

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

Client

CCIC-HTW (Auden)

Certificate No: D450V3-1102\_Feb18

| bject  | D450V3 - SN:110   | 2   |  |
|--|---|---|--|
| alibration procedure(s)  | QA CAL-15.v8<br>Calibration process   | dure for dipole validation kits belo  | w 700 MHz  |
| alibration date:   | February 23, 201  | В   |  |
| his calibration certificate docume   | ents the traceability to natio  | onal standards, which realize the physical uni  | ts of measurements (SI).   |
| he measurements and the uncer  | rtainties with confidence pr  | obability are given on the following pages and  | d are part of the certificate.   |
|  | dead in the elegand laborator   | y facility: environment temperature (22 ± 3)°C  | and humidity < 70%.  |
| All castrations have been conduc   | ned in the closed laborator   | menny, without the persons (see 3.4)  | CONTRACTOR NOT STATE   |
| Calibration Equipment used (M&)  | E critical for calibration)   |   |  |
|  | W1545W  | Cai Date (Certificate No.)  | Scheduled Calibration  |
| Primary Standards  | ID#<br>SN: 104778   | 04-Apr-17 (No. 217-02521/02522)   | Apr-18   |
| Power meter NRP  | SN: 104778<br>SN: 103244  | 04-Apr-17 (No. 217-02521)   | Apr-18   |
| ower sensor NRP-Z91  | SN: 103244<br>SN: 103245  | D4-Apr-17 (No. 217-02522)   | Apr-18   |
| Power sensor NRP-Z91   | SN: 5277 (20x)  | 07-Apr-17 (No. 217-02528)   | Apr-18   |
| Reference 20 dB Attenuator   | SN: 5047.2 / 06327  | 07-Apr-17 (No. 217-02529)   | Apr-18   |
| Type-N mismatch combination  | SN: 3877  | 30-Dec-17 (No. EX3-3877_Dec17)  | Dec-16   |
|  |   | 24-Jul-17 (No. DAE4-654_Jul17)  | Jul-18   |
| Reference Probe EX3DV4<br>DAE4   | SN: 654   |   |  |
| DAE4   |   |   | Scheduled Check  |
| DAE4<br>Secondary Standards  | ID#   | Check Date (in house)   | Scheduled Check<br>In house check: Jun-18  |
| OAE4<br>Secondary Standards<br>Power meter E4419B  | ID #<br>SN: GB41293874  | Check Date (in house)<br>06-Apr-16 (No. 217-02285/02284)  | The state of the s |
| OAE4<br>Secondary Standards<br>Power meter E4419B<br>Power sensor E4412A   | ID #<br>SN: GB41293874<br>SN: MY41496067  | Check Date (in house)<br>06-Apr-16 (No. 217-02285/02284)<br>06-Apr-16 (No. 217-02285)   | In house check: Jun-18   |
| DAE4 Secondary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A  | ID #<br>SN: GB41293874<br>SN: MY41496067<br>SN: 000110210                                       | Check Date (in house)<br>06-Apr-16 (No. 217-02285/02284)<br>06-Apr-16 (No. 217-02285)<br>06-Apr-16 (No. 217-02284   | In house check: Jun-18<br>In house check: Jun-18   |
| DAE4<br>Secondary Standards<br>Power meter E4419B<br>Power sensor E4412A   | ID #<br>SN: GB41293874<br>SN: MY41496067  | Check Date (in house)<br>06-Apr-16 (No. 217-02285/02284)<br>06-Apr-16 (No. 217-02285)   | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18   |
| DAE4 Secondary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A RF generator HP 8648C                      | ID #<br>SN: GB41293874<br>SN: MY41498067<br>SN: 000110210<br>SN: US3842U01700<br>SN: US37390585 | Check Date (in house)  06-Apr-16 (No. 217-02285/02284)  06-Apr-16 (No. 217-02285)  06-Apr-16 (No. 217-02284  04-Aug-99 (in house check Jun-16)  18-Oct-01 (in house check Oct-17)           | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18   |
| Secondary Standards Power meter E44198 Power sensor E4412A Power sensor E4412A RF generator HP 8648C Network Analyzer HP 8753E | ID #<br>SN: GB41293874<br>SN: MY41498067<br>SN: 000110210<br>SN: US3642U01700<br>SN: US37390585 | Check Date (in house)  06-Apr-16 (No. 217-02285/02284)  06-Apr-16 (No. 217-02285)  06-Apr-16 (No. 217-02284  04-Aug-99 (in house check Jun-16)  18-Oct-01 (in house check Oct-17)  Function | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Oct-18   |
| DAE4 Secondary Standards Power meter E4419B Power sensor E4412A Power sensor E4412A RF generator HP 8648C                      | ID #<br>SN: GB41293874<br>SN: MY41498067<br>SN: 000110210<br>SN: US3842U01700<br>SN: US37390585 | Check Date (in house)  06-Apr-16 (No. 217-02285/02284)  06-Apr-16 (No. 217-02285)  06-Apr-16 (No. 217-02284  04-Aug-99 (in house check Jun-16)  18-Oct-01 (in house check Oct-17)           | In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Jun-18<br>In house check: Oct-18   |

Certificate No: D450V3-1102\_Feb18

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





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

Accreditation No.: SCS 0108

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The Swiss Accreditation Service is one of the signatories to t

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

Glossary:

N/A

TSL tis ConvF se

tissue simulating liquid sensitivity in TSL / NORM x,y,z not applicable or not measured

Calibration is Performed According to the Following Standards:

 a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013

 b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016

c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010

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

#### **Additional Documentation:**

e) 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%.

Certificate No: D450V3-1102\_Feb18

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#### **Measurement Conditions**

DASY system configuration, as far as not given on page 1.

| DASY Version                 | DASY5                  | V52.10.0                    |
|------------------------------|------------------------|-----------------------------|
| Extrapolation                | Advanced Extrapolation |                             |
| Phantom                      | ELI4 Flat Phantom      | Shell thickness: 2 ± 0.2 mm |
| Distance Dipole Center - TSL | 15 mm                  | with Spacer                 |
| Zoom Scan Resolution         | dx, dy, dz = 5 mm      |                             |
| Frequency                    | 450 MHz ± 1 MHz        |                             |

Head TSL parameters
The following parameters and calculations were applied.

|   | Temperature     | Permittivity | Conductivity     |
|---|-----------------|--------------|------------------|
| Nominal Head TSL parameters             | 22.0 °C         | 43.5         | 0.87 mho/m       |
| Measured Head TSL parameters            | (22.0 ± 0.2) "C | 43.7 ± 6 %   | 0.87 mho/m ± 6 % |
| Head TSL temperature change during test | < 0.5 °C        |              | 0419             |

#### SAR result with Head TSL

| SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL | Condition          |                          |
|---|--------------------|--------------------------|
| SAR measured  | 250 mW input power | 1.12 W/kg                |
| SAR for nominal Head TSL parameters                   | normalized to 1W   | 4.48 W/kg ± 18.1 % (k=2) |

| SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL | condition          |                          |
|---|--------------------|--------------------------|
| SAR measured  | 250 mW input power | 0.749 W/kg               |
| SAR for nominal Head TSL parameters                     | normalized to 1W   | 3.00 W/kg ± 17.6 % (k=2) |

Body TSL parameters
The following parameters and calculations were applied.

| 1911-1911 - 11 Miles - | Temperature     | Permittivity | Conductivity     |
|--|-----------------|--------------|------------------|
| Nominal Body TSL parameters  | 22.0 °C         | 56.7         | 0.94 mho/m       |
| Measured Body TSL parameters   | (22.0 ± 0.2) °C | 56.0 ± 6 %   | 0.93 mho/m ± 6 % |
| Body TSL temperature change during test  | < 0.5 °C        |              |                  |

#### SAR result with Body TSL

| SAR averaged over 1 cm2 (1 g) of Body TSL | Condition          |                          |
|---|--------------------|--------------------------|
| SAR measured                              | 250 mW input power | 1.11 W/kg                |
| SAR for nominal Body TSL parameters       | normalized to 1W   | 4.47 W/kg ± 18.1 % (k=2) |

| SAR averaged over 10 cm3 (10 g) of Body TSL | condition          |                          |
|---|--------------------|--------------------------|
| SAR measured                                | 250 mW input power | 0.749 W/kg               |
| SAR for nominal Body TSL parameters         | normalized to 1W   | 3.01 W/kg ± 17.6 % (k=2) |

#### Appendix (Additional assessments outside the scope of SCS 0108)

#### Antenna Parameters with Head TSL

| Impedance, transformed to feed point | 59.6 Ω - 0.2  Ω |  |
|--------------------------------------|-----------------|--|
| Return Loss                          | - 21.1 dB       |  |

#### Antenna Parameters with Body TSL

| Impedance, transformed to feed point | 55.1 Ω - 6.9 jΩ |  |
|--------------------------------------|-----------------|--|
| Return Loss                          | - 21.8 dB       |  |

#### General Antenna Parameters and Design

| Value of the practice of the property of the p |              |
|--|--------------|
| Electrical Delay (one direction)   | 1.348 ns     |
|  | 11.00-10.100 |

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

#### Additional EUT Data

| Manufactured by | SPEAG            |
|-----------------|------------------|
| Manufactured on | October 05, 2017 |

#### **DASY5 Validation Report for Head TSL**

Date: 23.02.2018

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 450 MHz D450V3; Type: D450V3; Serial: D450V3 - SN:1102

Communication System: UID 0 - CW; Frequency: 450 MHz

Medium parameters used: f = 450 MHz;  $\sigma = 0.87 \text{ S/m}$ ;  $\varepsilon_c = 43.7$ ;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

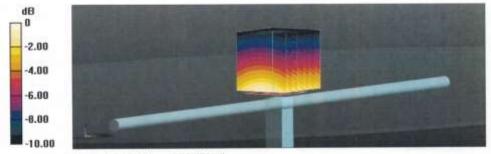
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

- Probe: EX3DV4 SN3877; ConvF(10.5, 10.5, 10.5); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 24.07.2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

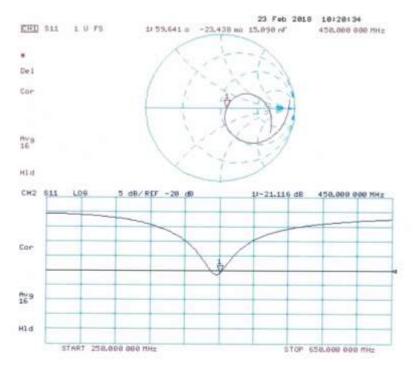
#### Dipole Calibration for Head Tissue/d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 43.13 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 1.73 W/kg SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.749 W/kg Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

#### Impedance Measurement Plot for Head TSL



#### **DASY5 Validation Report for Body TSL**

Date: 23.02.2018

Test Laboratory: SPEAG, Zurich, Switzerland

#### DUT: Dipole 450 MHz D450V3; Type: D450V3; Serial: D450V3 - SN:1102

Communication System: UID 0 - CW; Frequency: 450 MHz

Medium parameters used: f = 450 MHz;  $\sigma = 0.93$  S/m;  $\epsilon_r = 56$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

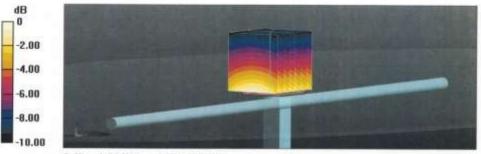
#### DASY52 Configuration:

- Probe: EX3DV4 SN3877; ConvF(10.8, 10.8, 10.8); Calibrated: 30.12.2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 24.07.2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1003
- DASY52 52.10.0(1446); SEMCAD X 14.6.10(7417)

#### Dipole Calibration for Body Tissue/d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 41.23 V/m; Power Drift = -0.01 dB Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 1.11 W/kg; SAR(10 g) = 0.749 W/kgMaximum value of SAR (measured) = 1.50 W/kg



0 dB = 1.50 W/kg = 1.76 dBW/kg

# Impedance Measurement Plot for Body TSL

