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| 10489          | AAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub)   | LTE-TDD | 8.31          | ± 9.6 % |
|----------------|-----|---|---------|---------------|---------|
| 10490          | AAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub)   | LTE-TDD |               |         |
| 10491          | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub)     | LTE-TDD | 8.54          | ± 9.6 % |
| 10492          | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub)   | LTE-TDD | 7.74          | ± 9.6 % |
| 10493          | AAE | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.41          | ± 9.6 % |
| 10494          | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Sub)     | LTE-TDD | 8.55          | ± 9.6 % |
| 10495          | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub)   |         | 7.74          | ± 9.6 % |
| 10496          | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.37          | ± 9.6 % |
| 10497          | AAB | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub)   | LTE-TDD | 8.54          | ± 9.6 % |
| 10498          |     | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub) | LTE-TDD | 7.67          | ± 9.6 % |
| 10499          | AAB | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.40          | ± 9.6 % |
| 10500          |     | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub)     | LTE-TDD | 8.68          | ± 9.6 % |
| 10501          | -   | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub)   | LTE-TDD | 7.67          | ± 9.6 % |
| 10502          | -   | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.44          | ± 9.6 % |
| 10503          |     | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub)     | LTE-TDD | 8.52          | ± 9.6 % |
| 10504          | AAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL SUD)     | LTE-TDD | 7.72          | ± 9.6 % |
| 10505          | AAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub)   | LTE-TDD | 8.31          | ± 9.6 % |
| 10505          | AAF | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub)   | LTE-TDD | 8.54          | ± 9.6 % |
|                |     | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub)    | LTE-TDD | 7.74          | ± 9.6 % |
| 10507<br>10508 | AAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub)  | LTE-TDD | 8.36          | ± 9.6 % |
|                | AAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub)  | LTE-TDD | 8.55          | ± 9.6 % |
| 10509          | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub)    | LTE-TDD | 7.99          | ± 9.6 % |
| 10510          | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub)  | LTE-TDD | 8.49          | ± 9.6 % |
| 10511          | AAE | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub)  | LTE-TDD | 8.51          | ± 9.6 % |
| 10512          | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub)    | LTE-TDD | 7.74          | ± 9.6 % |
| 10513          | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Sub)  | LTE-TDD | 8.42          | ± 9.6 % |
| 10514          | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Sub)  | LTE-TDD | 8.45          | ± 9.6 % |
| 10515          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc dc)   | WLAN    | 1.58          | ± 9.6 % |
| 10516          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc) | WLAN    | 1.57          | ± 9.6 % |
| 10517          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc dc)  | WLAN    | 1.58          | ± 9.6 % |
| 10518          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc dc)   | WLAN    | 8.23          | ± 9.6 % |
| 10519          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc)  | WLAN    | 8.39          | ± 9.6 % |
| 10520          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc dc)  | WLAN    | 8.12          | ± 9.6 % |
| 10521          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc)  | WLAN    | 7.97          | ± 9.6 % |
| 10522          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc)  | WLAN    | 8.45          | ± 9.6 % |
| 10523          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc)  | WLAN    | A SALAR SALAR |         |
| 10524          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc dc)  | WLAN    | 8.08          | ± 9.6 % |
| 10525          | AAC | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc dc)           | WLAN    | 8.27          | ± 9.6 % |
| 10526          | AAC | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc dc)           |         | 8.36          | ± 9.6 % |
| 10527          | AAC | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc dc)           | WLAN    | 8.42          | ± 9.6 % |
| 10528          | AAC | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc dc)           | WLAN    | 8.21          | ± 9.6 % |
| 10529          | AAC | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc dc)           | WLAN    | 8.36          | ± 9.6 % |
| 10531          | AAC | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc dc)           | WLAN    | 8.36          | ± 9.6 % |
| 10532          | AAC | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc dc)           | WLAN    | 8.43          | ± 9.6 % |
| 10533          | AAC | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc dc)           | WLAN    | 8.29          | ± 9.6 % |
| 10534          | AAC | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc)           | WLAN    | 8.38          | ± 9.6 % |
| 10535          | AAC | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc)           | WLAN    | 8.45          | ± 9.6 % |
| 10536          | AAC | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc dc)           | WLAN    | 8.45          | ± 9.6 % |
| 10537          | AAC |   | WLAN    | 8.32          | ± 9.6 % |
| 10538          | AAC | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc dc)           | WLAN    | 8.44          | ± 9.6 % |
| 10540          | AAC | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc dc)           | WLAN    | 8.54          | ± 9.6 % |
| 10540          |     | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc dc)           | WLAN    | 8.39          | ± 9.6 % |
|                | AAC | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc dc)           | WLAN    | 8.46          | ± 9.6 % |
| 10542          | AAC | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc dc)           | WLAN    | 8.65          | ± 9.6 % |
| 10543          | AAC | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc dc)           | WLAN    | 8.65          | ± 9.6 % |
| 10544          | AAC | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc dc)           | WLAN    | 8.47          | ± 9.6 % |
| 10545          | AAC | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc dc)           | WLAN    | 8.55          | ± 9.6 % |
| 10546          | AAC | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc dc)           | WLAN    | 8.35          | ± 9.6 % |

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| 10547          | AAC | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc dc)  | WLAN | 8.49 | ± 9.6 °        |
|----------------|-----|--|------|------|----------------|
| 10548          | AAC | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc dc)  | WLAN | 8.37 | ± 9.6 °        |
| 10550          | AAC | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc dc)  | WLAN | 8.39 | ± 9.6 °        |
| 10551          | AAC | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc dc)  | WLAN | 8.50 | ± 9.6 9        |
| 10552          | AAC | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc dc)  | WLAN | 8.42 | ± 9.6 %        |
| 10553          | AAC | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc dc)  | WLAN | 8.45 | ± 9.6 %        |
| 10554          | AAD | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc dc)   | WLAN | 8.48 | ± 9.6 %        |
| 10555          | AAD | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc dc)   | WLAN | 8.47 | ± 9.6 %        |
| 10556          | AAD | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc dc)   | WLAN | 8.50 | ± 9.6 %        |
| 10557          | AAD | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc dc)   | WLAN | 8.52 | ± 9.6 %        |
| 10558          | AAD | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc dc)   | WLAN | 8.61 | 1 Anna anna an |
| 10560          | AAD | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc dc)   | WLAN | 8.73 | ± 9.6 %        |
| 10561          | AAD | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc dc)   | WLAN |      |                |
| 10562          | AAD | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc dc)   | WLAN | 8.56 | ± 9.6 %        |
| 10563          | AAD | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc dc)   | WLAN | 8.69 | ± 9.6 %        |
| 10564          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc)   |      | 8.77 | ± 9.6 %        |
| 10565          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc)  | WLAN | 8.25 | ± 9.6 %        |
| 10566          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc dc)  | WLAN | 8.45 | ± 9.6 %        |
| 10567          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc)  | WLAN | 8.13 | ± 9.6 %        |
| 10568          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc)  | WLAN | 8.00 | ± 9.6 %        |
| 10569          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)  | WLAN | 8.37 | ± 9.6 %        |
| 10570          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc)  | WLAN | 8.10 | ± 9.6 %        |
| 10571          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc dc)  | WLAN | 8.30 | ± 9.6 %        |
| 10572          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc dc)  | WLAN | 1.99 | ± 9.6 %        |
| 10573          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc dc)  | WLAN | 1.99 | ± 9.6 %        |
| 10574          | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc dc)   | WLAN | 1.98 | ± 9.6 %        |
| 10575          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc)   | WLAN | 1.98 | ± 9.6 %        |
| 10576          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)   | WLAN | 8.59 | ± 9.6 %        |
| 10577          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc)   | WLAN | 8.60 | ± 9.6 %        |
| 10578          | AAA | IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc)  | WLAN | 8.70 | ± 9.6 %        |
| 10579          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc)<br>IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc) | WLAN | 8.49 | ± 9.6 %        |
| 10580          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc)  | WLAN | 8.36 | ± 9.6 %        |
| 10581          | AAA | IEEE 802.11g WIFI 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc)  | WLAN | 8.76 | ± 9.6 %        |
| 10582          | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc)  | WLAN | 8.35 | ± 9.6 %        |
| 10583          | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc)  | WLAN | 8.67 | ± 9.6 %        |
| 10583          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc dc)  | WLAN | 8.59 | ± 9.6 %        |
| 10585          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc dc)  | WLAN | 8.60 | ± 9.6 %        |
| 10586          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc dc)   | WLAN | 8.70 | ± 9.6 %        |
| 10587          |     | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc dc)   | WLAN | 8.49 | ± 9.6 %        |
| 10588          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc dc)   | WLAN | 8.36 | ± 9.6 %        |
| 10589          | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc dc)   | WLAN | 8.76 | ± 9.6 %        |
|                | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc dc)   | WLAN | 8.35 | ± 9.6 %        |
| 10590<br>10591 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc dc)   | WLAN | 8.67 | ± 9.6 %        |
| 10591          | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc dc)  | WLAN | 8.63 | ± 9.6 %        |
| 10592          | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc dc)  | WLAN | 8.79 | ± 9.6 %        |
|                | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc dc)  | WLAN | 8.64 | ± 9.6 %        |
| 10594          | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc dc)  | WLAN | 8.74 | ± 9.6 %        |
| 10595          | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc dc)  | WLAN | 8.74 | ± 9.6 %        |
| 10596          | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc dc)  | WLAN | 8.71 | ± 9.6 %        |
| 10597          | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc dc)  | WLAN | 8.72 | ± 9.6 %        |
| 10598          | AAC | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc dc)  | WLAN | 8.50 | ± 9.6 %        |
| 10599          | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc dc)  | WLAN | 8.79 | ± 9.6 %        |
| 10600          | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc dc)  | WLAN | 8.88 | ± 9.6 %        |
| 10601          | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc dc)  | WLAN | 8.82 | ± 9.6 %        |
| 10602          | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc dc)  | WLAN | 8.94 | ± 9.6 %        |
|                | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc dc)  | WLAN | 9.03 | ± 9.6 %        |
| 10604          | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc dc)  | WLAN | 8.76 | ± 9.6 %        |

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| 10605 | AAC | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc dc)   |               | 0.07  |         |
|-------|-----|---|---------------|-------|---------|
| 10606 |     |   | WLAN          | 8.97  | ± 9.6 % |
| 10607 |     | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc dc)   | WLAN          | 8.82  | ± 9.6 % |
| 10608 |     | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc dc)   | WLAN          | 8.64  | ± 9.6 % |
| 10609 |     | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc dc)   | WLAN          | 8.77  | ± 9.6 % |
| 10610 | _   | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc dc)   | WLAN          | 8.57  | ± 9.6 % |
| 10611 |     | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc dc)   | WLAN          | 8.78  | ± 9.6 % |
| 10612 | -   | IEEE 802.11ac WiFi (20MHz, MCS5, 90pc dc)   | WLAN          | 8.70  | ± 9.6 % |
| 10613 | _   | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc dc)   | WLAN          | 8.77  | ± 9.6 % |
| 10614 | -   |   | WLAN          | 8.94  | ± 9.6 % |
| 10615 |     | IEEE 802.11ac WiFi (20MHz, MCS7, 90pc dc)   | WLAN          | 8.59  | ± 9.6 % |
| 10616 |     | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc dc)   | WLAN          | 8.82  | ± 9.6 % |
| 10617 | -   | IEEE 802.11ac WiFi (40MHz, MCS0, 90pc dc)   | WLAN          | 8.82  | ± 9.6 % |
| 10618 |     | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc dc)   | WLAN          | 8.81  | ± 9.6 % |
|       |     | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc dc)   | WLAN          | 8.58  | ± 9.6 % |
| 10619 |     | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc dc)   | WLAN          | 8.86  | ± 9.6 % |
| 10620 | 14  | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc dc)   | WLAN          | 8.87  | ± 9.6 % |
| 10621 | AAC | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc dc)   | WLAN          | 8.77  | ± 9.6 % |
| 10622 |     | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc dc)   | WLAN          | 8.68  | ± 9.6 % |
| 10623 | AAC | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc dc)   | WLAN          | 8.82  | ± 9.6 % |
| 10624 |     | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc dc)   | WLAN          | 8.96  | ± 9.6 % |
| 10625 | AAC | IEEE 802.11ac WiFi (40MHz, MCS9, 90pc dc)   | WLAN          | 8.96  | ± 9.6 % |
| 10626 | AAC | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc dc)   | WLAN          | 8.83  | ± 9.6 % |
| 10627 | AAC | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc dc)   | WLAN          | 8.88  | ± 9.6 % |
| 10628 | AAC | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc dc)   | WLAN          | 8.71  | ± 9.6 % |
| 10629 | AAC | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc dc)   | WLAN          | 8.85  | ± 9.6 % |
| 10630 | AAC | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc dc)   | WLAN          | 8.72  | ± 9.6 % |
| 10631 | AAC | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc dc)   | WLAN          | 8.81  |         |
| 10632 | AAC | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc dc)   | WLAN          | 8.74  | ± 9.6 % |
| 10633 | AAC | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc dc)   | WLAN          |       | ± 9.6 % |
| 10634 | AAC | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc dc)   | WLAN          | 8.83  | ± 9.6 % |
| 10635 | AAC | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc dc)   | WLAN          | 8.80  | ± 9.6 % |
| 10636 | AAD | IEEE 802.11ac WiFi (160MHz, MCS0, 90pc dc)  | WLAN          | 8.81  | ± 9.6 % |
| 10637 | AAD | IEEE 802.11ac WiFi (160MHz, MCS1, 90pc dc)  | Stock Streets | 8.83  | ± 9.6 % |
| 10638 | AAD | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc dc)  | WLAN          | 8.79  | ± 9.6 % |
| 10639 | AAD | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc dc)  | WLAN          | 8.86  | ± 9.6 % |
| 10640 | AAD | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc dc)  | WLAN          | 8.85  | ± 9.6 % |
| 10641 | AAD | IEEE 802.11ac WiFi (160MHz, MCS5, 90pc dc)  | WLAN          | 8.98  | ± 9.6 % |
| 10642 | AAD | IEEE 802.11ac WiFi (160MHz, MCS6, 90pc dc)  | WLAN          | 9.06  | ± 9.6 % |
| 10643 | AAD | IEEE 802.11ac WiFi (160MHz, MCS7, 90pc dc)  | WLAN          | 9.06  | ± 9.6 % |
| 10644 | AAD | IEEE 802.11ac WiFi (160MHz, MCS8, 90pc dc)  | WLAN          | 8.89  | ± 9.6 % |
| 10645 | AAD | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc dc)  | WLAN          | 9.05  | ± 9.6 % |
| 10646 | AAG |   | WLAN          | 9.11  | ± 9.6 % |
| 10647 | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7)<br>LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7) | LTE-TDD       | 11.96 | ± 9.6 % |
| 10648 | AAA | CDMA2000 (1x Advanced)  | LTE-TDD       | 11.96 | ± 9.6 % |
| 10652 | AAE |   | CDMA2000      | 3.45  | ± 9.6 % |
| 10653 | AAE | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)  | LTE-TDD       | 6.91  | ± 9.6 % |
| 10654 | AAD | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)   | LTE-TDD       | 7.42  | ± 9.6 % |
| 10655 |     | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)   | LTE-TDD       | 6.96  | ± 9.6 % |
|       | AAE | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)   | LTE-TDD       | 7.21  | ± 9.6 % |
| 10658 | AAA | Pulse Waveform (200Hz, 10%)   | Test          | 10.00 | ± 9.6 % |
| 10659 | AAA | Pulse Waveform (200Hz, 20%)   | Test          | 6.99  | ± 9.6 % |
| 10660 | AAA | Pulse Waveform (200Hz, 40%)   | Test          | 3.98  | ± 9.6 % |
| 10661 | AAA | Pulse Waveform (200Hz, 60%)   | Test          | 2.22  | ± 9.6 % |
| 10662 | AAA | Pulse Waveform (200Hz, 80%)   | Test          | 0.97  | ± 9.6 % |
| 10670 | AAA | Bluetooth Low Energy  | Bluetooth     | 2.19  | ± 9.6 % |
| 10671 | AAC | IEEE 802.11ax (20MHz, MCS0, 90pc dc)  | WLAN          | 9.09  | ± 9.6 % |
| 10672 | AAC | IEEE 802.11ax (20MHz, MCS1, 90pc dc)  | WLAN          | 8.57  | ± 9.6 % |

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| 10070 |                 |   |                  |           |  |
|-------|-----------------|---|------------------|-----------|--|
| 10673 | -               | ( 1 1 1 1 1 1 2 1 1 0 5 0 0 0)          | WLAN             | 8.78      | ± 9.6 %                                |
| 10674 |                 | ( , , , , , , , , , , , , , , , , , , , | WLAN             | 8.74      | ± 9.6 %                                |
| 10675 |                 | IEEE 802.11ax (20MHz, MCS4, 90pc dc)    | WLAN             | 8.90      | ± 9.6 %                                |
| 10676 |                 | IEEE 802.11ax (20MHz, MCS5, 90pc dc)    | WLAN             | 8.77      | ± 9.6 %                                |
| 10677 | AAC             | IEEE 802.11ax (20MHz, MCS6, 90pc dc)    | WLAN             | 8.73      | ± 9.6 %                                |
| 10678 | AAC             | IEEE 802.11ax (20MHz, MCS7, 90pc dc)    | WLAN             | 8.78      | ± 9.6 %                                |
| 10679 | AAC             | IEEE 802.11ax (20MHz, MCS8, 90pc dc)    | WLAN             | 8.89      | ± 9.6 %                                |
| 10680 | AAC             | IEEE 802.11ax (20MHz, MCS9, 90pc dc)    | WLAN             | 8.80      | ± 9.6 %                                |
| 10681 | AAC             | IEEE 802.11ax (20MHz, MCS10, 90pc dc)   | WLAN             | 8.62      | ± 9.6 %                                |
| 10682 | AAC             | IEEE 802.11ax (20MHz, MCS11, 90pc dc)   | WLAN             | 8.83      |  |
| 10683 | AAC             | IEEE 802.11ax (20MHz, MCS0, 99pc dc)    | WLAN             |           | ± 9.6 %                                |
| 10684 | AAC             | IEEE 802.11ax (20MHz, MCS1, 99pc dc)    | WLAN             | 8.42      | ± 9.6 %                                |
| 10685 | AAC             | IEEE 802.11ax (20MHz, MCS2, 99pc dc)    | 1 (1990) - 10000 | 8.26      | ± 9.6 %                                |
| 10686 |                 | IEEE 802.11ax (20MHz, MCS3, 99pc dc)    | WLAN             | 8.33      | ± 9.6 %                                |
| 10687 |                 | IEEE 802.11ax (20MHz, MCS4, 99pc dc)    | WLAN             | 8.28      | ± 9.6 %                                |
| 10688 |                 | IEEE 802.11ax (20MHz, MCS5, 99pc dc)    | WLAN             | 8.45      | ± 9.6 %                                |
| 10689 |                 | IEEE 802.11ax (20MHz, MCS6, 99pc dc)    | WLAN             | 8.29      | ± 9.6 %                                |
| 10690 |                 |   | WLAN             | 8.55      | ± 9.6 %                                |
| 10691 | -               | IEEE 802.11ax (20MHz, MCS7, 99pc dc)    | WLAN             | 8.29      | ± 9.6 %                                |
| 10692 | AAC             | IEEE 802.11ax (20MHz, MCS8, 99pc dc)    | WLAN             | 8.25      | ± 9.6 %                                |
| 2     | 10000000000     | IEEE 802.11ax (20MHz, MCS9, 99pc dc)    | WLAN             | 8.29      | ± 9.6 %                                |
| 10693 | AAC             | IEEE 802.11ax (20MHz, MCS10, 99pc dc)   | WLAN             | 8.25      | ± 9.6 %                                |
| 10694 | AAC             | IEEE 802.11ax (20MHz, MCS11, 99pc dc)   | WLAN             | 8.57      | ± 9.6 %                                |
| 10695 |                 | IEEE 802.11ax (40MHz, MCS0, 90pc dc)    | WLAN             | 8.78      | ± 9.6 %                                |
| 10696 | AAC             | IEEE 802.11ax (40MHz, MCS1, 90pc dc)    | WLAN             | 8.91      | ± 9.6 %                                |
| 10697 | AAC             | IEEE 802.11ax (40MHz, MCS2, 90pc dc)    | WLAN             | 8.61      | ± 9.6 %                                |
| 10698 | AAC             | IEEE 802.11ax (40MHz, MCS3, 90pc dc)    | WLAN             | 8.89      | ± 9.6 %                                |
| 10699 | AAC             | IEEE 802.11ax (40MHz, MCS4, 90pc dc)    | WLAN             | 8.82      | ± 9.6 %                                |
| 10700 | AAC             | IEEE 802.11ax (40MHz, MCS5, 90pc dc)    | WLAN             | 8.73      | ± 9.6 %                                |
| 10701 | AAC             | IEEE 802.11ax (40MHz, MCS6, 90pc dc)    | WLAN             | 8.86      | ± 9.6 %                                |
| 10702 | AAC             | IEEE 802.11ax (40MHz, MCS7, 90pc dc)    | WLAN             | 8.70      | 10000000000000000000000000000000000000 |
| 10703 | AAC             | IEEE 802.11ax (40MHz, MCS8, 90pc dc)    | WLAN             | 100000000 | ± 9.6 %                                |
| 10704 | AAC             | IEEE 802.11ax (40MHz, MCS9, 90pc dc)    | WLAN             | 8.82      | ± 9.6 %                                |
| 10705 | AAC             | IEEE 802.11ax (40MHz, MCS10, 90pc dc)   |                  | 8.56      | ± 9.6 %                                |
| 10706 | AAC             | IEEE 802.11ax (40MHz, MCS11, 90pc dc)   | WLAN             | 8.69      | ± 9.6 %                                |
| 10707 | AAC             | IEEE 802.11ax (40MHz, MCS0, 99pc dc)    | WLAN             | 8.66      | ± 9.6 %                                |
| 10708 | AAC             | IEEE 802.11ax (40MHz, MCS1, 99pc dc)    | WLAN             | 8.32      | ± 9.6 %                                |
| 10709 | AAC             | IEEE 802.11ax (40MHz, MCS2, 99pc dc)    | WLAN             | 8.55      | ± 9.6 %                                |
| 10710 | AAC             | IEEE 802.11ax (40MHz, MCS2, 99pc dc)    | WLAN             | 8.33      | ± 9.6 %                                |
| 10711 | AAC             |   | WLAN             | 8.29      | ± 9.6 %                                |
| 10712 | AAC             | IEEE 802.11ax (40MHz, MCS4, 99pc dc)    | WLAN             | 8.39      | ± 9.6 %                                |
| 10712 | ants operanders | IEEE 802.11ax (40MHz, MCS5, 99pc dc)    | WLAN             | 8.67      | ± 9.6 %                                |
| 10713 | AAC             | IEEE 802.11ax (40MHz, MCS6, 99pc dc)    | WLAN             | 8.33      | ± 9.6 %                                |
| 10714 | AAC             | IEEE 802.11ax (40MHz, MCS7, 99pc dc)    | WLAN             | 8.26      | ± 9.6 %                                |
|       | AAC             | IEEE 802.11ax (40MHz, MCS8, 99pc dc)    | WLAN             | 8.45      | ± 9.6 %                                |
| 10716 | AAC             | IEEE 802.11ax (40MHz, MCS9, 99pc dc)    | WLAN             | 8.30      | ± 9.6 %                                |
| 10717 | AAC             | IEEE 802.11ax (40MHz, MCS10, 99pc dc)   | WLAN             | 8.48      | ± 9.6 %                                |
| 10718 | AAC             | IEEE 802.11ax (40MHz, MCS11, 99pc dc)   | WLAN             | 8.24      | ± 9.6 %                                |
| 10719 | AAC             | IEEE 802.11ax (80MHz, MCS0, 90pc dc)    | WLAN             | 8.81      | ± 9.6 %                                |
| 10720 | AAC             | IEEE 802.11ax (80MHz, MCS1, 90pc dc)    | WLAN             | 8.87      | ± 9.6 %                                |
| 10721 | AAC             | IEEE 802.11ax (80MHz, MCS2, 90pc dc)    | WLAN             | 8.76      | ± 9.6 %                                |
| 10722 | AAC             | IEEE 802.11ax (80MHz, MCS3, 90pc dc)    | WLAN             | 8.55      | ± 9.6 %                                |
| 10723 | AAC             | IEEE 802.11ax (80MHz, MCS4, 90pc dc)    | WLAN             | 8.70      |  |
| 10724 | AAC             | IEEE 802.11ax (80MHz, MCS5, 90pc dc)    | WLAN             | 8.90      | ± 9.6 %<br>± 9.6 %                     |
| 10725 | AAC             | IEEE 802.11ax (80MHz, MCS6, 90pc dc)    | WLAN             |           |  |
| 10726 | AAC             | IEEE 802.11ax (80MHz, MCS7, 90pc dc)    |                  | 8.74      | ± 9.6 %                                |
| 10727 | AAC             | IEEE 802.11ax (80MHz, MCS8, 90pc dc)    | WLAN             | 8.72      | ± 9.6 %                                |
|       |                 | IEEE 802.11ax (80MHz, MCS9, 90pc dc)    | WLAN             | 8.66      | ± 9.6 %                                |

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| 10729                 | AAC | IEEE 802.11ax (80MHz, MCS10, 90pc dc)          | WLAN          | 8.64                  | ± 9.6 % |
|-----------------------|-----|--|---------------|-----------------------|---------|
| 10730                 | AAC | IEEE 802.11ax (80MHz, MCS11, 90pc dc)          | WLAN          | 8.67                  | ± 9.6 % |
| 10731                 | AAC | IEEE 802.11ax (80MHz, MCS0, 99pc dc)           | WLAN          | 8.42                  | ± 9.6 % |
| 10732                 | AAC | IEEE 802.11ax (80MHz, MCS1, 99pc dc)           | WLAN          | 8.46                  | ± 9.6 % |
| 10733                 | AAC | IEEE 802.11ax (80MHz, MCS2, 99pc dc)           | WLAN          | 8.40                  |         |
| 10734                 | AAC | IEEE 802.11ax (80MHz, MCS3, 99pc dc)           | WLAN          | 8.25                  | ± 9.6 % |
| 10735                 | AAC | IEEE 802.11ax (80MHz, MCS4, 99pc dc)           | WLAN          | and the second second | ± 9.6 % |
| 10736                 | AAC | IEEE 802.11ax (80MHz, MCS5, 99pc dc)           | WLAN          | 8.33                  | ± 9.6 % |
| 10737                 | AAC | IEEE 802.11ax (80MHz, MCS6, 99pc dc)           | WLAN          | 8.27                  | ± 9.6 % |
| 10738                 | AAC | IEEE 802.11ax (80MHz, MCS7, 99pc dc)           | WLAN          | 8.36                  | ± 9.6 % |
| 10739                 | AAC | IEEE 802.11ax (80MHz, MCS8, 99pc dc)           |               | 8.42                  | ± 9.6 % |
| 10740                 | AAC | IEEE 802.11ax (80MHz, MCS9, 99pc dc)           | WLAN          | 8.29                  | ± 9.6 % |
| 10741                 | AAC | IEEE 802.11ax (80MHz, MCS10, 99pc dc)          | WLAN          | 8.48                  | ± 9.6 % |
| 10742                 | -   | IEEE 802.11ax (80MHz, MCS11, 99pc dc)          | WLAN          | 8.40                  | ± 9.6 % |
| 10743                 |     | IEEE 802.11ax (160MHz, MCS0, 90pc dc)          | WLAN          | 8.43                  | ± 9.6 % |
| 10744                 |     | IEEE 802.11ax (160MHz, MCS0, 90pc dc)          | WLAN          | 8.94                  | ± 9.6 % |
| 10745                 | -   | IEEE 802.11ax (160MHz, MCS1, 90pc dc)          | WLAN          | 9.16                  | ± 9.6 % |
| 10746                 |     |  | WLAN          | 8.93                  | ± 9.6 % |
| 10740                 | AAC | IEEE 802.11ax (160MHz, MCS3, 90pc dc)          | WLAN          | 9.11                  | ± 9.6 % |
| 10747                 | 8   | IEEE 802.11ax (160MHz, MCS4, 90pc dc)          | WLAN          | 9.04                  | ± 9.6 % |
| THE READ FOR THE READ | AAC | IEEE 802.11ax (160MHz, MCS5, 90pc dc)          | WLAN          | 8.93                  | ± 9.6 % |
| 10749                 | AAC | IEEE 802.11ax (160MHz, MCS6, 90pc dc)          | WLAN          | 8.90                  | ± 9.6 % |
| 10750                 | AAC | IEEE 802.11ax (160MHz, MCS7, 90pc dc)          | WLAN          | 8.79                  | ± 9.6 % |
| 10751                 | AAC | IEEE 802.11ax (160MHz, MCS8, 90pc dc)          | WLAN          | 8.82                  | ± 9.6 % |
| 10752                 | AAC | IEEE 802.11ax (160MHz, MCS9, 90pc dc)          | WLAN          | 8.81                  | ± 9.6 % |
| 10753                 | AAC | IEEE 802.11ax (160MHz, MCS10, 90pc dc)         | WLAN          | 9.00                  | ± 9.6 % |
| 10754                 | AAC | IEEE 802.11ax (160MHz, MCS11, 90pc dc)         | WLAN          | 8.94                  | ± 9.6 % |
| 10755                 | AAC | IEEE 802.11ax (160MHz, MCS0, 99pc dc)          | WLAN          | 8.64                  | ± 9.6 % |
| 10756                 | AAC | IEEE 802.11ax (160MHz, MCS1, 99pc dc)          | WLAN          | 8.77                  | ± 9.6 % |
| 10757                 | AAC | IEEE 802.11ax (160MHz, MCS2, 99pc dc)          | WLAN          | 8.77                  | ± 9.6 % |
| 10758                 | AAC | IEEE 802.11ax (160MHz, MCS3, 99pc dc)          | WLAN          | 8.69                  | ± 9.6 % |
| 10759                 | AAC | IEEE 802.11ax (160MHz, MCS4, 99pc dc)          | WLAN          | 8.58                  | ± 9.6 % |
| 10760                 | AAC | IEEE 802.11ax (160MHz, MCS5, 99pc dc)          | WLAN          | 8.49                  |         |
| 10761                 | AAC | IEEE 802.11ax (160MHz, MCS6, 99pc dc)          | WLAN          | 8.58                  | ± 9.6 % |
| 10762                 | AAC | IEEE 802.11ax (160MHz, MCS7, 99pc dc)          | WLAN          | 4200031020            | ± 9.6 % |
| 10763                 | AAC | IEEE 802.11ax (160MHz, MCS8, 99pc dc)          | WLAN          | 8.49                  | ± 9.6 % |
| 10764                 | AAC | IEEE 802.11ax (160MHz, MCS9, 99pc dc)          | and a began   | 8.53                  | ± 9.6 % |
| 10765                 | AAC | IEEE 802.11ax (160MHz, MCS10, 99pc dc)         | WLAN          | 8.54                  | ± 9.6 % |
| 10766                 | AAC | IEEE 802.11ax (160MHz, MCS11, 99pc dc)         | WLAN          | 8.54                  | ± 9.6 % |
| 10767                 | AAE | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)     | WLAN          | 8.51                  | ± 9.6 % |
| 10768                 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 7.99                  | ± 9.6 % |
| 10769                 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.01                  | ± 9.6 % |
| 10770                 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.01                  | ± 9.6 % |
| 10771                 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.02                  | ± 9.6 % |
| 10772                 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.02                  | ± 9.6 % |
| 10773                 | AAD | 5G NB (CP.OEDM, 1 PB, 40 MHz, QPSK, 15 KHZ)    | 5G NR FR1 TDD | 8.23                  | ± 9.6 % |
| 10774                 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.03                  | ± 9.6 % |
| 10775                 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.02                  | ± 9.6 % |
| 10776                 | AAD | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.31                  | ± 9.6 % |
| 10777                 |     | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.30                  | ± 9.6 % |
|                       | AAC | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.30                  | ± 9.6 % |
| 10778                 | AAD | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.34                  | ± 9.6 % |
| 10779                 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.42                  | ± 9.6 % |
| 10780                 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.38                  | ± 9.6 % |
| 10781                 | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.38                  | ± 9.6 % |
| 10782                 | AAD | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.43                  | ± 9.6 % |
| 10783                 | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.31                  | ± 9.6 % |
| 10784                 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.29                  | ± 9.6 % |

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| 10705           |     | 50 ND (00 05011 1000 55                         |               |            | Nº             |
|-----------------|-----|---|---------------|------------|----------------|
| 10785           |     | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.40       | ± 9.6 %        |
|                 |     | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.35       | ± 9.6 %        |
| 10787           | _   | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.44       | ± 9.6 %        |
| 10788           |     | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.39       | ± 9.6 %        |
| 10789           |     | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.37       | ± 9.6 %        |
| 10790           |     | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.39       | ± 9.6 %        |
| 10791           |     | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 7.83       | ± 9.6 %        |
| 10792           | _   | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.92       | ± 9.6 %        |
| 10793           | -   | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.95       | ± 9.6 %        |
| 10794           |     | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.82       | ± 9.6 %        |
| 10795           |     | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.84       | ± 9.6 %        |
| 10796           |     | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.82       | ± 9.6 %        |
| 10797           |     | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 8.01       | ± 9.6 %        |
| 10798           | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.89       | ± 9.6 %        |
| 10799           | AAD | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.93       | ± 9.6 %        |
| 10801           | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.89       | ± 9.6 %        |
| 10802           | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.87       | ± 9.6 %        |
| 10803           | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.93       | ± 9.6 %        |
| 10805           | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.34       | 7 12 100000000 |
| 10806           | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 1000000000 | ± 9.6 %        |
| 10809           | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.37       | ± 9.6 %        |
| 10810           | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)   |               | 8.34       | ± 9.6 %        |
| 10812           | AAD | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.34       | ± 9.6 %        |
| 10817           | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 8.35       | ± 9.6 %        |
| 10818           | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.35       | ± 9.6 %        |
| 10819           | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.34       | ± 9.6 %        |
| 10820           | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.33       | ± 9.6 %        |
| 10821           | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.30       | ± 9.6 %        |
| 10822           | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.41       | ± 9.6 %        |
| 10823           | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.41       | ± 9.6 %        |
| 10824           | AAD | 5G NR (CR-OEDM, 100% RB, 40 MHz, QPSK, 30 KHz)  | 5G NR FR1 TDD | 8.36       | ± 9.6 %        |
| 10825           | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.39       | ± 9.6 %        |
| 10827           | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.41       | ± 9.6 %        |
| 10828           | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.42       | ± 9.6 %        |
| 10829           | AAD | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.43       | ± 9.6 %        |
|                 |     | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.40       | ± 9.6 %        |
| 10830           | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.63       | ± 9.6 %        |
| 10831           | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.73       | ± 9.6 %        |
| 10832           | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.74       | ± 9.6 %        |
| 10833           | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.70       | ± 9.6 %        |
| 10834           | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.75       | ± 9.6 %        |
| 10835           | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.70       | ± 9.6 %        |
| 10836           | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.66       | ± 9.6 %        |
| 10837           | AAD | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.68       | ± 9.6 %        |
| 10839           | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.70       | ± 9.6 %        |
| 10840           | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)     | 5G NR FR1 TDD | 7.67       | ± 9.6 %        |
| 10841           | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)    | 5G NR FR1 TDD | 7.71       | ± 9.6 %        |
| 10843           | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)   | 5G NR FR1 TDD | 8.49       | ± 9.6 %        |
| 10844           | AAD | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)   | 5G NR FR1 TDD | 8.34       |                |
| 10846           | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)   | 5G NR FR1 TDD |            | ± 9.6 %        |
| 10854           | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.41       | ± 9.6 %        |
| 10855           | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)  |               | 8.34       | ± 9.6 %        |
| 10856           | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.36       | ± 9.6 %        |
| 10857           | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.37       | ± 9.6 %        |
| 10858           | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.35       | ± 9.6 %        |
| Standard States | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.36       | ± 9.6 %        |
|                 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.34       | ± 9.6 %        |
|                 |     | USK, 60 KHZ)                                    | 5G NR FR1 TDD | 8.41       | ± 9.6 %        |

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|                         | _           |   |               |              |                                       |
|-------------------------|-------------|---|---------------|--------------|---------------------------------------|
| 10861                   | -           | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.40         | ± 9.6 %                               |
| 10863                   | AAD         | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.41         | ± 9.6 %                               |
| 10864                   | AAD         | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)  | 5G NR FR1 TDD | 8.37         | ± 9.6 %                               |
| 10865                   | AAD         | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)   | 5G NR FR1 TDD | 8.41         | ± 9.6 %                               |
| 10866                   | AAD         | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
| 10868                   | AAD         | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.89         | ± 9.6 %                               |
| 10869                   | AAD         | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 5.75         | ± 9.6 %                               |
| 10870                   | AAD         | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)   | 5G NR FR2 TDD | 5.86         | ± 9.6 %                               |
| 10871                   | AAD         | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)   | 5G NR FR2 TDD | 5.75         | ± 9.6 %                               |
| 10872                   | AAD         | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 6.52         | ± 9.6 %                               |
| 10873                   | AAD         | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)   | 5G NR FR2 TDD | 6.61         |                                       |
| 10874                   | AAD         | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD |              | ± 9.6 %                               |
| 10875                   | AAD         | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)   |               | 6.65         | ± 9.6 %                               |
| 10876                   | AAD         | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 7.78         | ± 9.6 %                               |
| 10877                   | AAD         | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 8.39         | ± 9.6 %                               |
| 10878                   | AAD         | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)   | 5G NR FR2 TDD | 7.95         | ± 9.6 %                               |
| 10879                   | AAD         | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD | 8.41         | ± 9.6 %                               |
| 10880                   | AAD         | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)   | 5G NR FR2 TDD | 8.12         | ± 9.6 %                               |
| 10881                   | AAD         | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)   | 5G NR FR2 TDD | 8.38         | ± 9.6 %                               |
| 10882                   | AAD         | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 5.75         | ± 9.6 %                               |
| 10883                   | AAD         | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 5.96         | ± 9.6 %                               |
| 10884                   | AAD         | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)   | 5G NR FR2 TDD | 6.57         | ± 9.6 %                               |
| 10885                   | AAD         | 5G NR (DET & OEDM 1 RR 50 MHz, 16QAM, 120 KHz)  | 5G NR FR2 TDD | 6.53         | ± 9.6 %                               |
| 10886                   | AAD         | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD | 6.61         | ± 9.6 %                               |
| 10887                   | AAD         | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)   | 5G NR FR2 TDD | 6.65         | ± 9.6 %                               |
| 10888                   | AAD         | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 7.78         | ± 9.6 %                               |
| 10889                   |             | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)   | 5G NR FR2 TDD | 8.35         | ± 9.6 %                               |
| 10889                   | AAD         | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)   | 5G NR FR2 TDD | 8.02         | ± 9.6 %                               |
|                         | 1 AND STORY | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 8.40         | ± 9.6 %                               |
| 10891                   | AAD         | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)   | 5G NR FR2 TDD | 8.13         | ± 9.6 %                               |
| 10892                   | AAD         | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD | 8.41         | ± 9.6 %                               |
| 10897                   | AAC         | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.66         | ± 9.6 %                               |
| 10898                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.67         | ± 9.6 %                               |
| 10899                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.67         | ± 9.6 %                               |
| 10900                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
| 10901                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
| 10902                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
| 10903                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
| 10904                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
| 10905                   | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
|                         | AAB         | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.68         | ± 9.6 %                               |
| 10907                   | AAC         | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.78         | ± 9.6 %                               |
|                         | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.93         | ± 9.6 %                               |
|                         | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.96         | ± 9.6 %                               |
|                         | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.83         | ± 9.6 %                               |
| 10911                   | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.93         | ± 9.6 %                               |
| 10912                   | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.84         | ± 9.6 %                               |
|                         | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.84         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| 10914                   | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.85         | ± 9.6 %                               |
| 10915                   | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD |              | ± 9.6 %                               |
| 10916                   | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.83         | ± 9.6 %                               |
|                         | AAB         | 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)   |               | 5.87         | ± 9.6 %                               |
| 10917                   |             | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 5.94<br>5.86 | ± 9.6 %                               |
|                         | AAC         | 30 MIT (DI 1-3-01 DIVI, 100% RD, 3 MHZ, OPSK 30 KH7)  |               | -1 AD        | +46%                                  |
| 10918                   | AAC<br>AAB  | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD |              | ± 9.6 %                               |
| 10918<br>10919          |             | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.86         | ± 9.6 %                               |
| 10918<br>10919<br>10920 | AAB         | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)   5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)   5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)   5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) |               |              |                                       |

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| 1000  |     |   |               |       |         |
|-------|-----|---|---------------|-------|---------|
| 1092  |     |   | 5G NR FR1 TDD | 5.84  | ± 9.6 % |
| 10924 |     |   | 5G NR FR1 TDD | 5.84  | ± 9.6 % |
| 1092  |     |   | 5G NR FR1 TDD | 5.95  | ± 9.6 % |
| 10926 |     |   | 5G NR FR1 TDD | 5.84  | ± 9.6 % |
| 10927 |     | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.94  | ± 9.6 % |
| 10928 |     |   | 5G NR FR1 FDD | 5.52  | ± 9.6 % |
| 10929 |     | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.52  | ± 9.6 % |
| 10930 |     | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.52  | ± 9.6 % |
| 10931 |     | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10932 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10933 |     | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10934 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10935 |     | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51  | ± 9.6 % |
| 10936 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)     | 5G NR FR1 FDD | 5.90  | ± 9.6 % |
| 10937 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.77  | ± 9.6 % |
| 10938 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.90  | -       |
| 10939 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.82  | ± 9.6 % |
| 10940 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD |       | ± 9.6 % |
| 10941 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.89  | ± 9.6 % |
| 10942 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.83  | ± 9.6 % |
| 10943 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.85  | ± 9.6 % |
| 10944 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)    |               | 5.95  | ± 9.6 % |
| 10945 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.81  | ± 9.6 % |
| 10946 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.85  | ± 9.6 % |
| 10947 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.83  | ± 9.6 % |
| 10948 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87  | ± 9.6 % |
| 10949 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94  | ± 9.6 % |
| 10950 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87  | ± 9.6 % |
| 10951 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94  | ± 9.6 % |
| 10952 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   | 5G NR FR1 FDD | 5.92  | ± 9.6 % |
| 10953 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.25  | ± 9.6 % |
| 10954 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.15  | ± 9.6 % |
| 10955 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.23  | ± 9.6 % |
| 10956 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 FDD | 8.42  | ± 9.6 % |
| 10957 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.14  | ± 9.6 % |
| 10958 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.31  | ± 9.6 % |
| 10959 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.61  | ± 9.6 % |
| 10960 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 FDD | 8.33  | ± 9.6 % |
| 10961 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.32  | ± 9.6 % |
| 10962 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.36  | ± 9.6 % |
| 10963 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.40  | ± 9.6 % |
| 10964 | AAC | 5G NB DL (CP-OFDM, TM 3.1, 20 MHZ, 64-QAM, 15 KHZ)  | 5G NR FR1 TDD | 9.55  | ± 9.6 % |
| 10965 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 TDD | 9.29  | ± 9.6 % |
| 10966 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.37  | ± 9.6 % |
| 10967 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.55  | ± 9.6 % |
| 10968 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.42  | ± 9.6 % |
| 10908 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.49  | ± 9.6 % |
| 10972 | AAB | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)         | 5G NR FR1 TDD | 11.59 | ± 9.6 % |
| 10973 |     | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 9.06  | ± 9.6 % |
| 10974 | AAB | 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)  | 5G NR FR1 TDD | 10.28 | ± 9.6 % |
| 10978 | AAA | ULLA BDR  | ULLA          | 2.23  | ± 9.6 % |
|       | AAA | ULLA HDR4   | ULLA          | 7.02  | ± 9.6 % |
| 10980 | AAA | ULLA HDR8   | ULLA          | 8.82  | ± 9.6 % |
| 10981 | AAA | ULLA HDRp4  | ULLA          | 1.50  | ± 9.6 % |
| 10982 | AAA | ULLA HDRp8  | ULLA          | 1.44  | ± 9.6 % |

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

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ANNEX B

# **DIPOLE CALIBRATION REPORTS**



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





S

Schweizerischer Kalibrierdienst Service suisse d'étalonnage

С Servizio svizzero di taratura S

Swiss Calibration Service

Accreditation No.: SCS 0108

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Issued: December 10, 2021

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

|  |   | Certificate No  | : D2450V2-715_Dec2  |
|--|---|---|---|
| CALIBRATION CI   | ERTIFICATE  |   |   |
| Object   | D2450V2 - SN:77   | 15  |   |
| Calibration procedure(s)   | QA CAL-05.v11<br>Calibration Proce  | edure for SAR Validation Sources  | between 0.7-3 GHz   |
| Calibration date:  | December 09, 20   | 021   |   |
|  |   | ional standards, which realize the physical un<br>robability are given on the following pages an  |   |
| All calibrations have been conducte  | ed in the closed laborato   | ry facility: environment temperature (22 $\pm$ 3)°(   | C and humidity < 70%.   |
| Calibration Equipment used (M&TE   | E critical for calibration)   |   |   |
|  |   |   |   |
| <sup>o</sup> rimary Standards  | ID #  | Cal Date (Certificate No.)  | Scheduled Calibration   |
|  | ID #<br>SN: 104778  | Cal Date (Certificate No.)<br>09-Apr-21 (No. 217-03291/03292)   | Scheduled Calibration<br>Apr-22   |
| Power meter NRP  |   |   |   |
| Power meter NRP<br>Power sensor NRP-Z91  | SN: 104778  | 09-Apr-21 (No. 217-03291/03292)   | Apr-22  |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator  | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)  | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)  | Apr-22<br>Apr-22  |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination   | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327  | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)   | Арг-22<br>Арг-22<br>Арг-22<br>Арг-22<br>Арг-22  |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4   | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349  | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)   | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21  |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Fype-N mismatch combination<br>Reference Probe EX3DV4   | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327  | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)   | Арт-22<br>Арт-22<br>Арт-22<br>Арт-22<br>Арт-22<br>Арт-22  |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4   | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349  | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)   | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21  |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4<br>Secondary Standards  | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601   | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)   | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22  |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4<br>Secondary Standards<br>Power meter E4419B  | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601   | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)<br>Check Date (in house)  | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22<br>Scheduled Check   |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Spectra Standards<br>Power meter E4419B<br>Power sensor HP 8481A  | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601<br>ID #<br>SN: GB39512475   | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)<br>Check Date (in house)<br>30-Oct-14 (in house check Oct-20)   | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22<br>Scheduled Check<br>In house check: Oct-22<br>In house check: Oct-22   |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4<br>Secondary Standards<br>Power meter E4419B<br>Power sensor HP 8481A<br>Power sensor HP 8481A  | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601<br>ID #<br>SN: GB39512475<br>SN: US37292783   | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)<br>Check Date (in house)<br>30-Oct-14 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)  | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22<br>Scheduled Check<br>In house check: Oct-22<br>In house check: Oct-22<br>In house check: Oct-22   |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4<br>Secondary Standards<br>Power sensor HP 8481A<br>Power sensor HP 8481A<br>RF generator R&S SMT-06   | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601<br>ID #<br>SN: GB39512475<br>SN: US37292783<br>SN: MY41092317   | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)<br>Check Date (in house)<br>30-Oct-14 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)  | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22<br>Scheduled Check<br>In house check: Oct-22   |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4<br>Secondary Standards<br>Power sensor HP 8481A<br>Power sensor HP 8481A<br>RF generator R&S SMT-06   | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601<br>ID #<br>SN: GB39512475<br>SN: US37292783<br>SN: MY41092317<br>SN: 100972                           | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)<br>Check Date (in house)<br>30-Oct-14 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)<br>15-Jun-15 (in house check Oct-20)                                      | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22<br>Scheduled Check<br>In house check: Oct-22<br>In house check: Oct-22 |
| Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4<br>Secondary Standards<br>Power meter E4419B<br>Power meter E4419B<br>Power sensor HP 8481A<br>Power sensor HP 8481A<br>RF generator R&S SMT-06<br>Network Analyzer Agilent E8358A                  | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601<br>ID #<br>SN: GB39512475<br>SN: US37292783<br>SN: MY41092317<br>SN: 100972<br>SN: US41080477         | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)<br>Check Date (in house)<br>30-Oct-14 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)<br>15-Jun-15 (in house check Oct-20)<br>31-Mar-14 (in house check Oct-20) | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22<br>Scheduled Check<br>In house check: Oct-22<br>In house check: Oct-22<br>In house check: Oct-22<br>In house check: Oct-22   |
| Primary Standards<br>Power meter NRP<br>Power sensor NRP-Z91<br>Power sensor NRP-Z91<br>Reference 20 dB Attenuator<br>Type-N mismatch combination<br>Reference Probe EX3DV4<br>DAE4<br>Secondary Standards<br>Power meter E4419B<br>Power sensor HP 8481A<br>Power sensor HP 8481A<br>RF generator R&S SMT-06<br>Network Analyzer Agilent E8358A<br>Calibrated by: | SN: 104778<br>SN: 103244<br>SN: 103245<br>SN: BH9394 (20k)<br>SN: 310982 / 06327<br>SN: 7349<br>SN: 601<br>ID #<br>SN: GB39512475<br>SN: US37292783<br>SN: MY41092317<br>SN: 100972<br>SN: US41080477<br>Name | 09-Apr-21 (No. 217-03291/03292)<br>09-Apr-21 (No. 217-03291)<br>09-Apr-21 (No. 217-03292)<br>09-Apr-21 (No. 217-03343)<br>09-Apr-21 (No. 217-03344)<br>28-Dec-20 (No. EX3-7349_Dec20)<br>01-Nov-21 (No. DAE4-601_Nov21)<br>Check Date (in house)<br>30-Oct-14 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)<br>07-Oct-15 (in house check Oct-20)<br>15-Jun-15 (in house check Oct-20)<br>31-Mar-14 (in house check Oct-20) | Apr-22<br>Apr-22<br>Apr-22<br>Apr-22<br>Dec-21<br>Nov-22<br>Scheduled Check<br>In house check: Oct-22<br>In house check: Oct-22<br>In house check: Oct-22<br>In house check: Oct-22<br>In house check: Oct-22                           |

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

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Swiss Calibration Service

Accreditation No.: SCS 0108

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

#### Calibration is Performed According to the Following Standards:

- a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### **Additional Documentation:**

c) DASY 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%.

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### **Measurement Conditions**

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

| DASY Version                 | DASY52                 | V52.10.4    |
|------------------------------|------------------------|-------------|
| Extrapolation                | Advanced Extrapolation |             |
| Phantom                      | Modular Flat Phantom   |             |
| Distance Dipole Center - TSL | 10 mm                  | with Spacer |
| Zoom Scan Resolution         | dx, dy, dz = 5 mm      |             |
| Frequency                    | 2450 MHz ± 1 MHz       |             |

#### **Head TSL parameters**

The following parameters and calculations were applied.

|   | Temperature     | Permittivity | Conductivity     |
|---|-----------------|--------------|------------------|
| Nominal Head TSL parameters             | 22.0 °C         | 39.2         | 1.80 mho/m       |
| Measured Head TSL parameters            | (22.0 ± 0.2) °C | 38.8 ± 6 %   | 1.85 mho/m ± 6 % |
| Head TSL temperature change during test | < 0.5 °C        |              |                  |

### 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              | 13.1 W/kg                |
| SAR for nominal Head TSL parameters                                     | normalized to 1W                | 51.6 W/kg ± 17.0 % (k=2) |
|   |                                 |                          |
|   | 1                               |                          |
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL                 | condition                       |                          |
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL<br>SAR measured | condition<br>250 mW input power | 6.09 W/kg                |

# **Body TSL parameters**

The following parameters and calculations were applied.

|   | Temperature     | Permittivity | Conductivity     |
|---|-----------------|--------------|------------------|
| Nominal Body TSL parameters             | 22.0 °C         | 52.7         | 1.95 mho/m       |
| Measured Body TSL parameters            | (22.0 ± 0.2) °C | 52.2 ± 6 %   | 2.03 mho/m ± 6 % |
| Body TSL temperature change during test | < 0.5 °C        |              |                  |

### SAR result with Body TSL

| SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL                   | Condition                       |                          |
|---|---------------------------------|--------------------------|
| SAR measured  | 250 mW input power              | 13.1 W/kg                |
| SAR for nominal Body TSL parameters                                     | normalized to 1W                | 51.1 W/kg ± 17.0 % (k=2) |
|   |                                 |                          |
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL                 | condition                       |                          |
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL<br>SAR measured | condition<br>250 mW input power | 6.10 W/kg                |

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

Antenna Parameters with Head TSL

| Impedance, transformed to feed point | 52.0 Ω + 0.7 jΩ |
|--------------------------------------|-----------------|
| Return Loss                          | - 33.5 dB       |

#### Antenna Parameters with Body TSL

| Impedance, transformed to feed point | 48.7 Ω + 3.5 jΩ |  |
|--------------------------------------|-----------------|--|
| Return Loss                          | - 28.6 dB       |  |

#### General Antenna Parameters and Design

| Electrical Delay (one direction) | 1.157 ns |
|----------------------------------|----------|

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 |
|-----------------|-------|

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

Date: 03.12.2021

Test Laboratory: SPEAG, Zurich, Switzerland

### DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:715

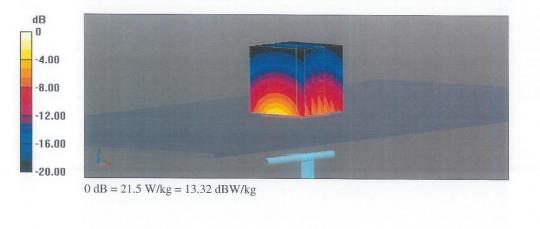
Communication System: UID 0 - CW; Frequency: 2450 MHz Medium parameters used: f = 2450 MHz;  $\sigma$  = 1.85 S/m;  $\epsilon_r$  = 38.8;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

#### DASY52 Configuration:

- Probe: EX3DV4 SN7349; ConvF(7.96, 7.96, 7.96) @ 2450 MHz; Calibrated: 28.12.2020
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 01.11.2021
- Phantom: Flat Phantom 5.0 (front); Type: QD 000 P50 AA; Serial: 1001
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

# Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm Reference Value = 115.5 V/m; Power Drift = -0.02 dB Peak SAR (extrapolated) = 25.8 W/kg SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.09 W/kg Smallest distance from peaks to all points 3 dB below = 9 mm Ratio of SAR at M2 to SAR at M1 = 51% Maximum value of SAR (measured) = 21.5 W/kg



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