$\left.\begin{array}{|l|l|l|l|c|c|}\hline 10492 & \text { AAE } & \begin{array}{l}\text { LTE-TDD (SC-FDMA, } 50 \% ~ R B, ~ 15 ~ M H z, ~ 16-Q A M, ~ U L ~\end{array} \\ \text { Subframe }=2,3,4,7,8,9)\end{array}, \begin{array}{l}\text { LTE-TDD }\end{array}\right)$

| 10535 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10536 | AAB | IEEE 802.11 ac WiFl (40MHz, MCS2, 99pc duty cycle) | WLAN | 8.32 | $\pm 9.6 \%$ |
| 10537 | AAB | IEEE 802.11 ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS} 3,99 \mathrm{pc}$ duty cycle) | WLAN | 8.44 | $\pm 9.6 \%$ |
| 10538 | AAB | IEEE 802.11 ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS4}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.54 | $\pm 9.6 \%$ |
| 10540 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | WLAN | 8.39 | $\pm 9.6 \%$ |
| 10541 | AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | WLAN | 8.46 | $\pm 9.6 \%$ |
| 10542 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(40 \mathrm{MHz}, \mathrm{MCS} 8,99 \mathrm{pc}$ duty cycle) | WLAN | 8.65 | $\pm 9.6 \%$ |
| 10543 | AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | WLAN | 8.65 | $\pm 9.6 \%$ |
| 10544 | AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 99pc duty cycle) | WLAN | 8.47 | $\pm 9.6 \%$ |
| 10545 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99 pc duty cycle) | WLAN | 8.55 | $\pm 9.6 \%$ |
| 10546 | AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | WLAN | 8.35 | $\pm 9.6 \%$ |
| 10547 | AAB | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS3}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.49 | $\pm 9.6 \%$ |
| 10548 | AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6 \%$ |
| 10550 | AAB | IEEE 802.11 ac WiFi (80MHz, MCS6, 99pc duty cycle) | WLAN | 8.38 | $\pm 9.6 \%$ |
| 10551 | AAB | IEEE 802.11 ac WiFi (80MHz, MCS7, 99pc duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10552 | AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle) | WLAN | 8.42 | $\pm 9.6 \%$ |
| 10553 | AAB | IEEE 802.11 ac WiFi (80MHz, MCS9, 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |
| 10554 | AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | WLAN | 8.48 | $\pm 9.6 \%$ |
| 10555 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 160 \mathrm{MHz}, \mathrm{MCS1}$, 99pc duty cycle) | WLAN | 8.47 | $\pm 9.6 \%$ |
| 10556 | AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10557 | AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | WLAN | 8.52 | $\pm 9.6 \%$ |
| 10558 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99pc duty cycle) | WLAN | 8.61 | $\pm 9.6 \%$ |
| 10560 | AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle) | WLAN | 8.73 | $\pm 9.6 \%$ |
| 10561 | AAC | IEEE 802.11ac WiFi (160MHz, MCS7, 99pc duty cycle) | WLAN | 8.56 | $\pm 9.6 \%$ |
| 10562 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 99pc duty cycle) | WLAN | 8.69 | $\pm 9.6 \%$ |
| 10563 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 99pc duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10564 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps , 99 pc duty cycle) | WLAN | 8.25 | $\pm 9.6 \%$ |
| 10565 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $12 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.45 | $\pm 9.6$ \% |
| 10566 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $18 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.13 | $\pm 9.6 \%$ |
| 10567 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $24 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.00 | $\pm 9.6$ \% |
| 10568 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps , 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6 \%$ |
| 10569 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $48 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.10 | $\pm 9.6 \%$ |
| 10570 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $54 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.30 | $\pm 9.6 \%$ |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps , 90pc duty cycle) | WLAN | 1.99 | $\pm 9.6 \%$ |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $2 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.99 | $\pm 9.6 \%$ |
| 10573 | AAA | IEEE 802.11 b WiFi 2.4 GHz (DSSS, $5.5 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.98 | $\pm 9.6 \%$ |
| 10574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $11 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.98 | $\pm 9.6 \%$ |
| 10575 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps , 90 pc duty cycle) | WLAN | 8.59 | $\pm 9.6$ \% |
| 10576 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps , 90pc duty cycle) | WLAN | 8.60 | $\pm 9.6 \%$ |
| 10577 | AAA | JEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps , 90pc duty cycle) | WLAN | 8.70 | $\pm 9.6 \%$ |
| 10578 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps , 90pc duty cycle) | WLAN | 8.49 | $\pm 9.6$ \% |
| 10579 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $24 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |
| 10580 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $36 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.76 | $\pm 9.6 \%$ |
| 10581 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $48 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.35 | $\pm 9.6 \%$ |
| 10582 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.67 | $\pm 9.6 \%$ |
| 10583 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, $6 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.59 | $\pm 9.6 \%$ |
| 10584 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $9 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.60 | $\pm 9.6 \%$ |
| 10585 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, $12 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.70 | $\pm 9.6 \%$ |
| 10586 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 18 Mbps , 90pc duty cycle) | WLAN | 8.49 | $\pm 9.6 \%$ |
| 10587 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps , 90pc duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |


| 10588 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, $36 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.76 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10589 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 48 Mbps , 90pc duty cycle) | WILAN | 8.35 | $\pm 9.6 \%$ |
| 10590 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 54 Mbps , 90 pc duty cycle) | WLAN | 8.67 | $\pm 9.6 \%$ |
| 10591 | AAB | IEEE 802.11 n (HT Mixed, 20 MHz , MCSO, 90pc duty cycle) | WLAN | 8.63 | $\pm 9.6 \%$ |
| 10592 | AAB | IEEE 802.11 n (HT Mixed, 20 MHz , MCS1, 90 pc duty cycle) | WILAN | 8.79 | $\pm 9.6 \%$ |
| 10593 | AAB | IEEE 802.11n (HT Mixed, $20 \mathrm{MHz}, \mathrm{MCS2}$, 90pc duty cycle) | WLAN | 8.64 | $\pm 9.6 \%$ |
| 10594 | AAB | IEEE 802.11 n (HT Mixed, $20 \mathrm{MHz}, \mathrm{MCS3}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10595 | AAB | IEEE 802.11n (HT Mixed, 20 MHz , MCS4, 90 pc duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10596 | AAB | IEEE 802.11n (HT Mixed, $20 \mathrm{MHz}, \mathrm{MCS5}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.71 | $\pm 9.6 \%$ |
| 10597 | AAB | IEEE 802.11 n (HT Mixed, $20 \mathrm{MHz}, \mathrm{MCS6}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.72 | $\pm 9.6 \%$ |
| 10598 | AAB | IEEE 802.11 n (HT Mixed, 20 MHz , MCS7, 90 pc duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10599 | AAB | IEEE 802.11 n (HT Mixed, 40 MHz , MCSO, 90 pc duty cycle) | WLAN | 8.79 | $\pm 9.6 \%$ |
| 10600 | AAB | IEEE 802.11 n (HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | WLAN | 8.88 | $\pm 9.6 \%$ |
| 10601 | AAB | IEEE 802.11n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS} 2,90 \mathrm{pc}$ duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10602 | AAB | IEEE 802.1 in (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS3}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.94 | $\pm 9.6 \%$ |
| 10603 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS} 4,90 \mathrm{pc}$ duty cycle) | WLAN | 9.03 | $\pm 9.6 \%$ |
| 10604 | AAB | IEEE 802.11 n (HT Mixed, 40 MHz , MCS5, 90pc duty cycle) | WLAN | 8.76 | $\pm 9.6 \%$ |
| 10605 | $A A B$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS6, 90pc duty cycle) | WLAN | 8.97 | $\pm 9.6 \%$ |
| 10606 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS7}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10607 | AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | WLAN | 8.64 | $\pm 9.6 \%$ |
| 10608 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(20 \mathrm{MHz}, \mathrm{MCS} 1,90 \mathrm{pc}$ duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10609 | AAB | IEEE 802.11ac $\mathrm{WiFi}(20 \mathrm{MHz}, \mathrm{MCS} 2,90 \mathrm{pc}$ duty cycle) | WLAN | 8.57 | $\pm 9.6 \%$ |
| 10610 | AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 90pc duty cycle) | WLAN | 8.78 | $\pm 9.6 \%$ |
| 10611 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | WLAN | 8.70 | $\pm 9.6 \%$ |
| 10612 | AAB | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS5}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10613 | AAB | IEEE 802.11ac WiFi (20MHz, MCS6, 90pc duty cycle) | WLAN | 8.94 | $\pm 9.6 \%$ |
| 10614 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(20 \mathrm{MHz}, \mathrm{MCS} 7,90 \mathrm{pc}$ duty cycle) | WLAN | 8.59 | $\pm 9.6 \%$ |
| 10615 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90 pc duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10616 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(40 \mathrm{MHz}, \mathrm{MCSO}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10617 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90 pc duty cycle) | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10618 | $A A B$ | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | WLAN | 8.58 | $\pm 9.6 \%$ |
| 10619 | $A A B$ | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | WLAN | 8.86 | $\pm 9.6 \%$ |
| 10620 | AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | WLAN | 8.87 | $\pm 9.6 \%$ |
| 10621 | AAB | IEEE 802.11ac $\mathrm{WiFi}(40 \mathrm{MHz}, \mathrm{MCS5}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10622 | AAB | IEEE 802.11 ac WiFi (40MHz, MCS6, 90pc duty cycle) | WLAN | 8.68 | $\pm 9.6 \%$ |
| 10623 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 40 \mathrm{MHz}, \mathrm{MCS7}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10624 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(40 \mathrm{MHz}, \mathrm{MCS8}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.96 | $\pm 9.6 \%$ |
| 10625 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(40 \mathrm{MHz}, \mathrm{MCS} 9,90 \mathrm{pc}$ duty cycle) | WLAN | 8.96 | $\pm 9.6 \%$ |
| 10626 | AAB | IEEE 802.11ac WiFi (80MHz, MCSO, 90pc duty cycle) | WLAN | 8.83 | $\pm 9.6 \%$ |
| 10627 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | WLAN | 8.88 | $\pm 9.6 \%$ |
| 10628 | AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 90 pc duty cycle) | WLAN | 8.71 | $\pm 9.6 \%$ |
| 10629 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(80 \mathrm{MHz}, \mathrm{MCS3}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.85 | $\pm 9.6 \%$ |
| 10630 | AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 90pc duty cycle) | WLAN | 8.72 | $\pm 9.6 \%$ |
| 10631 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{(80MHz}, \mathrm{MCS5}, \mathrm{90pc} \mathrm{duty} \mathrm{cycle)}$ | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10632 | AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10633 | AAB | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle) | WLAN | 8.83 | $\pm 9.6 \%$ |
| 10634 | AAB | IEEE 802.11 ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS8}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.80 | $\pm 9.6 \%$ |
| 10635 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(80 \mathrm{MHz}, \mathrm{MCS9}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10636 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCSO}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.83 | $\pm 9.6 \%$ |
| 10637 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 160 \mathrm{MHz}$, MCS1, 90 pc duty cycle) | WLAN | 8.79 | $\pm 9.6 \%$ |
| 10638 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCS} 2,90 \mathrm{pc}$ duty cycle) | WLAN | 8.86 | $\pm 9.6 \%$ |
| 10639 | AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | $\pm 9.6 \%$ |
| 10640 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle) | WLAN | 8.98 | $\pm 9.6 \%$ |
| 10641 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCS} 5,90 \mathrm{pc}$ duty cycle) | WLAN | 9.06 | $\pm 9.6 \%$ |
| 10642 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCS6}, 90 \mathrm{pc}$ duty cycle) | WLAN | 9.06 | $\pm 9.6 \%$ |
| 10643 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 160 \mathrm{MHz}, \mathrm{MCS} 7,90 \mathrm{pc}$ duty cycle) | WLAN | 8.89 | $\pm 9.6 \%$ |
| 10644 | AAC | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS8}$, 90pc duty cycle) | WLAN | 9.05 | $\pm 9.6 \%$ |
| 10645 | AAC | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS9}, 90 \mathrm{pc}$ duty cycle) | WLAN | 9.11 | $\pm 9.6 \%$ |
| 10646 | AAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}$, QPSK, UL Subframe $=2,7$ ) | LTE-TDD | 11.96 | $\pm 9.6 \%$ |
| 10647 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe=2,7) | LTE-TDD | 11.96 | $\pm 9.6 \%$ |
| 10648 | AAA | CDMA2000 (1x Advanced) | CDMA2000 | 3.45 | $\pm 9.6 \%$ |
| 10652 | AAD | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | LTE-TDD | 6.91 | $\pm 9.6 \%$ |
| 10653 | AAD | LTE-TDD (OFDMA $10 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$, Clipping $44 \%$ ) | LTE-TDD | 7.42 | $\pm 9.6 \%$ |
| 10654 | AAD | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44\%) | LTE-TDD | 6.96 | $\pm 9.6 \%$ |


| 10655 | AAE | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44\%) | LTE-TDD | 7.21 | $\pm 9.6 \%$ |
| :---: | :---: | :--- | :--- | :---: | :---: |
| 10658 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 10 \%)$ | Test | 10.00 | $\pm 9.6 \%$ |
| 10659 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 20 \%)$ | Test | 6.99 | $\pm 9.6 \%$ |
| 10660 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 40 \%)$ | Test | 3.98 | $\pm 9.6 \%$ |
| 10661 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 60 \%)$ | Test | 2.22 | $\pm 9.6 \%$ |
| 10662 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 80 \%)$ | Test | 0.97 | $\pm 9.6 \%$ |
| 10670 | AAA | Bluetooth Low Energy | Bluetooth | 2.19 | $\pm 9.6 \%$ |

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

Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzerland



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 PCJTest Certificate No EX3-7308_Aug18
CALIBRATION CERTIFICATE


| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
| :--- | :--- | :--- | :--- |
| Power meter NRP | SN: 104778 | $04-A p r-18$ (No. 217-02672/02673) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-18 (No. 217-02672) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-18 (No. 217-02673) | Apr-19 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 04-Apr-18 (No. 217-02682) | Apr-19 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-17 (No. ES3-3013_Dec17) | Dec-18 |
| DAE4 | SN: 660 | 21-Dec-17 (No. DAE4-660_Dec17) | Dec-18 |
|  |  |  |  |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | O6-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C | SN: US3642U01700 | O4-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |



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

Accredited by the Swiss Accreditation Service (SAS)
Accreditation No.: SCS 0108
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates
Glossary:
TSL
NORMx,y,z
ConvF
DCP
CF
A, B, C, D
Polarization $\varphi$
Polarization $\vartheta$
Connector Angle

> tissue simulating liquid
> sensitivity in free space
> sensitivity in TSL / NORMx,y,z
> diode compression point
> crest factor (1/duty_cycle) of the RF signal
> modulation dependent linearization parameters
> $\varphi$ rotation around probe axis
> $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta=0$ is normal to probe axis

## 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 handheld 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 "

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $\vartheta=0$ (f $\leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORMx, $y, z$ are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- $N O R M(f) x, y, z=N O R M x, y, z{ }^{*}$ frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- $D C P x, y, z$ : DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z;Bx,y,z;Cx,y,z;Dx,y,z;VRx,y,z:A,B,C,Dare numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. $V R$ is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $\mathrm{f}>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z*ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset. The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no uncertainty required).


# Probe EX3DV4 

## SN:7308

Manufactured: March 11, 2014
Calibrated: August 23, 2018

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

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

## Basic Calibration Parameters

|  | Sensor $\mathbf{X}$ | Sensor $\mathbf{Y}$ | Sensor $\mathbf{Z}$ | Unc $(\mathbf{k}=\mathbf{2})$ |
| :--- | :---: | :---: | :---: | :---: |
| Norm $\left(\mu \mathrm{V} /(\mathrm{V} / \mathrm{m})^{2}\right)^{\mathrm{A}}$ | 0.49 | 0.60 | 0.44 | $\pm 10.1 \%$ |
| $\mathrm{DCP}(\mathrm{mV})^{\mathrm{B}}$ | 99.6 | 97.1 | 102.5 |  |

## Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \mathbf{V} \mathbf{V}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c} \mathbf{E}$ <br> $(\mathbf{k}=\mathbf{2})$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 177.2 | $\pm 3.5 \%$ |
|  |  | Y | 0.0 | 0.0 | 1.0 |  | 165.4 |  |
|  | Z | 0.0 | 0.0 | 1.0 |  | 159.6 |  |  |

Note: For details on UID parameters see Appendix.

## Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{\alpha}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s .} \mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s} . \mathbf{V}^{-1}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{-\mathbf{1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 53.71 | 401.2 | 35.76 | 12.80 | 0.351 | 5.077 | 0.717 | 0.413 | 1.005 |
| Y | 56.67 | 439.8 | 38.08 | 13.44 | 0.524 | 5.100 | 0.000 | 0.597 | 1.012 |
| $Z$ | 40.98 | 304.1 | 35.29 | 8.573 | 0.334 | 5.045 | 1.531 | 0.174 | 1.005 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $\mathrm{k}=2$, which for a normal distribution corresponds to a coverage probability of approximately $95 \%$.

[^1]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

Calibration Parameter Determined in Head Tissue Simulating Media

| $f(\mathrm{MHz})^{\text {c }}$ | Relative Permittivity ${ }^{F}$ | $\begin{gathered} \text { Conductivity } \\ (\mathrm{S} / \mathrm{m})^{\mathrm{F}} \end{gathered}$ | ConvF X | ConvF Y | ConvF Z | Alpha ${ }^{\text {G }}$ | Depth (mm) | $\begin{aligned} & \text { Unc } \\ & (\mathrm{k}=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 10.23 | 10.23 | 10.23 | 0.57 | 0.81 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 9.96 | 9.96 | 9.96 | 0.58 | 0.81 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 8.66 | 8.66 | 8.66 | 0.36 | 0.80 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 8.26 | 8.26 | 8.26 | 0.29 | 0.85 | $\pm 12.0 \%$ |
| 2300 | 39.5 | 1.67 | 7.81 | 7.81 | 7.81 | 0.29 | 0.85 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 7.45 | 7.45 | 7.45 | 0.35 | 0.91 | $\pm 12.0$ \% |
| 2600 | 39.0 | 1.96 | 7.30 | 7.30 | 7.30 | 0.35 | 0.87 | $\pm 12.0 \%$ |
| 5250 | 35.9 | 4.71 | 5.10 | 5.10 | 5.10 | 0.40 | 1.80 | $\pm 13.1$ \% |
| 5600 | 35.5 | 5.07 | 4.85 | 4.85 | 4.85 | 0.40 | 1.80 | $\pm 13.1$ \% |
| 5750 | 35.4 | 5.22 | 5.04 | 5.04 | 5.04 | 0.40 | 1.80 | $\pm 13.1$ \% |

[^2]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7308

## Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathbf{f ( M H z ) ^ { c }}$ | Relative <br> Permittivity ${ }^{\mathrm{F}}$ | Conductivity <br> $(\mathbf{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha $^{\text {G }}$ | Depth <br> $(\mathbf{m m})$ | Unc <br> $(\mathbf{k}=\mathbf{2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 10.38 | 10.38 | 10.38 | 0.36 | 0.99 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 10.19 | 10.19 | 10.19 | 0.50 | 0.82 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 8.13 | 8.13 | 8.13 | 0.27 | 1.04 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 7.79 | 7.79 | 7.79 | 0.38 | 0.85 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 7.73 | 7.73 | 7.73 | 0.37 | 0.80 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 7.57 | 7.57 | 7.57 | 0.34 | 0.88 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 7.40 | 7.40 | 7.40 | 0.29 | 0.95 | $\pm 12.0 \%$ |
| 5250 | 48.9 | 5.36 | 4.48 | 4.48 | 4.48 | 0.50 | 1.90 | $\pm 13.1 \%$ |
| 5600 | 48.5 | 5.77 | 4.00 | 4.00 | 4.00 | 0.50 | 1.90 | $\pm 13.1 \%$ |
| 5750 | 48.3 | 5.94 | 4.18 | 4.18 | 4.18 | 0.50 | 1.90 | $\pm 13.1 \%$ |

[^3]
## Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: $\pm \mathbf{6 . 3 \%}(\mathrm{k}=\mathbf{2})$

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



## Dynamic Range $f\left(\right.$ SAR $\left._{\text {head }}\right)$ (TEM cell , $\mathrm{f}_{\text {eval }}=1900 \mathbf{~ M H z}$ )




Uncertainty of Linearity Assessment: $\pm \mathbf{0 . 6 \%}$ ( $\mathbf{k}=\mathbf{2}$ )

## Conversion Factor Assessment



Deviation from Isotropy in Liquid
Error ( $\phi, \vartheta$ ) , $\mathbf{f}=\mathbf{9 0 0} \mathbf{~ M H z}$



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

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle $\left(^{\circ}\right.$ ) | 108.5 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

## Appendix: Modulation Calibration Parameters

| UID | Communication System Name |  | $\begin{gathered} \bar{A} \\ d B \end{gathered}$ | $\begin{gathered} B \\ d B \vee \mu \mathrm{~V} \end{gathered}$ | C | $\begin{gathered} \overline{\mathrm{D}} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \hline \mathrm{VR} \\ & \mathrm{mV} \end{aligned}$ | Max Unc E $(k=2)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 177.2 | $\pm 3.5 \%$ |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 165.4 |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 159.6 |  |
| $\begin{aligned} & 10010- \\ & \text { CAA } \end{aligned}$ | SAR Validation (Square, $100 \mathrm{~ms}, 10 \mathrm{~ms}$ ) | X | 2.71 | 68.17 | 11.26 | 10.00 | 20.0 | $\pm 9.6$ \% |
|  |  | Y | 2.39 | 66.64 | 10.67 |  | 20.0 |  |
|  |  | Z | 1.90 | 64.26 | 9.03 |  | 20.0 |  |
| $\begin{aligned} & 10011- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (WCDMA) | X | 1.19 | 70.37 | 17.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.96 | 66.50 | 14.51 |  | 150.0 |  |
|  |  | Z | 1.05 | 68.92 | 16.00 |  | 150.0 |  |
| $\begin{aligned} & 10012- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 1.18 | 64.67 | 16.08 | 0.41 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.11 | 63.43 | 15.04 |  | 150.0 |  |
|  |  | Z | 1.13 | 64.11 | 15.48 |  | 150.0 |  |
| $\begin{aligned} & 10013- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS- OFDM, 6 Mbps ) | X | 4.93 | 66.75 | 17.26 | 1.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.92 | 66.47 | 17.15 |  | 150.0 |  |
|  |  | Z | 4.74 | 66.75 | 17.08 |  | 150.0 |  |
| $\begin{aligned} & 10021- \\ & \text { DAC } \end{aligned}$ | GSM-FDD (TDMA, GMSK) | X | 100.00 | 114.38 | 27.28 | 9.39 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 114.83 | 27.64 |  | 50.0 |  |
|  |  | Z | 100.00 | 109.69 | 24.90 |  | 50.0 |  |
| $\begin{aligned} & 10023- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0) | X | 100.00 | 113.94 | 27.13 | 9.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 114.49 | 27.54 |  | 50.0 |  |
|  |  | Z | 100.00 | 109.21 | 24.74 |  | 50.0 |  |
| $\begin{aligned} & 10024- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 100.00 | 115.48 | 26.77 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 114.18 | 26.29 |  | 60.0 |  |
|  |  | Z | 100.00 | 109.85 | 23.86 |  | 60.0 |  |
| $\begin{aligned} & 10025- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0) | $\bar{\chi}$ | 6.22 | 84.66 | 34.29 | 12.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 76.24 | 29.94 |  | 50.0 |  |
|  |  | Z | 5.36 | 79.88 | 31.57 |  | 50.0 |  |
| $\begin{aligned} & 10026- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 11.81 | 100.22 | 36.35 | 9.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 11.10 | 97.75 | 35.30 |  | 60.0 |  |
|  |  | Z | 7.89 | 90.81 | 32.78 |  | 60.0 |  |
| 10027- DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | X | 100.00 | 118.27 | 27.22 | 4.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 114.44 | 25.61 |  | 80.0 |  |
|  |  | Z | 100.00 | 111.67 | 23.86 |  | 80.0 |  |
| $\begin{aligned} & 10028- \\ & \text { DAC } \\ & \hline \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 100.00 | 122.72 | 28.40 | 3.55 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 114.80 | 25.04 |  | 100.0 |  |
|  |  | Z | 100.00 | 114.83 | 24.49 |  | 100.0 |  |
| $\begin{aligned} & 10029- \\ & \text { DAC } \\ & \hline \end{aligned}$ | EDGE-FDD (TDMA, 8 8SK, TN 0-1-2) | X | 6.56 | 85.50 | 29.56 | 7.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.53 | 84.80 | 29.16 |  | 80.0 |  |
|  |  | Z | 4.80 | 79.03 | 26.78 |  | 80.0 |  |
| $\begin{aligned} & 10030- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 100.00 | 114.96 | 26.10 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 112.69 | 25.18 |  | 70.0 |  |
|  |  | Z | 100.00 | 108.37 | 22.73 |  | 70.0 |  |
| $\begin{aligned} & 10031- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 100.00 | 126.84 | 28.53 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 105.21 | 19.68 |  | 100.0 |  |
|  |  | Z | 100.00 | 108.61 | 20.59 |  | 100.0 |  |


| $\begin{aligned} & 10032- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 100.00 | 146.53 | 35.02 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\bar{Y}$ | 100.00 | 95.65 | 15.05 |  | 100.0 |  |
| $\begin{array}{\|l\|} \hline 10033- \\ \mathrm{CAA} \\ \hline \end{array}$ |  | Z | 100.00 | 112.23 | 21.08 |  | 100.0 |  |
|  | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH1) | X | 100.00 | 133.98 | 36.90 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 94.91 | 132.14 | 36.35 |  | 70.0 |  |
|  |  | Z | 24.70 | 106.96 | 28.52 |  | 70.0 |  |
| $\begin{aligned} & 10034- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | X | 8.70 | 95.28 | 25.33 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 83.23 | 21.11 |  | 100.0 |  |
|  |  | Z | 3.97 | 82.01 | 19.44 |  | 100.0 |  |
| $\begin{aligned} & 10035- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5) | X | 3.83 | 83.82 | 21.38 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 2.23 | 74.99 | 17.69 |  | 100.0 |  |
|  |  | Z | 2.33 | 75.94 | 16.98 |  | 100.0 |  |
| $\begin{aligned} & 10036- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 100.00 | 134.50 | 37.14 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 133.48 | 36.76 |  | 70.0 |  |
|  |  | Z | 56.60 | 119.91 | 31.85 |  | 70.0 |  |
| $\begin{array}{\|l} \hline 10037- \\ \text { CAA } \\ \hline \end{array}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 7.69 | 93.53 | 24.78 | 1.88 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.89 | 82.31 | 20.76 |  | 100.0 |  |
|  |  | Z | 3.40 | 80.12 | 18.77 |  | 100.0 |  |
| $\begin{aligned} & 10038- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 3.93 | 84.59 | 21.78 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 2.28 | 75.57 | 18.03 |  | 100.0 |  |
|  |  | Z | 2.38 | 76.51 | 17.34 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \text { CAB } \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 2.78 | 78.14 | 18.71 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 1.67 | 70.12 | 14.94 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 2.00 | 74.01 | 15.76 |  | 150.0 |  |
| $\begin{aligned} & 10042- \\ & \text { CAB } \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, Pl/4- DQPSK, Halfrate) | X | 100.00 | 110.92 | 24.96 | 7.78 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 110.22 | 24.75 |  | 50.0 |  |
|  |  | Z | 100.00 | 106.01 | 22.46 |  | 50.0 |  |
| $\begin{aligned} & 10044- \\ & \text { CAA } \end{aligned}$ | IS-91/EIAVTIA-553 FDD (FDMA, FM) | X | 0.00 | 112.58 | 4.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.07 | 121.95 | 9.84 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 0.01 | 118.94 | 9.83 |  | 150.0 |  |
| $\begin{aligned} & 10048- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | $\bar{X}$ | 100.00 | 111.48 | 27.44 | 13.80 | 25.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 112.85 | 28.28 |  | 25.0 |  |
|  |  | Z | 18.65 | 86.54 | 19.90 |  | 25.0 |  |
| $\begin{aligned} & 10049- \\ & \text { CAA } \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 100.00 | 112.40 | 26.75 | 10.79 | 40.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.42 | 27.38 |  | 40.0 |  |
|  |  | Z | 46.23 | 99.19 | 22.45 |  | 40.0 |  |
| $\begin{aligned} & 10056- \\ & \text { CAA } \\ & \hline \end{aligned}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | X | 100.00 | 126.85 | 34.82 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 126.84 | 34.96 |  | 50.0 |  |
|  |  | Z | 73.14 | 116.99 | 30.84 |  | 50.0 |  |
| $\begin{aligned} & 10058- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 4.87 | 79.06 | 26.07 | 6.55 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.89 | 78.72 | 25.82 |  | 100.0 |  |
|  |  | Z | 3.78 | 74.24 | 23.87 |  | 100.0 |  |
| $\begin{aligned} & 10059- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.24 | 66.08 | 16.89 | 0.61 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 1.15 | 64.70 | 15.80 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \text { CAB } \end{aligned}$ |  | Z | 1.15 | 65.12 | 16.08 |  | 110.0 |  |
|  | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 <br> Mbps) | X | 100.00 | 145.11 | 38.67 | 1.30 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 138.14 | 35.54 |  | 110.0 |  |
|  |  | Z | 100.00 | 143.13 | 37.45 |  | 110.0 |  |


| $\begin{aligned} & 10061- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 5.01 | 92.44 | 27.34 | 2.04 | 110.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.88 | 86.79 | 24.94 |  | 110.0 |  |
| $\begin{aligned} & 10062- \\ & \text { CAC } \end{aligned}$ |  | Z | 2.64 | 81.37 | 23.02 |  | 110.0 |  |
|  | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 4.74 | 66.80 | 16.70 | 0.49 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 66.44 | 16.52 |  | 100.0 |  |
|  |  | Z | 4.55 | 66.78 | 16.53 |  | 100.0 |  |
| $\begin{aligned} & 10063- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 4.76 | 66.90 | 16.81 | 0.72 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.55 | 16.64 |  | 100.0 |  |
|  |  | $\underline{Z}$ | 4.57 | 66.86 | 16.62 |  | 100.0 |  |
| $\begin{aligned} & 10064- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 12 Mbps) | X | 5.07 | 67.18 | 17.05 | 0.86 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 66.88 | 16.91 |  | 100.0 |  |
|  |  | Z | 4.83 | 67.08 | 16.83 |  | 100.0 |  |
| $\begin{aligned} & 10065- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 18 Mbps) | X | 4.93 | 67.08 | 17.15 | 1.21 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.92 | 66.80 | 17.03 |  | 100.0 |  |
|  |  | Z | 4.69 | 66.95 | 16.91 |  | 100.0 |  |
| $\begin{aligned} & 10066- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 24 Mbps) | X | 4.95 | 67.11 | 17.33 | 1.46 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 66.84 | 17.22 |  | 100.0 |  |
|  |  | Z | 4.70 | 66.94 | 17.07 |  | 100.0 |  |
| $\begin{aligned} & 10067- \\ & \mathrm{CAC} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps) | X | 5.22 | 67.17 | 17.72 | 2.04 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.23 | 66.94 | 17.65 |  | 100.0 |  |
|  |  | Z | 4.99 | 67.15 | 17.52 |  | 100.0 |  |
| $\begin{aligned} & 10068- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | X | 5.28 | 67.31 | 17.99 | 2.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 67.12 | 17.95 |  | 100.0 |  |
|  |  | Z | 5.01 | 67.08 | 17.69 |  | 100.0 |  |
| $\begin{aligned} & 10069- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps) | X | 5.36 | 67.24 | 18.15 | 2.67 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.38 | 67.05 | 18.11 |  | 100.0 |  |
|  |  | Z | 5.09 | 67.11 | 17.88 |  | 100.0 |  |
| $\begin{aligned} & 10071- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | X | 5.01 | 66.83 | 17.56 | 1.99 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.01 | 66.58 | 17.48 |  | 100.0 |  |
|  |  | Z | 4.83 | 66.80 | 17.36 |  | 100.0 |  |
| $\begin{aligned} & 10072- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | X | 5.00 | 67.20 | 17.81 | 2.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.01 | 66.96 | 17.73 |  | 100.0 |  |
|  |  | Z | 4.79 | 67.07 | 17.56 |  | 100.0 |  |
| $\begin{aligned} & 10073- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | X | 5.05 | 67.32 | 18.13 | 2.83 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 67.11 | 18.07 |  | 100.0 |  |
|  |  | Z | 4.84 | 67.21 | 17.87 |  | 100.0 |  |
| $\begin{aligned} & 10074- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | X | 5.01 | 67.17 | 18.27 | 3.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.03 | 66.98 | 18.23 |  | 100.0 |  |
|  |  | Z | 4.82 | 67.10 | 18.01 |  | 100.0 |  |
| $\begin{aligned} & 10075- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | X | 5.05 | 67.33 | 18.61 | 3.82 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.08 | 67.18 | 18.60 |  | 90.0 |  |
|  |  | Z | 4.84 | 67.13 | 18.28 |  | 90.0 |  |
| $\begin{aligned} & 10076- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | X | 5.04 | 67.01 | 18.67 | 4.15 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 66.85 | 18.66 |  | 90.0 |  |
|  |  | Z | 4.86 | 66.95 | 18.41 |  | 90.0 |  |
| $\begin{aligned} & 10077- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | X | 5.05 | 67.06 | 18.76 | 4.30 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.07 | 66.89 | 18.74 |  | 90.0 |  |
|  |  | Z | 4.89 | 67.03 | 18.52 |  | 90.0 |  |


| $\begin{aligned} & 10081- \\ & \mathrm{CAB} \end{aligned}$ | CDMA2000 (1xRTT, RC3) | X | 1.10 | 69.87 | 14.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.78 | 64.74 | 11.83 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10082- \\ \text { CAB } \\ \hline \end{array}$ |  | Z | 0.78 | 66.34 | 11.97 |  | 150.0 |  |
|  | IS-54 / IS-136 FDD (TDMA/FDM, P//4DQPSK, Fullrate) | X | 0.69 | 60.00 | 4.39 | 4.77 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.71 | 60.00 | 4.39 |  | 80.0 |  |
|  |  | Z | 7.97 | 68.50 | 6.36 |  | 80.0 |  |
| $\begin{aligned} & 10090- \\ & \text { DAC } \\ & \hline \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 100.00 | 115.53 | 26.81 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 114.29 | 26.36 |  | 60.0 |  |
|  |  | Z | 100.00 | 109.90 | 23.90 |  | 60.0 |  |
| $\begin{aligned} & 10097- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSDPA) | X | 1.95 | 68.97 | 16.62 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.75 | 66.81 | 15.24 |  | 150.0 |  |
|  |  | Z | 1.87 | 68.90 | 16.13 |  | 150.0 |  |
| $\begin{aligned} & 10098- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 2) | X | 1.91 | 68.95 | 16.60 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.71 | 66.77 | 15.20 |  | 150.0 |  |
|  |  | Z | 1.83 | 68.86 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & 10099- \\ & \text { DAC } \\ & \hline \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 11.93 | 100.45 | 36.42 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 11.20 | 97.95 | 35.37 |  | 60.0 |  |
|  |  | Z | 7.96 | 90.99 | 32.84 |  | 60.0 |  |
| $\begin{aligned} & 10100- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 20 MHz, QPSK) | X | 3.40 | 71.76 | 17.45 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.10 | 69.82 | 16.33 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 3.12 | 70.91 | 17.03 |  | 150.0 |  |
| $\begin{aligned} & 10101- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \mathrm{RB}, 20 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 3.36 | 68.15 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.24 | 67.23 | 15.77 |  | 150.0 |  |
|  |  | Z | 3.17 | 67.74 | 16.07 |  | 150.0 |  |
| 10102-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 64-\mathrm{QAM}) \end{aligned}$ | X | 3.45 | 68.05 | 16.42 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.34 | 67.19 | 15.87 |  | 150.0 |  |
|  |  | Z | 3.28 | 67.71 | 16.16 |  | 150.0 |  |
| $\begin{aligned} & 10103- \\ & \text { CAF } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, QPSK) | X | 6.86 | 77.75 | 21.56 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.56 | 76.62 | 21.10 |  | 65.0 |  |
|  |  | Z | 5.69 | 75.27 | 20.45 |  | 65.0 |  |
| $10104-$ CAF | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 16-Q A M) \end{aligned}$ | $\bar{X}$ | 6.41 | 74.58 | 21.07 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.33 | 74.04 | 20.86 |  | 65.0 |  |
|  |  | Z | 5.58 | 72.74 | 20.11 |  | 65.0 |  |
| $\begin{aligned} & 10105- \\ & \text { CAF } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 20 MHz, $64-\mathrm{QAM}$ ) | X | 6.09 | 73.43 | 20.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.03 | 72.95 | 20.69 |  | 65.0 |  |
|  |  | Z | 5.24 | 71.29 | 19.75 |  | 65.0 |  |
| 10108CAF | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 MHz , QPSK) | X | 2.97 | 70.94 | 17.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.72 | 69.08 | 16.17 |  | 150.0 |  |
|  |  | Z | 2.70 | 70.20 | 16.88 |  | 150.0 |  |
| 10109- <br> CAF | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 3.02 | 68.05 | 16.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.90 | 67.02 | 15.66 |  | 150.0 |  |
|  |  | $z$ | 2.83 | 67.71 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & 10110- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK) | X | 2.42 | 70.09 | 17.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.21 | 68.14 | 15.78 |  | 150.0 |  |
|  |  | Z | 2.18 | 69.46 | 16.49 |  | 150.0 |  |
| $\begin{aligned} & 10111- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.76 | 69.06 | 16.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.59 | 67.59 | 15.88 |  | 150.0 |  |
|  |  | Z | 2.59 | 68.99 | 16.39 |  | 150.0 |  |


| $\begin{aligned} & 10112- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 10 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | $\bar{\chi}$ | 3.14 | 67.97 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.03 | 67.00 | 15.72 |  | 150.0 |  |
| 10113- <br> CAF |  | Z | 2.95 | 67.72 | 16.05 |  | 150.0 |  |
|  | LTE-FDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM) | X | 2.92 | 69.11 | 16.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.75 | 67.72 | 16.02 |  | 150.0 |  |
| 10114CAC |  | Z | 2.74 | 69.14 | 16.51 |  | 150.0 |  |
|  | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | X | 5.18 | 67.31 | 16.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.14 | 66.93 | 16.36 |  | 150.0 |  |
|  |  | Z | 5.02 | 67.26 | 16.48 |  | 150.0 |  |
| $\begin{aligned} & 10115- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Greenfield, 81 Mbps , 16-QAM) | X | 5.52 | 67.57 | 16.70 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.51 | 67.29 | 16.56 |  | 150.0 |  |
|  |  | Z | 5.27 | 67.30 | 16.50 |  | 150.0 |  |
| $\begin{aligned} & 10116- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 5.29 | 67.56 | 16.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.27 | 67.21 | 16.43 |  | 150.0 |  |
|  |  | Z | 5.10 | 67.44 | 16.50 |  | 150.0 |  |
| $\begin{aligned} & 10117- \\ & \mathrm{CAC} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK) | X | 5.16 | 67.25 | 16.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.13 | 66.89 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.99 | 67.15 | 16.44 |  | 150.0 |  |
| $\begin{aligned} & 10118- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 81 Mbps, 16- | X | 5.59 | 67.74 | 16.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.60 | 67.49 | 16.67 |  | 150.0 |  |
|  |  | Z | 5.34 | 67.49 | 16.60 |  | 150.0 |  |
| $10119$$C A C$ | IEEE 802.11n (HT Mixed, 135 Mbps, 64QAM) | X | 5.26 | 67.49 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.24 | 67.15 | 16.41 |  | 150.0 |  |
|  |  | Z | 5.09 | 67.40 | 16.49 |  | 150.0 |  |
| 10140- CAE | LTE-FDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 3.50 | 68.05 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.39 | 67.19 | 15.79 |  | 150.0 |  |
|  |  | Z | 3.30 | 67.72 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10141- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 3.62 | 68.10 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.51 | 67.27 | 15.96 |  | 150.0 |  |
|  |  | Z | 3.43 | 67.85 | 16.25 |  | 150.0 |  |
| 10142-$\mathrm{CAE}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 2.22 | 70.35 | 16.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.98 | 67.98 | 15.45 |  | 150.0 |  |
|  |  | Z | 1.97 | 69.67 | 16.10 |  | 150.0 |  |
| 10143- <br> CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM) | X | 2.70 | 70.21 | 16.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.44 | 68.12 | 15.58 |  | 150.0 |  |
|  |  | Z | 2.48 | 69.97 | 16.00 |  | 150.0 |  |
| 10144- <br> CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM) | X | 2.42 | 67.64 | 15.07 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.26 | 66.15 | 14.15 |  | 150.0 |  |
|  |  | Z | 2.13 | 66.86 | 13.96 |  | 150.0 |  |
| $\begin{aligned} & 10145- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \mathrm{RB}, 1.4 \\ & \mathrm{MHz}, \mathrm{QPSK} \text { ) } \\ & \hline \end{aligned}$ | X | 1.54 | 68.23 | 14.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.25 | 64.93 | 12.03 |  | 150.0 |  |
|  |  | Z | 1.00 | 63.72 | 10.21 |  | 150.0 |  |
| $\begin{aligned} & 10146- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 2.38 | 68.67 | 13.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.63 | 70.03 | 14.41 |  | $150 . \overline{0}$ |  |
|  |  | Z | 1.37 | 62.94 | 8.80 |  | 150.0 |  |
| $\begin{aligned} & 10147- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 1.4 $M H z, 64-Q A M)$ | X | 3.01 | 71.74 | 14.81 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.44 | 73.73 | 16.16 |  | 150.0 |  |
|  |  | Z | 1.50 | 63.86 | 9.38 |  | 150.0 |  |


| 10149- CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.03 | 68.12 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.91 | 67.08 | 15.71 |  | 150.0 |  |
|  |  | Z | 2.84 | 67.78 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10150- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 20 \mathrm{MHz} \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.15 | 68.03 | 16.39 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.03 | 67.05 | 15.76 |  | 150.0 |  |
|  |  | Z | 2.96 | 67.78 | 16.09 |  | 150.0 |  |
| $\begin{aligned} & 10151- \\ & \text { CAF } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK) | X | 7.33 | 80.62 | 22.85 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.93 | 79.21 | 22.28 |  | 65.0 |  |
|  |  | Z | 6.07 | 78.22 | 21.74 |  | 65.0 |  |
| 10152- CAF | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 20 \mathrm{MHz} \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.98 | 74.73 | 20.92 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.89 | 74.12 | 20.68 |  | 65.0 |  |
|  |  | Z | 5.12 | 72.74 | 19.78 |  | 65.0 |  |
| $\begin{aligned} & 10153- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz, 64-QAM) | X | 6.33 | 75.57 | 21.65 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.23 | 74.94 | 21.41 |  | 65.0 |  |
|  |  | Z | 5.49 | 73.78 | 20.61 |  | 65.0 |  |
| $\begin{aligned} & 10154- \\ & \mathrm{CAF} \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 2.49 | 70.63 | 17.32 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.26 | 68.57 | 16.06 |  | 150.0 |  |
|  |  | Z | 2.24 | 69.92 | 16.77 |  | 150.0 |  |
| $\begin{aligned} & 10155- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM) | X | 2.77 | 69.07 | 16.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.59 | 67.59 | 15.89 |  | 150.0 |  |
|  |  | Z | 2.59 | 69.02 | 16.41 |  | 150.0 |  |
| $\begin{aligned} & 10156- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK) | X | 2.11 | 70.85 | 16.93 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.83 | 68.04 | 15.26 |  | 150.0 |  |
|  |  | Z | 1.82 | 69.80 | 15.80 |  | 150.0 |  |
| $\begin{aligned} & 10157- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 2.31 | 68.61 | 15.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.08 | 66.62 | 14.16 |  | 150.0 |  |
|  |  | Z | 1.98 | 67.47 | 13.92 |  | 150.0 |  |
| $\begin{aligned} & 10158- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.92 | 69.17 | 16.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.75 | 67.77 | 16.06 |  | 150.0 |  |
|  |  | Z | 2.75 | 69.22 | 16.57 |  | 150.0 |  |
| $\begin{aligned} & 10159- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 64-QAM) | X | 2.44 | 69.17 | 15.69 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.19 | 67.06 | 14.45 |  | 150.0 |  |
|  |  | Z | 2.09 | 67.96 | 14.21 |  | 150.0 |  |
| $\begin{aligned} & 10160- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 2.90 | 69.57 | 16.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.74 | 68.24 | 16.05 |  | 150.0 |  |
|  |  | Z | 2.70 | 69.25 | 16.60 |  | 150.0 |  |
| $\begin{aligned} & 10161- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 3.05 | 67.98 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.93 | 66.95 | 15.69 |  | 150.0 |  |
|  |  | Z | 2.86 | 67.77 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10162- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 64-QAM) | X | 3.15 | 68.06 | 16.42 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.03 | 67.06 | 15.79 |  | 150.0 |  |
|  |  | Z | 2.97 | 67.96 | 16.14 |  | 150.0 |  |
| $\begin{aligned} & 10166- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 3.67 | 69.77 | 19.22 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.71 | 69.61 | 19.37 |  | 150.0 |  |
|  |  | Z | 3.45 | 70.11 | 19.35 |  | 150.0 |  |
| $\begin{aligned} & 10167- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 4.61 | 72.92 | 19.78 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 72.37 | 19.78 |  | 150.0 |  |
|  |  | Z | 4.42 | 74.02 | 20.14 |  | 150.0 |  |

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| $\begin{aligned} & 10168- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz} \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.13 | 75.25 | 21.12 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.05 | 74.54 | 21.07 |  | 150.0 |  |
| $\begin{aligned} & 10169- \\ & \text { CAE } \end{aligned}$ |  | Z | 5.13 | 77.22 | 21.87 |  | 150.0 |  |
|  | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 3.12 | 70.03 | 19.37 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.15 | 69.73 | 19.46 |  | 150.0 |  |
|  |  | Z | 2.86 | 69.57 | 19.15 |  | 150.0 |  |
| $\begin{aligned} & 10170- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.58 | 77.10 | 22.08 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.39 | 75.79 | 21.81 |  | 150.0 |  |
|  |  | Z | 4.44 | 78.23 | 22.53 |  | 150.0 |  |
| 10171AAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \\ & \hline \end{aligned}$ | X | 3.64 | 72.24 | 19.05 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.59 | 71.47 | 18.98 |  | 150.0 |  |
|  |  | Z | 3.36 | 72.39 | 19.02 |  | 150.0 |  |
| $\begin{aligned} & 10172- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz}, \\ & \text { QPSK) } \end{aligned}$ | X | 12.64 | 100.34 | 31.84 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 12.97 | 100.68 | 32.37 |  | 65.0 |  |
|  |  | Z | 5.77 | 87.24 | 27.51 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \mathrm{CAF} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 36.96 | 114.71 | 33.67 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 30.92 | 112.16 | 33.64 |  | 65.0 |  |
|  |  | Z | 22.36 | 108.00 | 31.61 |  | 65.0 |  |
| $\begin{aligned} & 10174- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 22.92 | 104.35 | 30.17 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 21.96 | 104.04 | 30.70 |  | 65.0 |  |
|  |  | Z | 11.65 | 95.24 | 27.25 |  | 65.0 |  |
| $\begin{aligned} & 10175- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 3.08 | 69.68 | 19.10 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.11 | 69.39 | 19.20 |  | 150.0 |  |
|  |  | Z | 2.82 | 69.22 | 18.88 |  | 150.0 |  |
| 10176- <br> CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , 16-QAM) | X | 4.59 | 77.13 | 22.09 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 75.82 | 21.82 |  | 150.0 |  |
|  |  | Z | 4.45 | 78.26 | 22.55 |  | 150.0 |  |
| $\begin{aligned} & 10177- \\ & \mathrm{CAH} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 5 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.11 | 69.85 | 19.21 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.14 | 69.56 | 19.30 |  | 150.0 |  |
|  |  | Z | 2.84 | 69.38 | 18.97 |  | 150.0 |  |
| 10178CAF | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 4.53 | 76.83 | 21.94 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 75.53 | 21.68 |  | 150.0 |  |
|  |  | Z | 4.39 | 77.99 | 22.42 |  | 150.0 |  |
| $\begin{aligned} & 10179- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.06 | 74.50 | 20.40 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.95 | 73.49 | 20.26 |  | 150.0 |  |
|  |  | Z | 3.83 | 75.09 | 20.61 |  | 150.0 |  |
| $10180-$CAF | LTE-FDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 64-$ QAM) | X | 3.62 | 72.15 | 18.99 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.58 | 71.38 | 18.93 |  | 150.0 |  |
|  |  | Z | 3.35 | 72.32 | 18.97 |  | 150.0 |  |
| $\overline{10181-}$ <br> CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.10 | 69.83 | 19.20 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 3.13 | 69.54 | 19.29 |  | 150.0 |  |
|  |  | Z | 2.84 | 69.36 | 18.97 |  | 150.0 |  |
| $\overline{10182-}$ <br> CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 16-QAM) | X | 4.52 | 76.80 | 21.93 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.33 | 75.51 | 21.66 |  | 150.0 |  |
|  |  | Z | 4.38 | 77.96 | 22.40 |  | 150.0 |  |
| 10183- <br> AAD | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 64-QAM) | X | 3.62 | 72.12 | 18.97 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.57 | 71.35 | 18.91 |  | 150.0 |  |
|  |  | Z | 3.34 | 72.29 | 18.96 |  | 150.0 |  |


| 10184- CAE | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | X | 3.11 | 69.88 | 19.22 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\bar{Y}$ | 3.14 | 69.58 | 19.32 |  | 150.0 |  |
|  |  | Z | 2.85 | 69.41 | 18.99 |  | 150.0 |  |
| $\begin{aligned} & 10185- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16QAM) | X | 4.54 | 76.88 | 21.97 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.35 | 75.59 | 21.70 |  | 150.0 |  |
|  |  | Z | 4.41 | 78.06 | 22.45 |  | 150.0 |  |
| 10186-AAE | $\text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 3 \text { MHz, 64- }$ QAM) | X | 3.64 | 72.20 | 19.01 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.59 | 71.42 | 18.95 |  | 150.0 |  |
|  |  | Z | 3.36 | 72.37 | 19.00 |  | 150.0 |  |
| $\begin{aligned} & 10187- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.12 | 69.93 | 19.28 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.15 | 69.63 | 19.37 |  | 150.0 |  |
|  |  | Z | 2.86 | 69.48 | 19.07 |  | 150.0 |  |
| $\begin{aligned} & 10188- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.72 | 77.70 | 22.40 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 76.33 | 22.11 |  | 150.0 |  |
|  |  | Z | 4.61 | 78.98 | 22.92 |  | 150.0 |  |
| 10189- <br> AAF | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.73 | 72.70 | 19.32 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.67 | 71.88 | 19.24 |  | 150.0 |  |
|  |  | Z | 3.46 | 72.92 | 19.33 |  | 150.0 |  |
| $\begin{aligned} & 10193- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 6.5 Mbps , BPSK) | X | 4.59 | 66.76 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 66.31 | 16.09 |  | 150.0 |  |
|  |  | Z | 4.42 | 66.80 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10194- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 39 Mbps , 16-QAM) | X | 4.77 | 67.10 | 16.45 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.66 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.58 | 67.08 | 16.32 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 65 Mbps , 64-QAM) | X | 4.82 | 67.12 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.78 | 66.69 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.62 | 67.10 | 16.34 |  | 150.0 |  |
| $\begin{aligned} & 10196- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 6.5 Mbps , BPSK) | X | 4.60 | 66.84 | 16.36 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 66.40 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.41 | 66.83 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & 10197- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 39 Mbps , 16QAM) | X | 4.79 | 67.12 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 66.69 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.59 | 67.09 | 16.33 |  | 150.0 |  |
| $\begin{aligned} & 10198- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 65 Mbps, 64QAM) | X | 4.82 | 67.14 | 16.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.78 | 66.71 | 16.24 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 4.61 | 67.11 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10219- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 7.2 Mbps , BPSK) | X | 4.55 | 66.86 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.41 | 16.08 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 4.37 | 66.86 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16QAM) | X | 4.79 | 67.10 | 16.45 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 66.67 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.58 | 67.05 | 16.32 |  | 150.0 |  |
| $\begin{aligned} & 10221- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64QAM) | X | 4.83 | 67.06 | 16.45 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 66.64 | 16.23 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 4.62 | 67.04 | 16.33 |  | 150.0 |  |
| $\begin{aligned} & 10222- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK) | X | 5.14 | 67.26 | 16.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 5.11 | 66.90 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.97 | 67.15 | 16.43 |  | 150.0 |  |


| $\overline{10223-}$ CAC | IEEE 802.11n (HT Mixed, 90 Mbps , 16QAM) | X | 5.45 | 67.43 | 16.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.45 | 67.18 | 16.52 |  | 150.0 |  |
|  |  | Z | 5.25 | 67.35 | 16.55 |  | 150.0 |  |
| $\begin{aligned} & 10224- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 150 Mbps , 64QAM) | X | 5.19 | 67.37 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.15 | 66.99 | 16.33 |  | 150.0 |  |
|  |  | Z | 5.01 | 67.26 | 16.42 |  | 150.0 |  |
| $\begin{aligned} & 10225- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSPA+) | X | 2.89 | 66.55 | 15.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.80 | 65.71 | 15.24 |  | 150.0 |  |
|  |  | Z | 2.72 | 66.49 | 15.32 |  | 150.0 |  |
| $\begin{aligned} & 10226- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 42.12 | 117.30 | 34.47 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 34.39 | 114.35 | 34.35 |  | 65.0 |  |
|  |  | Z | 25.78 | 110.75 | 32.49 |  | 65.0 |  |
| 10227- $\mathrm{CAA}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 33.34 | 110.83 | 32.01 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 29.14 | 109.23 | 32.25 |  | 65.0 |  |
|  |  | Z | 23.91 | 107.08 | 30.63 |  | 65.0 |  |
| $\begin{aligned} & 10228- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | X | 15.66 | 105.06 | 33.38 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 15.84 | 105.37 | 33.95 |  | 65.0 |  |
|  |  | Z | 7.75 | 93.33 | 29.68 |  | 65.0 |  |
| $\begin{aligned} & 10229- \\ & \text { CAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16QAM) | X | 37.28 | 114.84 | 33.72 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 31.13 | 112.26 | 33.67 |  | 65.0 |  |
|  |  | Z | 22.62 | 108.17 | 31.67 |  | 65.0 |  |
| $\begin{aligned} & 10230- \\ & \text { CAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 64 - QAM) | X | 29.88 | 108.76 | 31.36 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 26.58 | 107.43 | 31.66 |  | 65.0 |  |
|  |  | Z | 20.85 | 104.61 | 29.86 |  | 65.0 |  |
| $\begin{aligned} & 10231- \\ & \text { CAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | X | 14.65 | 103.59 | 32.85 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.88 | 103.95 | 33.43 |  | 65.0 |  |
|  |  | $\underline{Z}$ | 7.34 | 92.15 | 29.19 |  | 65.0 |  |
| $\begin{aligned} & 10232- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 37.25 | 114.84 | 33.71 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 31.10 | 112.26 | 33.67 |  | 65.0 |  |
|  |  | Z | 22.58 | 108.16 | 31.67 |  | 65.0 |  |
| $\begin{aligned} & 10233- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64- QAM) | X | 29.82 | 108.74 | 31.35 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 26.53 | 107.41 | 31.66 |  | 65.0 |  |
|  |  | Z | 20.76 | 104.56 | 29.85 |  | 65.0 |  |
| $\begin{aligned} & \text { 10234- } \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 5 \mathrm{MHz}, \\ & \text { QPSK) } \end{aligned}$ | X | 13.83 | 102.21 | 32.30 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.10 | 102.64 | 32.91 |  | 65.0 |  |
|  |  | Z | 7.03 | 91.14 | 28.71 |  | 65.0 |  |
| $\begin{aligned} & 10235- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 37.39 | 114.93 | 33.74 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 31.21 | 112.34 | 33.70 |  | 65.0 |  |
|  |  | Z | 22.65 | 108.24 | 31.69 |  | 65.0 |  |
| $\begin{aligned} & 10236- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 30.43 | 109.05 | 31.43 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 27.03 | $\overline{107.71}$ | 31.73 |  | 65.0 |  |
|  |  | Z | 21.22 | 104.87 | 29.93 |  | 65.0 |  |
| 10237- CAE | $\text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, }$ QPSK) | X | 14.73 | 103.74 | 32.90 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.96 | 104.11 | 33.48 |  | 65.0 |  |
|  |  | Z | 7.35 | 92.21 | 29.22 |  | 65.0 |  |
| $\begin{aligned} & 10238- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 37.20 | 114.83 | 33.71 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 31.07 | 112.26 | 33.67 |  | 65.0 |  |
|  |  | Z | 22.51 | 108.13 | 31.66 |  | 65.0 |  |


| $\begin{aligned} & 10239- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 29.73 | 108.72 | 31.35 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 26.48 | 107.40 | 31.66 |  | 65.0 |  |
|  |  | Z | 20.66 | 104.50 | 29.83 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | $\bar{X}$ | 14.67 | 103.66 | 32.88 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.89 | 104.03 | 33.46 |  | 65.0 |  |
|  |  | Z | 7.33 | 92.17 | 29.20 |  | 65.0 |  |
| $\begin{aligned} & 10241- \\ & \text { CAA } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 8.22 | 81.62 | 25.84 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 8.21 | 81.11 | 25.93 |  | 65.0 |  |
|  |  | Z | 7.55 | 81.89 | 25.74 |  | 65.0 |  |
| $\begin{aligned} & 10242- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM) | X | 7.60 | 79.92 | 25.06 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.70 | 79.68 | 25.24 |  | 65.0 |  |
|  |  | Z | 6.63 | 79.21 | 24.57 |  | 65.0 |  |
| 10243- CAA | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 6.06 | 76.28 | 24.43 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.20 | 76.29 | 24.69 |  | 65.0 |  |
|  |  | Z | 5.27 | 75.02 | 23.70 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \text { CAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM) | X | 6.94 | 79.13 | 20.40 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.61 | 80.93 | 21.65 |  | 65.0 |  |
|  |  | Z | 4.63 | 73.01 | 16.54 |  | 65.0 |  |
| $\begin{aligned} & 10245- \\ & \text { CAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 6.74 | 78.35 | 20.03 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.38 | 80.11 | 21.28 |  | 65.0 |  |
|  |  | Z | 4.46 | 72.20 | 16.14 |  | 65.0 |  |
| $\begin{aligned} & 10246- \\ & \text { CAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 8.26 | 86.16 | 23.38 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.07 | 83.23 | 22.34 |  | 65.0 |  |
|  |  | Z | 4.76 | 77.46 | 19.00 |  | 65.0 |  |
| $\begin{aligned} & 10247- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 5.60 | 76.50 | 20.35 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 75.45 | 19.96 |  | 65.0 |  |
|  |  | Z | 4.29 | 72.64 | 17.71 |  | 65.0 |  |
| $\begin{aligned} & 10248- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC̄-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.54 | 75.70 | 19.98 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 74.79 | 19.65 |  | 65.0 |  |
|  |  | Z | 4.24 | 71.91 | 17.36 |  | 65.0 |  |
| $\begin{aligned} & 10249- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 9.19 | 88.24 | 24.95 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.96 | 85.32 | 23.90 |  | 65.0 |  |
|  |  | Z | 6.28 | 82.28 | 22.02 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \mathrm{CAE} \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 6.20 | 77.76 | 22.32 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.01 | 76.85 | 21.97 |  | 65.0 |  |
|  |  | Z | 5.20 | 75.42 | 20.86 |  | 65.0 |  |
| $\begin{aligned} & 10251- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) 64-QAM) | X | 5.85 | 75.32 | 20.92 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.73 | 74.58 | 20.63 |  | 65.0 |  |
|  |  | Z | 4.92 | 73.12 | 19.45 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK) | X | 8.09 | 84.95 | 24.58 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 7.42 | 82.94 | 23.81 |  | 65.0 |  |
|  |  | Z | 6.31 | 81.52 | 22.96 |  | 65.0 |  |
| $\begin{aligned} & 10253- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.80 | 74.00 | 20.63 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.72 | 73.40 | 20.39 |  | 65.0 |  |
|  |  | Z | 5.04 | 72.28 | 19.52 |  | 65.0 |  |
| $\begin{aligned} & 10254- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 15 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 6.14 | 74.84 | 21.30 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.05 | 74.22 | 21.07 |  | 65.0 |  |
|  |  | Z | 5.36 | 73.21 | 20.25 |  | 65.0 |  |

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| $\begin{aligned} & 10255- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 6.81 | 79.50 | 22.67 | 3.98 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.50 | 78.25 | 22.16 |  | 65.0 |  |
| $\begin{aligned} & \text { 10256- } \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | Z | 5.72 | 77.37 | 21.59 |  | 65.0 |  |
|  |  | X | 5.54 | 75.38 | 17.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.45 | 78.02 | 19.55 |  | 65.0 |  |
| $\begin{aligned} & 10257- \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \mathrm{MHz}, 64-\mathrm{QAM}) \end{aligned}$ | Z | 3.15 | 67.52 | 12.83 |  | 65.0 |  |
|  |  | X | 5.31 | 74.31 | 17.34 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.14 | 76.80 | 18.96 |  | 65.0 |  |
| $\begin{aligned} & 10258- \\ & \text { CAA } \\ & \hline \end{aligned}$ |  | Z | 3.05 | 66.79 | 12.37 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 6.24 | 81.13 | 20.76 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.52 | 78.91 | 19.97 |  | 65.0 |  |
| $\begin{aligned} & 10259- \\ & \text { CAC } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | Z | 3.09 | 70.62 | 15.05 |  | 65.0 |  |
|  |  | X | 5.84 | 76.93 | 21.04 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.63 | 75.94 | 20.66 |  | 65.0 |  |
|  |  | Z | 4.68 | 73.82 | 18.92 |  | 65.0 |  |
| $\begin{aligned} & 10260- \\ & \text { CAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 5.84 | 76.54 | 20.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.65 | 75.62 | 20.54 |  | 65.0 |  |
| $\begin{aligned} & 10261- \\ & \text { CAC } \\ & \hline \end{aligned}$ |  | Z | 4.68 | 73.47 | 18.76 |  | 65.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 7.94 | 85.32 | 24.30 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.17 | 83.07 | 23.45 |  | 65.0 |  |
|  |  | Z | 5.90 | 80.89 | 22.01 |  | 65.0 |  |
| $\begin{aligned} & 10262- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 5 \mathrm{MHz}, \\ & \text { 16-QAM) } \end{aligned}$ | X | 6.19 | 77.72 | 22.28 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.00 | 76.81 | 21.93 |  | 65.0 |  |
|  |  | Z | 5.19 | 75.36 | 20.81 |  | 65.0 |  |
| $\begin{aligned} & 10263- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, 100\% RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.84 | 75.30 | 20.91 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.72 | 74.57 | 20.63 |  | 65.0 |  |
|  |  | Z | 4.91 | 73.09 | 19.44 |  | 65.0 |  |
| $\begin{aligned} & 10264- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK) | X | 8.00 | 84.72 | 24.48 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.34 | 82.73 | 23.71 |  | 65.0 |  |
|  |  | Z | 6.24 | 81.28 | 22.84 |  | 65.0 |  |
| $\begin{aligned} & 10265- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 5.98 | 74.73 | 20.93 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.89 | 74.12 | 20.69 |  | 65.0 |  |
|  |  | Z | 5.12 | 72.74 | 19.78 |  | 65.0 |  |
| $\begin{aligned} & 10266- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 6.33 | 75.56 | 21.64 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.22 | 74.93 | 21.40 |  | 65.0 |  |
|  |  | Z | 5.49 | 73.76 | 20.60 |  | 65.0 |  |
| $\begin{aligned} & 10267- \\ & \mathrm{CAE} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, QPSK) | X | 7.32 | 80.56 | 22.82 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.92 | 79.16 | 22.26 |  | 65.0 |  |
|  |  | $\underline{Z}$ | 6.05 | 78.17 | 21.72 |  | 65.0 |  |
| $\begin{aligned} & 10268- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 6.52 | 74.24 | 21.04 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.45 | 73.73 | 20.85 |  | 65.0 |  |
|  |  | Z | 5.74 | 72.63 | 20.16 |  | 65.0 |  |
| $\begin{aligned} & 10269- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 6.46 | 73.71 | 20.87 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.39 | 73.22 | 20.69 |  | 65.0 |  |
|  |  | Z | 5.73 | 72.22 | 20.02 |  | 65.0 |  |
| $\begin{aligned} & 10270- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 15 \\ & \mathrm{MHz}, \mathrm{QPSK} \text { ) } \end{aligned}$ | X | 6.79 | 76.82 | 21.42 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.57 | 75.90 | 21.04 |  | 65.0 |  |
|  |  | Z | 5.88 | 75.11 | 20.59 |  | 65.0 |  |


| $\begin{aligned} & 10274- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.66 | 66.98 | 15.73 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.54 | 65.90 | 15.04 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \mathrm{CAB} \end{aligned}$ |  | Z | 2.55 | 67.07 | 15.35 |  | 150.0 |  |
|  | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.78 | 69.77 | 16.72 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.55 | 67.13 | 15.03 |  | 150.0 |  |
|  |  | Z | 1.62 | 69.04 | 16.02 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 2.12 | 61.97 | 7.55 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 2.25 | 62.30 | 7.96 |  | 50.0 |  |
|  |  | Z | 1.72 | 60.31 | 5.78 |  | 50.0 |  |
| $\begin{aligned} & 10278- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 10.93 | 86.19 | 21.29 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 9.64 | 84.41 | 20.95 |  | 50.0 |  |
|  |  | Z | 3.57 | 69.00 | 13.15 |  | 50.0 |  |
| $\begin{aligned} & 10279- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 11.22 | 86.49 | 21.46 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 9.91 | 84.71 | 21.11 |  | 50.0 |  |
|  |  | Z | 3.69 | 69.35 | 13.38 |  | 50.0 |  |
| $\begin{aligned} & 10290- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC1, SO55, Full Rate | X | 1.95 | 72.86 | 16.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.38 | 67.46 | 13.46 |  | 150.0 |  |
|  |  | Z | 1.34 | 68.81 | 13.27 |  | 150.0 |  |
| $\begin{aligned} & 10291- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 1.06 | 69.47 | 14.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.76 | 64.53 | 11.71 |  | 150.0 |  |
|  |  | Z | 0.76 | 66.05 | 11.81 |  | 150.0 |  |
| $\begin{aligned} & 10292- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, Full Rate | X | 1.83 | 78.35 | 18.94 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.91 | 67.73 | 13.68 |  | 150.0 |  |
|  |  | Z | 1.34 | 73.93 | 15.68 |  | 150.0 |  |
| $\begin{aligned} & 10293- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 4.73 | 93.04 | 24.47 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.31 | 72.72 | 16.40 |  | 150.0 |  |
|  |  | Z | 6.43 | 94.81 | 23.11 |  | 150.0 |  |
| $\begin{aligned} & 10295- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 10.60 | 89.87 | 26.40 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 10.25 | 88.78 | 26.08 |  | 50.0 |  |
|  |  | Z | 12.25 | 89.80 | 24.68 |  | 50.0 |  |
| $\begin{aligned} & 10297- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 2.99 | 71.06 | 17.36 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.73 | 69.18 | 16.24 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 2.72 | 70.32 | 16.96 |  | 150.0 |  |
| $\begin{aligned} & \text { 10298- } \\ & \text { AAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 1.90 | 70.47 | 15.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 1.56 | 67.01 | 13.91 |  | 150.0 |  |
|  |  | Z | 1.44 | 67.67 | 13.50 |  | 150.0 |  |
| $\begin{aligned} & \text { 10299- } \\ & \text { AAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.07 | 71.64 | 15.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.23 | 72.42 | 16.33 |  | 150.0 |  |
|  |  | Z | 2.17 | 67.61 | 12.32 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \text { AAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.19 | 66.26 | 12.34 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.31 | 66.80 | 13.02 |  | 150.0 |  |
|  |  | Z | 1.57 | 63.33 | 9.50 |  | 150.0 |  |
| 10301- <br> AAA | IEEE 802.16e WiMAX ( $29: 18$, 5 ms , 10 MHz, QPSK, PUSC) | X | 4.82 | 65.43 | 17.57 | 4.17 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 65.32 | 17.50 |  | 50.0 |  |
|  |  | Z | 4.60 | 65.72 | 17.49 |  | 50.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5 ms , $10 \mathrm{MHz}, \mathrm{QPSK}, \mathrm{PUSC}, 3$ CTRL symbols) | X | 5.31 | 66.17 | 18.35 | 4.96 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 5.36 | 66.00 | 18.25 |  | 50.0 |  |
|  |  | Z | 5.00 | 66.00 | 18.02 |  | 50.0 |  |

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| $\begin{aligned} & \text { 10303- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX ( $31: 15,5 \mathrm{~ms}$, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC) | X | 5.06 | 65.83 | 18.21 | 4.96 | 50.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.11 | 65.70 | 18.12 |  | 50.0 |  |
| $\begin{aligned} & \text { 10304- } \\ & \text { AAA } \end{aligned}$ |  | $\underline{Z}$ | 4.75 | 65.61 | 17.82 |  | 50.0 |  |
|  | IEEE 802.16e WiMAX (29:18, 5 ms , $10 \mathrm{MHz}, 64 \mathrm{QAM}, \mathrm{PUSC}$ ) | X | 4.87 | 65.69 | 17.69 | 4.17 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 65.47 | 17.55 |  | 50.0 |  |
| $\begin{aligned} & \text { 10305- } \\ & \text { AAA } \end{aligned}$ |  | Z | 4.58 | 65.56 | 17.35 |  | 50.0 |  |
|  | IEEE 802.16 e WiMAX $(31: 15,10 \mathrm{~ms}$, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 15 symbols) | X | 4.43 | 67.35 | 19.83 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 67.70 | 19.98 |  | 35.0 |  |
|  |  | Z | 4.15 | 67.17 | 19.10 |  | 35.0 |  |
| $\begin{aligned} & \text { 10306- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10ms, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 18 symbois) | X | 4.77 | 66.43 | 19.36 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 66.61 | 19.45 |  | 35.0 |  |
|  |  | Z | 4.49 | 66.31 | 18.82 |  | 35.0 |  |
| $\begin{aligned} & 10307- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX $(29: 18,10 \mathrm{~ms}$, 10 MHz , QPSK, PUSC, 18 symbols) | X | 4.67 | 66.65 | 19.36 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.78 | 66.88 | 19.46 |  | 35.0 |  |
|  |  | Z | 4.37 | 66.39 | 18.75 |  | 35.0 |  |
| 10308-AAA | IEEE 802.16e WiMAX (29:18, 10ms, $10 \mathrm{MHz}, 16 \mathrm{QAM}$, PUSC) | X | 4.64 | 66.81 | 19.48 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 67.03 | 19.58 |  | 35.0 |  |
|  |  | Z | 4.35 | 66.60 | 18.90 |  | 35.0 |  |
| 10309- AAA | IEEE 802.16e WiMAX (29:18, 10ms, $10 \mathrm{MHz}, 16 \mathrm{QAM}, \mathrm{AMC} 2 \times 3,18$ symbols) | X | 4.84 | 66.72 | 19.54 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 66.92 | 19.63 |  | 35.0 |  |
|  |  | Z | 4.52 | 66.47 | 18.95 |  | 35.0 |  |
| $10310-$$\mathrm{AAA}$ | IEEE 802.16 e WIMAX $(29: 18,10 \mathrm{~ms}$, 10 MHz, QPSK, AMC $2 \times 3,18$ symbols) | X | 4.71 | 66.49 | 19.33 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.81 | 66.68 | 19.42 |  | 35.0 |  |
|  |  | Z | 4.43 | 66.37 | 18.80 |  | 35.0 |  |
| $\begin{aligned} & 10311- \\ & \text { AAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 MHz, QPSK) | X | 3.36 | 70.26 | 16.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.08 | 68.46 | 15.91 |  | 150.0 |  |
|  |  | Z | 3.08 | 69.51 | 16.57 |  | 150.0 |  |
| 10313AAA | iDEN 1:3 | X | 5.95 | 81.40 | 19.48 | 6.99 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 4.30 | 76.35 | 17.48 |  | 70.0 |  |
|  |  | Z | 3.21 | 73.80 | 16.43 |  | 70.0 |  |
| 10314-AAA | iDEN 1:6 | X | 12.17 | 97.07 | 27.72 | 10.00 | 30.0 | $\pm 9.6$ \% |
|  |  | Y | 7.44 | 87.94 | 24.60 |  | 30.0 |  |
|  |  | Z | 6.18 | 85.76 | 23.72 |  | 30.0 |  |
| 10315- <br> AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 <br> Mbps, 96 pc duty cycle) | X | 1.10 | 64.61 | 16.02 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.01 | 63.21 | 14.85 |  | 150.0 |  |
|  |  | Z | 1.05 | 64.14 | 15.48 |  | 150.0 |  |
| $\begin{aligned} & 10316- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, 6 Mbps , 96 pc duty cycle) | X | 4.65 | 66.81 | 16.47 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.42 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.46 | 66.78 | 16.31 |  | 150.0 |  |
| $\begin{aligned} & 10317- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96 pc duty cycle) | X | 4.65 | 66.81 | 16.47 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.42 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.46 | 66.78 | 16.31 |  | 150.0 |  |
| $\begin{aligned} & 10400- \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 20 MHz , 64-QAM, $99 p \mathrm{~d}$ duty cycle) | X | 4.78 | 67.16 | 16.44 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.73 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.55 | 67.11 | 16.31 |  | 150.0 |  |
| $\begin{aligned} & 10401- \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle) | X | 5.43 | 67.23 | 16.53 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.42 | 66.92 | 16.38 |  | 150.0 |  |
|  |  | Z | 5.24 | 67.11 | 16.40 |  | 150.0 |  |


| $\begin{aligned} & 10402- \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99 pc duty cycle) | X | 5.71 | 67.66 | 16.59 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.70 | 67.34 | 16.43 |  | 150.0 |  |
|  |  | Z | 5.52 | 67.48 | 16.45 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10403- \\ \mathrm{AAB} \\ \hline \end{array}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 1.95 | 72.86 | 16.32 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.38 | 67.46 | 13.46 |  | 115.0 |  |
|  |  | Z | 1.34 | 68.81 | 13.27 |  | 115.0 |  |
| $\begin{aligned} & 10404- \\ & \text { AAB } \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. A) | X | 1.95 | 72.86 | 16.32 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.38 | 67.46 | 13.46 |  | 115.0 |  |
|  |  | Z | 1.34 | 68.81 | 13.27 |  | 115.0 |  |
| $\begin{aligned} & 10406- \\ & A A B \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CDMA2000, RC3, SO32, SCH0, Full } \\ & \text { Rate } \end{aligned}$ | X | 100.00 | 122.38 | 30.73 | 0.00 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 81.48 | 123.67 | 32.28 |  | 100.0 |  |
|  |  | Z | 100.00 | 114.83 | 26.66 |  | 100.0 |  |
| $\begin{aligned} & 10410- \\ & \text { AAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 100.00 | 123.65 | 31.04 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 100.00 | 127.30 | 33.02 |  | 80.0 |  |
|  |  | Z | 100.00 | 122.18 | 29.60 |  | 80.0 |  |
| 10415- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 1.02 | 63.74 | 15.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.94 | 62.36 | 14.20 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 0.99 | 63.49 | 14.99 |  | 150.0 |  |
| $\begin{aligned} & 10416- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, 6 Mbps, $99 p \mathrm{duty}$ cycle) | X | 4.59 | 66.79 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 66.36 | 16.15 |  | 150.0 |  |
|  |  | Z | 4.42 | 66.82 | 16.27 |  | 150.0 |  |
| 10417- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.59 | 66.79 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 66.36 | 16.15 |  | 150.0 |  |
|  |  | Z | 4.42 | 66.82 | 16.27 |  | 150.0 |  |
| $\begin{aligned} & 10418- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps, 99pc duty cycle, Long preambule) | X | 4.58 | 66.96 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.49 | 16.15 |  | 150.0 |  |
| $\begin{aligned} & 10419- \\ & \text { AAA } \end{aligned}$ |  | Z | 4.42 | 67.01 | 16.31 |  | 150.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps, 99pc duty cycle, Short preambule) | X | 4.61 | 66.90 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 66.45 | 16.16 |  | 150.0 |  |
|  |  | $\underline{Z}$ | 4.43 | 66.95 | 16.30 |  | 150.0 |  |
| 10422- <br> AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 4.73 | 66.90 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 66.47 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.54 | 66.92 | 16.31 |  | 150.0 |  |
| $\begin{aligned} & 10423- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 43.3 <br> Mbps, 16-QAM) | X | 4.91 | 67.24 | 16.54 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 66.82 | 16.31 |  | 150.0 |  |
|  |  | Z | 4.68 | 67.21 | 16.40 |  | 150.0 |  |
| $\begin{aligned} & 10424- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 72.2 <br> Mbps, 64-QAM) | X | 4.82 | 67.19 | 16.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 66.76 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.61 | 67.16 | 16.38 |  | 150.0 |  |
| 10425- <br> AAB | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK) | X | 5.41 | 67.47 | 16.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 67.17 | 16.50 |  | 150.0 |  |
|  |  | Z | 5.21 | 67.35 | 16.53 |  | 150.0 |  |
| $\begin{aligned} & 10426- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 90 Mbps , 16-QAM) | X | 5.41 | 67.47 | 16.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 67.19 | 16.50 |  | 150.0 |  |
|  |  | Z | 5.23 | 67.42 | 16.56 |  | 150.0 |  |



| 10460- AAA | UMTS-FDD (WCDMA, AMR) | X | 1.07 | 72.05 | 18.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.81 | 67.05 | 15.17 |  | 150.0 |  |
| 10461- <br> AAA |  | Z | 0.95 | 70.49 | 17.24 |  | 150.0 |  |
|  | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 129.11 | 33.59 | 3.29 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 132.68 | 35.56 |  | 80.0 |  |
|  |  | Z | 100.00 | 128.17 | 32.38 |  | 80.0 |  |
| 10462-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 29.76 | 94.39 | 20.32 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 112.07 | 25.94 |  | 80.0 |  |
|  |  | Z | 0.79 | 60.49 | 7.76 |  | 80.0 |  |
| $\begin{aligned} & 10463- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 1.4 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.50 | 68.97 | 12.20 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.58 | 23.85 |  | 80.0 |  |
|  |  | Z | 0.77 | 60.00 | 6.89 |  | 80.0 |  |
| $\begin{aligned} & 10464- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK, UL Subframe=2,3,4,7,8,9) | X | 100.00 | 126.29 | 32.12 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 130.29 | 34.26 |  | 80.0 |  |
|  |  | Z | 100.00 | 124.25 | 30.42 |  | 80.0 |  |
| $\begin{aligned} & 10465- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 9.13 | 82.53 | 17.12 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 111.30 | 25.58 |  | 80.0 |  |
|  |  | Z | 0.75 | 60.00 | 7.44 |  | 80.0 |  |
| 10466- <br> AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.98 | 66.71 | 11.27 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 99.88 | 106.88 | 23.53 |  | 80.0 |  |
|  |  | Z | 0.78 | 60.00 | 6.83 |  | 80.0 |  |
| $\begin{aligned} & 10467- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 126.60 | 32.25 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 130.59 | 34.40 |  | 80.0 |  |
|  |  | Z | 100.00 | 124.67 | 30.60 |  | 80.0 |  |
| $\begin{aligned} & 10468- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 11.66 | 85.00 | 17.83 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 111.53 | 25.68 |  | 80.0 |  |
|  |  | Z | 0.75 | 60.09 | 7.51 |  | 80.0 |  |
| $\begin{aligned} & 10469- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.98 | 66.75 | 11.28 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 106.90 | 23.54 |  | 80.0 |  |
|  |  | Z | 0.77 | 60.00 | 6.83 |  | 80.0 |  |
| $\begin{aligned} & 10470- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 126.64 | 32.26 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 130.65 | 34.41 |  | 80.0 |  |
|  |  | $\underline{Z}$ | 100.00 | 124.69 | 30.60 |  | 80.0 |  |
| $\begin{aligned} & 10471- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, $10 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 11.32 | 84.67 | 17.72 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 111.46 | 25.64 |  | 80.0 |  |
|  |  | Z | 0.75 | 60.04 | 7.47 |  | 80.0 |  |
| $\begin{aligned} & 10472- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.96 | 66.63 | 11.22 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 106.82 | 23.49 |  | 80.0 |  |
|  |  | Z | 0.77 | 60.00 | 6.81 |  | 80.0 |  |
| $\begin{aligned} & 10473- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 100.00 | 126.60 | 32.24 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 130.61 | 34.39 |  | 80.0 |  |
|  |  | Z | 100.00 | 124.64 | 30.58 |  | 80.0 |  |
| $\begin{aligned} & 10474- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 11.06 | 84.45 | 17.66 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 111.47 | 25.64 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.02 | 7.45 |  | 80.0 |  |
| $\begin{aligned} & 10475- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.95 | 66.59 | 11.20 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 99.99 | 106.84 | 23.50 |  | 80.0 |  |
|  |  | Z | 0.77 | 60.00 | 6.81 |  | 80.0 |  |


| 10477- <br> AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , $16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 9.10 | 82.47 | 17.07 | 3.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 111.24 | 25.54 |  | 80.0 |  |
| 10478- <br> AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | Z | 0.74 | 60.00 | 7.42 |  | 80.0 |  |
|  |  | X | 1.93 | 66.47 | 11.14 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 96.81 | 106.44 | 23.40 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | $\underline{Z}$ | 0.77 | 60.00 | 6.80 |  | 80.0 |  |
| $\begin{aligned} & 10479- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | X | 9.68 | 90.97 | 25.10 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 13.83 | 97.37 | 27.65 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | Z | 12.23 | 94.71 | 25.17 |  | 80.0 |  |
| $\begin{aligned} & 10480- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | X | 11.91 | 88.02 | 22.17 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 19.25 | 95.65 | 25.10 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | Z | 7.50 | 81.30 | 18.54 |  | 80.0 |  |
| $\begin{aligned} & 10481- \\ & \text { AAA } \end{aligned}$ |  | X | 9.15 | 83.59 | 20.38 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 15.12 | 91.18 | 23.39 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 50\% RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | Z | 4.40 | 74.24 | 15.71 |  | 80.0 |  |
| $\begin{aligned} & 10482- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | X | 4.76 | 79.70 | 20.44 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.53 | 74.74 | 18.45 |  | 80.0 |  |
|  |  | Z | 2.62 | 71.60 | 16.13 |  | 80.0 |  |
| $\begin{aligned} & \hline 10483- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.87 | 78.17 | 19.16 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 8.24 | 83.44 | 21.55 |  | 80.0 |  |
|  |  | Z | 2.93 | 69.04 | 14.15 |  | 80.0 |  |
| $\begin{aligned} & 10484- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.35 | 76.61 | 18.60 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 7.24 | 81.28 | 20.83 |  | 80.0 |  |
|  |  | Z | 2.73 | 67.94 | 13.69 |  | 80.0 |  |
| 10485- <br> AAD | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.47 | 78.87 | 21.04 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.68 | 75.23 | 19.49 |  | 80.0 |  |
|  |  | Z | 3.15 | 74.27 | 18.50 |  | 80.0 |  |
| $\begin{aligned} & \hline 10486- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.79 | 72.50 | 18.04 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.38 | 70.29 | 17.05 |  | 80.0 |  |
|  |  | $\underline{Z}$ | 2.84 | 69.02 | 15.57 |  | 80.0 |  |
| $\begin{aligned} & 10487- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 50\% RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.74 | 71.89 | 17.77 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.37 | 69.86 | 16.85 |  | 80.0 |  |
|  |  | Z | 2.81 | 68.50 | 15.32 |  | 80.0 |  |
| $\begin{aligned} & \text { 10488- } \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.24 | 75.86 | 20.43 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.83 | 73.65 | 19.40 |  | 80.0 |  |
|  |  | Z | 3.28 | 72.72 | 18.85 |  | 80.0 |  |
| $\begin{aligned} & 10489- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.72 | 70.49 | 18.27 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.53 | 69.26 | 17.66 |  | 80.0 |  |
|  |  | Z | 3.19 | 68.97 | 17.14 |  | 80.0 |  |
| $\begin{aligned} & 10490- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.79 | 70.18 | 18.14 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.62 | 69.04 | 17.58 |  | 80.0 |  |
|  |  | Z | 3.27 | 68.77 | 17.05 |  | 80.0 |  |
| $\begin{aligned} & 10491- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.23 | 73.19 | 19.42 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.95 | 71.65 | 18.67 |  | 80.0 |  |
|  |  | Z | 3.47 | 70.90 | 18.25 |  | 80.0 |  |
| $\begin{aligned} & \text { 10492- } \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.97 | 69.24 | 17.95 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.85 | 68.36 | 17.51 |  | 80.0 |  |
|  |  | Z | 3.50 | 68.04 | 17.11 |  | 80.0 |  |


| $\begin{aligned} & 10493- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 50\% RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.03 | 69.04 | 17.87 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.92 | 68.21 | 17.46 |  | 80.0 |  |
| 10494AAE |  | Z | 3.56 | 67.90 | 17.04 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.79 | 75.46 | 20.14 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.38 | 73.53 | 19.24 |  | 80.0 |  |
|  |  | Z | 3.78 | 72.48 | 18.78 |  | 80.0 |  |
| $\begin{aligned} & 10495- \\ & \text { AAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.03 | 69.76 | 18.19 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.90 | 68.85 | 17.73 |  | 80.0 |  |
|  |  | Z | 3.53 | 68.35 | 17.31 |  | 80.0 |  |
| 10496- AAE | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.08 | 69.35 | 18.04 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.97 | 68.51 | 17.62 |  | 80.0 |  |
|  |  | Z | 3.60 | 68.09 | 17.22 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10497- \\ \text { AAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.72 | 75.87 | 18.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.64 | 70.76 | 15.98 |  | 80.0 |  |
|  |  | Z | 1.51 | 64.60 | 11.77 |  | 80.0 |  |
| $\begin{aligned} & 10498- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.30 | 66.27 | 12.99 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.02 | 64.31 | 12.06 |  | 80.0 |  |
|  |  | Z | 1.20 | 60.00 | 8.21 |  | 80.0 |  |
| $\begin{aligned} & 10499- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.18 | 65.35 | 12.41 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.97 | 63.70 | 11.62 |  | 80.0 |  |
|  |  | Z | 1.22 | 60.00 | 8.05 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.19 | 76.87 | 20.53 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.63 | 74.04 | 19.27 |  | 80.0 |  |
|  |  | Z | 3.15 | 73.35 | 18.54 |  | 80.0 |  |
| $\begin{aligned} & 10501- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.74 | 71.57 | 18.07 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.44 | 69.83 | 17.26 |  | 80.0 |  |
|  |  | Z | 3.03 | 69.25 | 16.29 |  | 80.0 |  |
| $\begin{aligned} & 10502- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.79 | 71.34 | 17.92 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.50 | 69.66 | 17.14 |  | 80.0 |  |
|  |  | Z | 3.07 | 69.05 | 16.12 |  | 80.0 |  |
| $\begin{array}{\|l} 10503- \\ \text { AAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.18 | 75.62 | 20.32 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.77 | 73.43 | 19.30 |  | 80.0 |  |
|  |  | Z | 3.23 | 72.50 | 18.74 |  | 80.0 |  |
| $\begin{aligned} & 10504- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.70 | 70.40 | 18.21 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.52 | 69.18 | 17.61 |  | 80.0 |  |
|  |  | Z | 3.17 | 68.86 | 17.07 |  | 80.0 |  |
| $\begin{aligned} & \text { 10505- } \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.77 | 70.08 | 18.09 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.60 | 68.95 | 17.53 |  | 80.0 |  |
|  |  | Z | 3.25 | 68.67 | 16.99 |  | 80.0 |  |
| $\begin{aligned} & \text { 10506- } \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.74 | 75.29 | 20.06 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 73.37 | 19.17 |  | 80.0 |  |
|  |  | $\underline{z}$ | 3.74 | 72.32 | 18.70 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 <br> MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 4.01 | 69.69 | 18.15 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.88 | 68.79 | 17.69 |  | 80.0 |  |
|  |  | Z | 3.51 | 68.29 | 17.27 |  | 80.0 |  |

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| $\begin{aligned} & 10508- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 4.07 | 69.28 | 18.00 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.96 | 68.45 | 17.58 |  | 80.0 |  |
| $\begin{aligned} & 10509- \\ & \text { AAD } \\ & \hline \end{aligned}$ |  | Z | 3.59 | 68.02 | 17.17 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.87 | 73.12 | 19.15 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 71.69 | 18.46 |  | 80.0 |  |
| $\begin{aligned} & 10510- \\ & \text { AAD } \end{aligned}$ |  | Z | 4.08 | 70.95 | 18.12 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 4.46 | 69.19 | 17.97 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.36 | 68.46 | 17.61 |  | 80.0 |  |
| $\begin{aligned} & 10511- \\ & \text { AAD } \end{aligned}$ |  | Z | 3.98 | 67.93 | 17.23 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 15 <br> MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 4.49 | 68.83 | 17.85 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 68.15 | 17.52 |  | 80.0 |  |
|  |  | Z | 4.03 | 67.70 | 17.16 |  | 80.0 |  |
| 10512- <br> AAE | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.35 | 75.53 | 19.95 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.89 | 73.64 | 19.09 |  | 80.0 |  |
|  |  | Z | 4.27 | 72.56 | 18.64 |  | 80.0 |  |
| $\begin{aligned} & \text { 10513- } \\ & \text { AAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 <br> MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 4.37 | 69.62 | 18.15 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 68.83 | 17.75 |  | 80.0 |  |
|  |  | Z | 3.86 | 68.15 | 17.33 |  | 80.0 |  |
| 10514- AAE | LTE-TDD (SC-FDMA, 100\% RB, 20 <br> MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 4.36 | 69.04 | 17.95 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 68.32 | 17.60 |  | 80.0 |  |
|  |  | Z | 3.89 | 67.75 | 17.20 |  | 80.0 |  |
| $10515-$ <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 0.98 | 64.01 | 15.52 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.90 | 62.52 | 14.23 |  | 150.0 |  |
|  |  | Z | 0.95 | 63.71 | 15.08 |  | 150.0 |  |
| $\begin{aligned} & 10516- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.96 | 80.43 | 22.24 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.52 | 69.16 | 15.73 |  | 150.0 |  |
|  |  | Z | 0.74 | 75.71 | 19.80 |  | 150.0 |  |
| $10517-$ <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 <br> Mbps, 99pc duty cycle) | X | 0.87 | 66.95 | 16.73 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.75 | 64.30 | 14.64 |  | 150.0 |  |
|  |  | Z | 0.81 | 66.10 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10518- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.59 | 66.88 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.55 | 66.43 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.41 | 66.91 | 16.25 |  | 150.0 |  |
| 10519- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 <br> Mbps, 99pc duty cycle) | X | 4.79 | 67.13 | 16.49 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 66.71 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.57 | 67.10 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10520- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.64 | 67.11 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.60 | 66.67 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.43 | 67.05 | 16.27 |  | 150.0 |  |
| $\begin{aligned} & \text { 10521- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 <br> Mbps, 99pc duty cycle) | X | 4.57 | 67.12 | 16.42 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.53 | 66.66 | 16.16 |  | 150.0 |  |
|  |  | Z | 4.36 | 67.04 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10522- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 <br> Mbps, 99pc duty cycle) | X | 4.63 | 67.16 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 66.70 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.42 | 67.17 | 16.36 |  | 150.0 |  |


| $\begin{aligned} & 10523- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.51 | 67.05 | 16.34 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.46 | 66.56 | 16.06 |  | 150.0 |  |
|  |  | Z | 4.33 | 67.10 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & \text { 10524- } \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.58 | 67.09 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.53 | 66.64 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.37 | 67.10 | 16.33 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10525- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (20MHz, MC̄ 99pc duty cycle) | X | 4.55 | 66.14 | 16.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 65.66 | 15.78 |  | 150.0 |  |
|  |  | Z | 4.38 | 66.18 | 15.95 |  | 150.0 |  |
| $\begin{aligned} & 10526- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 99 pc duty cycle) | X | 4.74 | 66.53 | 16.19 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 66.05 | 15.93 |  | 150.0 |  |
|  |  | Z | 4.52 | 66.50 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10527- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) | X | 4.66 | 66.50 | 16.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 66.01 | 15.87 |  | 150.0 |  |
|  |  | Z | 4.45 | 66.47 | 16.02 |  | 150.0 |  |
| $\begin{aligned} & 10528- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) | X | 4.67 | 66.52 | 16.18 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.03 | 15.91 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.48 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10529- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.67 | 66.52 | 16.18 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.03 | 15.91 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.48 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10531- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) | X | 4.67 | 66.65 | 16.20 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 66.16 | 15.93 |  | 150.0 |  |
|  |  | Z | 4.44 | 66.54 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10532- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, $99 p \mathrm{c}$ duty cycle) | X | 4.53 | 66.51 | 16.14 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 66.01 | 15.86 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.41 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10533- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, $99 p \mathrm{duty}$ cycle) | X | 4.68 | 66.56 | 16.16 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 66.06 | 15.89 |  | 150.0 |  |
|  |  | Z | 4.48 | 66.56 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10534- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCSO, 99pc duty cycle) | X | 5.19 | 66.60 | 16.20 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.16 | 66.20 | 15.99 |  | 150.0 |  |
|  |  | Z | 5.01 | 66.50 | 16.09 |  | 150.0 |  |
| $\begin{aligned} & 10535- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | X | 5.26 | 66.75 | 16.27 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.22 | 66.35 | 16.06 |  | 150.0 |  |
|  |  | Z | 5.06 | 66.65 | 16.16 |  | 150.0 |  |
| $\begin{aligned} & 10536- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | X | 5.13 | 66.73 | 16.24 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.09 | 66.32 | 16.02 |  | 150.0 |  |
|  |  | Z | 4.95 | 66.64 | 16.13 |  | 150.0 |  |
| $\begin{aligned} & 10537- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS} 3$, 99 pc duty cycle) | X | 5.19 | 66.69 | 16.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.15 | 66.30 | 16.01 |  | 150.0 |  |
|  |  | Z | 5.00 | 66.59 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & 10538- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle) | X | 5.28 | 66.73 | 16.28 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 66.36 | 16.08 |  | 150.0 |  |
|  |  | Z | 5.08 | 66.58 | 16.14 |  | 150.0 |  |
| $\begin{aligned} & 10540 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 5.21 | 66.72 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.17 | 66.33 | 16.08 |  | 150.0 |  |
|  |  | Z | 5.01 | 66.56 | 16.15 |  | 150.0 |  |

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| $\begin{array}{\|l} \hline 10541- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | X | 5.18 | 66.60 | 16.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.14 | 66.20 | 16.01 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10542- \\ \text { AAB } \\ \hline \end{array}$ |  | Z | 4.99 | 66.47 | 16.09 |  | 150.0 |  |
|  | IEEE 802.11ac WIFI (40MHz, MCS8, 99 pc duty cycle) | X | 5.33 | 66.65 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.31 | 66.28 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10543- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 5.14 | 66.55 | 16.15 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCS9, 99 pc duty cycle) | X | 5.41 | 66.68 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.39 | 66.31 | 16.11 |  | 150.0 |  |
| 10544- <br> AAB |  | Z | 5.20 | 66.56 | 16.18 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS} 0$, 99pc duty cycle) | X | 5.49 | 66.70 | 16.18 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.45 | 66.31 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10545- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 5.34 | 66.58 | 16.07 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle) | X | 5.68 | 67.09 | 16.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.66 | 66.76 | 16.15 |  | 150.0 |  |
| $\begin{aligned} & 10546- \\ & \text { AAB } \end{aligned}$ |  | Z | 5.51 | 66.98 | 16.23 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | X | 5.57 | 66.94 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.54 | 66.57 | 16.08 |  | 150.0 |  |
| $\begin{aligned} & 10547- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 5.38 | 66.73 | 16.11 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi ( 80 MHz , MCS3, 99pc duty cycle) | X | 5.64 | 66.98 | 16.27 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.63 | 66.66 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & 10548- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Z | 5.45 | 66.79 | 16.14 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | X | 5.90 | 67.92 | 16.71 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.97 | 67.87 | 16.68 |  | 150.0 |  |
| $\begin{aligned} & 10550- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 5.63 | 67.50 | 16.47 |  | 150.0 |  |
|  | IEEE 802.11 ac WiFi (80MHz, MCS6, $99 p \mathrm{duty}$ cycle) | X | 5.59 | 66.92 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.55 | 66.54 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & \text { 10551- } \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 5.42 | 66.82 | 16.17 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCS7, 99 pc duty cycle) | X | 5.60 | 66.98 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.56 | 66.60 | 16.06 |  | 150.0 |  |
|  |  | Z | 5.40 | 66.75 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10552- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle) | X | 5.51 | 66.77 | 16.16 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.47 | 66.37 | 15.96 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10553- \\ \text { AAB } \\ \hline \end{array}$ |  | Z | 5.35 | 66.67 | 16.06 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (80MHz, MCS9, 99 pc duty cycle) | X | 5.60 | 66.81 | 16.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.56 | 66.43 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10554- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Z | 5.41 | 66.65 | 16.08 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi ( 160 MHz , MCSO, 99pc duty cycle) | X | 5.89 | 67.05 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.86 | 66.69 | 16.08 |  | 150.0 |  |
| $\begin{aligned} & 10555- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Z | 5.75 | 66.91 | 16.14 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi ( 160 MHz , MCS1, 99pc duty cycle) | X | 6.02 | 67.35 | 16.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.00 | 67.02 | 16.22 |  | 150.0 |  |
|  |  | Z | 5.86 | 67.17 | 16.25 |  | 150.0 |  |
| 10556- $\mathrm{AAC}$ | IEEE 802.11ac WiFi (160MHz, MCS2, 99pc duty cycle) | X | 6.04 | 67.39 | 16.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.02 | 67.06 | 16.23 |  | 150.0 |  |
| $\begin{aligned} & 10557- \\ & \text { AAC } \end{aligned}$ |  | Z | 5.88 | 67.24 | 16.28 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (160MHz, MCS3, $99 p \mathrm{duty}$ cycle) | X | 6.01 | 67.32 | 16.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.99 | 66.98 | 16.22 |  | 150.0 |  |
|  |  | Z | 5.85 | 67.13 | 16.24 |  | 150.0 |  |


| $\begin{aligned} & \text { 10558- } \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS4, $99 p \mathrm{duty}$ cycle) | X | 6.07 | 67.49 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.05 | 67.17 | 16.33 |  | 150.0 |  |
| $\begin{aligned} & 10560- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Z | 5.88 | 67.26 | 16.33 |  | 150.0 |  |
|  | IEEE 802.11ac WiFi (160MHz, MCS6, 99 pc duty cycle) | X | 6.06 | 67.34 | 16.44 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.04 | 66.99 | 16.28 |  | 150.0 |  |
|  |  | Z | 5.88 | 67.13 | 16.30 |  | 150.0 |  |
| $\begin{aligned} & 10561- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 7$, 99 pc duty cycle) | X | 5.98 | 67.30 | 16.46 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.96 | 66.96 | 16.30 |  | 150.0 |  |
|  |  | Z | 5.81 | 67.11 | 16.32 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 99pc duty cycle) | X | 6.11 | 67.72 | 16.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.12 | 67.46 | 16.55 |  | 150.0 |  |
|  |  | Z | 5.89 | 67.37 | 16.45 |  | 150.0 |  |
| 10563- <br> AAC | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 9$, 99 pc duty cycle) | X | 6.43 | 68.23 | 16.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.50 | 68.16 | 16.85 |  | 150.0 |  |
|  |  | Z | 5.96 | 67.23 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10564- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 9 Mbps , 99 pc duty cycle) | X | 4.91 | 66.93 | 16.51 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.88 | 66.54 | 16.31 |  | 150.0 |  |
|  |  | Z | 4.73 | 66.93 | 16.37 |  | 150.0 |  |
| 10565- <br> AAA | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps , 99 pc duty cycle) | X | 5.16 | 67.40 | 16.83 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.13 | 67.02 | 16.64 |  | 150.0 |  |
|  |  | Z | 4.93 | 67.35 | 16.69 |  | 150.0 |  |
| $\begin{aligned} & 10566- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , $99 p \mathrm{c}$ duty cycle) | X | 4.99 | 67.26 | 16.66 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.96 | 66.87 | 16.45 |  | 150.0 |  |
|  |  | Z | 4.77 | 67.18 | 16.50 |  | 150.0 |  |
| $\begin{aligned} & 10567- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps , 99 pc duty cycle) | X | 5.02 | 67.67 | 17.02 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 67.25 | 16.79 |  | 150.0 |  |
|  |  | Z | 4.81 | 67.60 | 16.88 |  | 150.0 |  |
| $\begin{aligned} & 10568- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 99 pc duty cycle) | X | 4.90 | 67.00 | 16.42 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 66.62 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.67 | 66.94 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10569- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $48 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.97 | 67.73 | 17.07 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.93 | 67.29 | 16.83 |  | 150.0 |  |
|  |  | Z | 4.78 | 67.78 | 16.99 |  | 150.0 |  |
| $\begin{aligned} & 10570- \\ & \mathrm{AAA} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps , 99 pc duty cycle) | X | 5.01 | 67.57 | 17.00 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 67.15 | 16.77 |  | 150.0 |  |
|  |  | Z | 4.80 | 67.57 | 16.89 |  | 150.0 |  |
| $\begin{aligned} & 10571- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90 pc duty cycle) | X | 1.17 | 65.22 | 16.39 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.09 | 63.89 | 15.30 |  | 130.0 |  |
|  |  | Z | 1.10 | 64.48 | 15.68 |  | 130.0 |  |
| $10572$ <br> AAA | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 1.19 | 65.91 | 16.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.10 | 64.45 | 15.65 |  | 130.0 |  |
|  |  | Z | 1.12 | 65.08 | 16.07 |  | 130.0 |  |
| $10573-$ AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 <br> Mbps, 90pc duty cycle) | X | 11.95 | 118.97 | 33.95 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 2.10 | 86.50 | 22.92 |  | 130.0 |  |
|  |  | Z | 2.78 | 93.83 | 26.37 |  | 130.0 |  |
| $\begin{aligned} & 10574- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90 pc duty cycle) | X | 1.42 | 73.69 | 20.72 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.20 | 70.19 | 18.52 |  | 130.0 |  |
|  |  | Z | 1.24 | 71.54 | 19.44 |  | 130.0 |  |

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| $\begin{array}{\|l\|} \hline 10575- \\ \text { AAA } \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.69 | 66.71 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.67 | 66.34 | 16.38 |  | 130.0 |  |
| 10576- <br> AAA |  | Z | 4.50 | 66.68 | 16.40 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.72 | 66.88 | 16.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 4.69 | 66.50 | 16.44 |  | 130.0 |  |
|  |  | Z | 4.53 | 66.88 | 16.48 |  | 130.0 |  |
| $\begin{aligned} & 10577- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps, 90 pc duty cycle) | X | 4.94 | 67.20 | 16.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 66.83 | 16.62 |  | 130.0 |  |
|  |  | Z | 4.71 | 67.13 | 16.63 |  | 130.0 |  |
| $\begin{aligned} & 10578- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $18 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.83 | 67.37 | 16.92 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.81 | 66.98 | 16.72 |  | 130.0 |  |
|  |  | Z | 4.61 | 67.29 | 16.74 |  | 130.0 |  |
| $\begin{aligned} & 10579- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps, 90 pc duty cycle) | X | 4.60 | 66.66 | 16.24 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 66.30 | 16.05 |  | 130.0 |  |
|  |  | Z | 4.37 | 66.49 | 16.00 |  | 130.0 |  |
| $\begin{aligned} & 10580- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 90 pc duty cycle) | X | 4.64 | 66.67 | 16.25 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.31 | 16.06 |  | 130.0 |  |
|  |  | Z | 4.41 | 66.55 | 16.03 |  | 130.0 |  |
| $\begin{aligned} & 10581- \\ & \text { AAA } \\ & \hline \end{aligned}$ | 1EEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps , 90 pc duty cycle) | X | 4.73 | 67.42 | 16.87 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 67.02 | 16.65 |  | 130.0 |  |
|  |  | Z | 4.52 | 67.36 | 16.71 |  | 130.0 |  |
| $\begin{aligned} & \text { 10582- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps , 90 pc duty cycle) | X | 4.54 | 66.41 | 16.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.53 | 66.07 | 15.85 |  | 130.0 |  |
|  |  | Z | 4.30 | 66.25 | 15.78 |  | 130.0 |  |
| $\begin{aligned} & 10583- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90 pc duty cycle) | X | 4.69 | 66.71 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.67 | 66.34 | 16.38 |  | 130.0 |  |
|  |  | Z | 4.50 | 66.68 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & 10584- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90 pc duty cycle) | X | 4.72 | 66.88 | 16.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 66.50 | 16.44 |  | 130.0 |  |
|  |  | $Z$ | 4.53 | 66.88 | 16.48 |  | 130.0 |  |
| $\begin{aligned} & 10585- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 <br> Mbps, 90pc duty cycle) | X | 4.94 | 67.20 | 16.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 66.83 | 16.62 |  | 130.0 |  |
|  |  | Z | 4.71 | 67.13 | 16.63 |  | 130.0 |  |
| $\begin{aligned} & 10586- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.83 | 67.37 | 16.92 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.81 | 66.98 | 16.72 |  | 130.0 |  |
|  |  | Z | 4.61 | 67.29 | 16.74 |  | 130.0 |  |
| $\begin{aligned} & 10587- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.60 | 66.66 | 16.24 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 66.30 | 16.05 |  | 130.0 |  |
|  |  | Z | 4.37 | 66.49 | 16.00 |  | 130.0 |  |
| $\begin{aligned} & 10588- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90 pc duty cycle) | X | 4.64 | 66.67 | 16.25 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.31 | 16.06 |  | 130.0 |  |
|  |  | Z | 4.41 | 66.55 | 16.03 |  | 130.0 |  |
| $\begin{aligned} & \hline 10589- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90 pc duty cycle) | X | 4.73 | 67.42 | 16.87 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 67.02 | 16.65 |  | 130.0 |  |
|  |  | Z | 4.52 | 67.36 | 16.71 |  | 130.0 |  |
| $\begin{aligned} & 10590- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.54 | 66.41 | 16.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.53 | 66.07 | 15.85 |  | 130.0 |  |
|  |  | Z | 4.30 | 66.25 | 15.78 |  | 130.0 |  |


| $\begin{aligned} & 10591- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCSO, 90pc duty cycle) | X | 4.84 | 66.77 | 16.66 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.82 | 66.41 | 16.48 |  | 130.0 |  |
|  |  | Z | 4.66 | 66.76 | 16.51 |  | 130.0 |  |
| $\begin{aligned} & 10592- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | X | 5.01 | 67.12 | 16.79 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.99 | 66.76 | 16.61 |  | 130.0 |  |
|  |  | Z | 4.79 | 67.07 | 16.64 |  | 130.0 |  |
| $\begin{aligned} & 10593- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.93 | 67.04 | 16.68 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 66.69 | 16.51 |  | 130.0 |  |
|  |  | Z | 4.71 | 66.95 | 16.50 |  | 130.0 |  |
| $\begin{aligned} & \text { 10594- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.98 | 67.20 | 16.83 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.96 | 66.84 | 16.65 |  | 130.0 |  |
|  |  | Z | 4.76 | 67.13 | 16.67 |  | 130.0 |  |
| $\begin{array}{\|l} 10595- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.95 | 67.16 | 16.73 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.93 | 66.80 | 16.55 |  | 130.0 |  |
|  |  | Z | 4.73 | 67.10 | 16.57 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10596- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.89 | 67.16 | 16.74 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 66.79 | 16.55 |  | 130.0 |  |
|  |  | Z | 4.66 | 67.08 | 16.56 |  | 130.0 |  |
| $\begin{aligned} & 10597- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.84 | 67.08 | 16.63 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.82 | 66.71 | 16.44 |  | 130.0 |  |
|  |  | Z | 4.61 | 66.96 | 16.43 |  | 130.0 |  |
| $\begin{aligned} & 10598- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.82 | 67.33 | 16.90 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 66.95 | 16.70 |  | 130.0 |  |
|  |  | Z | 4.60 | 67.20 | 16.70 |  | 130.0 |  |
| $\begin{aligned} & 10599- \\ & A A B \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS0, 90pc duty cycle) | X | 5.51 | 67.30 | 16.83 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.50 | 67.04 | 16.72 |  | 130.0 |  |
|  |  | $\underline{Z}$ | 5.31 | 67.18 | 16.69 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10600- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS1, 90pc duty cycle) | X | 5.66 | 67.75 | 17.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.70 | 67.66 | 17.00 |  | 130.0 |  |
|  |  | Z | 5.42 | 67.55 | 16.85 |  | 130.0 |  |
| $\begin{aligned} & 10601- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS2, 90pc duty cycle) | X | 5.54 | 67.49 | 16.91 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.55 | 67.29 | 16.83 |  | 130.0 |  |
|  |  | Z | 5.33 | 67.34 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10602- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, $40 \mathrm{MHz}_{\text {, }}$ MCS3, 90pc duty cycle) | X | 5.62 | 67.47 | 16.82 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.64 | 67.27 | 16.74 |  | 130.0 |  |
|  |  | Z | 5.46 | 67.51 | 16.77 |  | 130.0 |  |
| $\begin{aligned} & 10603- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 5.72 | 67.83 | 17.13 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.72 | 67.56 | 17.01 |  | 130.0 |  |
|  |  | Z | 5.53 | 67.80 | 17.05 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 5.51 | 67.26 | 16.84 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.51 | 67.00 | 16.72 |  | 130.0 |  |
|  |  | $\underline{Z}$ | 5.40 | 67.44 | 16.85 |  | 130.0 |  |
| $\begin{aligned} & 10605- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | X | 5.62 | 67.58 | 16.99 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 5.63 | 67.37 | 16.91 |  | 130.0 |  |
|  |  | Z | 5.43 | 67.48 | 16.86 |  | 130.0 |  |
| $\begin{aligned} & 10606- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | X | 5.39 | 67.04 | 16.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.38 | 66.75 | 16.46 |  | 130.0 |  |
|  |  | Z | 5.18 | 66.82 | 16.39 |  | 130.0 |  |

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| $\begin{array}{\|l} \hline 10607- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 90pc duty cycle) | X | 4.69 | 66.11 | 16.30 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\bar{Y}$ | 4.65 | 65.70 | 16.09 |  | 130.0 |  |
| $\begin{aligned} & 10608- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | $\underline{Z}$ | 4.51 | 66.12 | 16.16 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc duty cycle) | X | 4.89 | 66.54 | 16.47 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.86 | 66.13 | 16.26 |  | 130.0 |  |
| $\begin{aligned} & 10609- \\ & \text { AAB } \end{aligned}$ |  | Z | 4.67 | 66.48 | 16.32 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS2, 90pe duty cycle) | X | 4.78 | 66.40 | 16.32 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 65.99 | 16.10 |  | 130.0 |  |
| $\begin{aligned} & 10610- \\ & \text { AAB } \end{aligned}$ |  | Z | 4.56 | 66.32 | 16.14 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS3, 90 pc duty cycle) | X | 4.83 | 66.56 | 16.48 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 66.15 | 16.27 |  | 130.0 |  |
| $\begin{aligned} & 10611- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 4.61 | 66.49 | 16.31 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS4, 90 pc duty cycle) | X | 4.74 | 66.37 | 16.33 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 65.96 | 16.12 |  | 130.0 |  |
| $\begin{aligned} & 10612- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Z | 4.52 | 66.28 | 16.15 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS5, 90 pc duty cycle) | X | 4.76 | 66.53 | 16.38 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 66.12 | 16.16 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10613- \\ \text { AAB } \\ \hline \end{array}$ |  | Z | 4.52 | 66.43 | 16.20 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS6, 90 pc duty cycle) | X | 4.76 | 66.43 | 16.27 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.03 | 16.06 |  | 130.0 |  |
| $\begin{aligned} & 10614- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 4.52 | 66.26 | 16.05 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS7, 90 pc duty cycle) | X | 4.70 | 66.62 | 16.50 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.67 | 66.19 | 16.28 |  | 130.0 |  |
| $\begin{aligned} & 10615- \\ & \text { AAB } \\ & \hline \end{aligned}$ |  | Z | 4.48 | 66.49 | 16.31 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.74 | 66.19 | 16.10 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 65.79 | 15.90 |  | 130.0 |  |
| $\begin{aligned} & 10616- \\ & \text { AAB } \end{aligned}$ |  | Z | 4.52 | 66.11 | 15.92 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCSO, 90 pc duty cycle) | X | 5.34 | 66.61 | 16.47 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.32 | 66.28 | 16.32 |  | 130.0 |  |
| $\begin{aligned} & 10617- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Z | 5.14 | 66.47 | 16.32 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCS1, 90pc duty cycle) | X | 5.40 | 66.74 | 16.51 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.38 | 66.41 | 16.35 |  | 130.0 |  |
|  |  | Z | 5.21 | 66.65 | 16.39 |  | 130.0 |  |
| $\begin{aligned} & 10618- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi (40MHz, MCS2, 90pc duty cycle) | X | 5.29 | 66.79 | 16.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.27 | 66.46 | 16.39 |  | 130.0 |  |
| $\begin{aligned} & \hline 10619- \\ & \text { AAB } \end{aligned}$ |  | Z | 5.11 | 66.70 | 16.43 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | X | 5.31 | 66.61 | 16.40 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 66.30 | 16.25 |  | 130.0 |  |
| $\begin{aligned} & 10620- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Z | 5.11 | 66.46 | 16.24 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | X | 5.41 | 66.67 | 16.47 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.41 | 66.38 | 16.34 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10621- \\ \text { AAB } \\ \hline \end{array}$ |  | Z | 5.19 | 66.48 | 16.30 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCS5, 90 pe duty cycle) | X | 5.40 | 66.76 | 16.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 5.38 | 66.43 | 16.48 |  | 130.0 |  |
| $\begin{aligned} & 10622- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ |  | Z | 5.21 | 66.64 | 16.50 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (40MHz, MCS6, 90 pc duty cycle) | X | 5.41 | 66.91 | 16.70 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.39 | 66.60 | 16.55 |  | 130.0 |  |
|  |  | Z | 5.20 | 66.74 | 16.55 |  | 130.0 |  |


| $\begin{aligned} & \hline 10623- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 90 pc duty cycle) | X | 5.29 | 66.45 | 16.36 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.27 | 66.12 | 16.20 |  | 130.0 |  |
|  |  | Z | 5.08 | 66.28 | 16.19 |  | 130.0 |  |
| $\begin{aligned} & 10624- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 90 pc duty cycle) | X | 5.48 | 66.64 | 16.51 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.47 | 66.35 | 16.38 |  | 130.0 |  |
|  |  | Z | 5.28 | 66.51 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90 pc duty cycle) | X | 5.87 | 67.67 | 17.07 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.92 | 67.56 | 17.03 |  | 130.0 |  |
|  |  | Z | 5.48 | 66.99 | 16.66 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCSO, 90pc duty cycle) | X | 5.62 | 66.65 | 16.41 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.59 | 66.32 | 16.26 |  | 130.0 |  |
|  |  | Z | 5.46 | 66.52 | 16.28 |  | 130.0 |  |
| $\begin{aligned} & 10627- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pe duty cycle) | X | 5.86 | 67.19 | 16.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.87 | 66.96 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.68 | 67.07 | 16.52 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10628- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 90 pc duty cycle) | X | 5.67 | 66.78 | 16.37 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.65 | 66.49 | 16.24 |  | 130.0 |  |
|  |  | Z | 5.47 | 66.52 | 16.18 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90 pc duty cycle) | X | 5.76 | 66.87 | 16.41 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.74 | 66.55 | 16.26 |  | 130.0 |  |
|  |  | Z | 5.55 | 66.62 | 16.22 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, 90 pc duty cycle) | X | 6.21 | 68.41 | 17.17 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $\bar{Y}$ | 6.36 | 68.57 | 17.26 |  | 130.0 |  |
|  |  | Z | 5.84 | 67.72 | 16.78 |  | 130.0 |  |
| $\begin{aligned} & 10631- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 6.11 | 68.22 | 17.27 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.15 | 68.07 | 17.21 |  | 130.0 |  |
|  |  | Z | 5.81 | 67.73 | 16.97 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 90 pc duty cycle) | X | 5.83 | 67.26 | 16.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.82 | 66.98 | 16.68 |  | 130.0 |  |
|  |  | Z | 5.67 | 67.19 | 16.73 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS7, 90 pe duty cycle) | X | 5.73 | 66.95 | 16.48 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.72 | 66.66 | 16.35 |  | 130.0 |  |
|  |  | Z | 5.54 | 66.74 | 16.32 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS8, 90 pc duty cycle) | X | 5.72 | 66.98 | 16.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.70 | 66.65 | 16.41 |  | 130.0 |  |
|  |  | Z | 5.52 | 66.78 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & 10635- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 90 pc duty cycle) | X | 5.60 | 66.32 | 15.97 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.59 | 66.03 | 15.84 |  | 130.0 |  |
|  |  | Z | 5.39 | 66.04 | 15.76 |  | 130.0 |  |
| $\begin{aligned} & 10636- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCSO, 90pc duty cycle) | X | 6.03 | 67.02 | 16.50 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.02 | 66.74 | 16.37 |  | 130.0 |  |
|  |  | Z | 5.89 | 66.87 | 16.36 |  | 130.0 |  |
| 10637- AAC | $\qquad$ 90 pc duty cycle) | X | 6.19 | 67.40 | 16.66 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.19 | 67.15 | 16.56 |  | 130.0 |  |
|  |  | Z | 6.02 | 67.21 | 16.51 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | X | 6.19 | 67.38 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.19 | 67.12 | 16.52 |  | 130.0 |  |
|  |  | Z | 6.03 | 67.21 | 16.49 |  | 130.0 |  |

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| $\begin{array}{\|l\|} \hline 10639- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 90 pc duty cycle) | X | 6.18 | 67.36 | 16.66 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.17 | 67.09 | 16.55 |  | 130.0 |  |
| $10640-$ <br> AAC | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 4$, 90 pc duty cycle) | Z | 6.00 | 67.13 | 16.50 |  | 130.0 |  |
|  |  | X | 6.19 | 67.39 | 16.62 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.20 | 67.16 | 16.53 |  | 130.0 |  |
| $\begin{aligned} & 10641- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS5, 90 pc duty cycle) | Z | 5.99 | 67.11 | 16.43 |  | 130.0 |  |
|  |  | X | 6.21 | 67.22 | 16.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  | IEEE 802.11ac WiFi (160MHz, MCS6, 90 pc duty cycle) | Y | 6.20 | 66.94 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10642- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | $\underline{Z}$ | 6.05 | 67.08 | 16.43 |  | 130.0 |  |
|  |  | X | 6.27 | 67.52 | 16.87 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.26 | 67.23 | 16.75 |  | 130.0 |  |
| $10643-$ <br> AAC |  | Z | 6.09 | 67.31 | 16.72 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (160MHz, MCS7, 90 pc duty cycle) | X | 6.10 | 67.19 | 16.61 | 0.46 | 130.0 | $\pm 9.6$ \% |
| 10644- AAC |  | Y | 6.09 | 66.93 | 16.50 |  | 130.0 |  |
|  |  | Z | 5.93 | 67.00 | 16.46 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (160MHz, MCS8, 90 pc duty cycle) | X | 6.29 | 67.77 | 16.92 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.32 | 67.61 | 16.86 |  | 130.0 |  |
| $\begin{aligned} & 10645- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | $\underline{Z}$ | 6.02 | 67.30 | 16.63 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (160MHz, MCS9, 90 pe duty cycle) | $\overline{\text { X }}$ | 6.72 | 68.61 | 17.29 | 0.46 | 130.0 | $\pm 9.6$ \% |
| 10646- <br> AAE |  | Y | 6.81 | 68.60 | 17.31 |  | 130.0 |  |
|  |  | Z | 6.13 | 67.29 | 16.58 |  | 130.0 |  |
|  | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe=2,7) | X | 26.22 | 119.06 | 40.53 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 23.98 | 116.77 | 40.23 |  | 60.0 |  |
| 10647- <br> AAE |  | Z | 13.39 | 105.96 | 36.68 |  | 60.0 |  |
|  | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe=2,7) | X | 21.91 | 115.56 | 39.67 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 20.79 | 114.08 | 39.59 |  | 60.0 |  |
| $\begin{array}{\|l\|} \hline 10648- \\ \text { AAA } \\ \hline \end{array}$ |  | Z | 11.12 | 102.25 | 35.63 |  | 60.0 |  |
|  | CDMA2000 (1x Advanced) | X | 0.80 | 65.60 | 12.34 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.65 | 62.69 | 10.17 |  | 150.0 |  |
| 10652- <br> AAC |  | Z | 0.58 | 62.96 | 9.61 |  | 150.0 |  |
|  | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | X | 3.70 | 67.38 | 17.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10653- \\ & \text { AAC } \\ & \hline \end{aligned}$ |  | Y | 3.59 | 66.56 | 16.66 |  | 80.0 |  |
|  |  | Z | 3.39 | 66.83 | 16.41 |  | 80.0 |  |
|  | LTE-TDD (OFDMA, $10 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$, Clipping 44\%) | X | 4.17 | 66.50 | 17.03 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.11 | 65.95 | 16.76 |  | 80.0 |  |
| 10654- <br> AAC |  | $\underline{Z}$ | 3.90 | 66.02 | 16.55 |  | 80.0 |  |
|  | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | X | 4.13 | 66.12 | 17.00 | 2.23 | 80.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10655- \\ & \text { AAD } \\ & \hline \end{aligned}$ |  | Y | 4.07 | 65.60 | 16.75 |  | 80.0 |  |
|  |  | Z | 3.90 | 65.62 | 16.55 |  | 80.0 |  |
|  | LTE-TDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 4.19 | 66.12 | 17.04 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.13 | 65.62 | 16.79 |  | 80.0 |  |
| 10658- <br> AAA |  | Z | 3.96 | 65.57 | 16.58 |  | 80.0 |  |
|  | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | X | 100.00 | 111.27 | 26.15 | 10.00 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 112.15 | 26.71 |  | 50.0 |  |
|  |  | Z | 14.35 | 85.50 | 18.40 |  | 50.0 |  |
| $\begin{aligned} & 10659- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | X | 100.00 | 110.66 | 24.83 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 110.25 | 24.76 |  | 60.0 |  |
|  |  | Z | 100.00 | 105.29 | 22.07 |  | 60.0 |  |


| $10660-$ <br> AAA | Pulse Waveform (200Hz, 40\%) | X | 100.00 | 112.93 | 24.53 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 108.47 | 22.64 |  | 80.0 |  |
|  |  | Z | 100.00 | 104.83 | 20.58 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform $(200 \mathrm{~Hz}, 60 \%)$ | X | 100.00 | 118.71 | 25.68 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 104.33 | 19.70 |  | 100.0 |  |
|  |  | Z | 100.00 | 104.48 | 19.32 |  | 100.0 |  |
| $10662-$ <br> AAA | Pulse Waveform $(200 \mathrm{~Hz}, 80 \%)$ | X | 100.00 | 138.66 | 31.49 | 0.97 | 120.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.19 | 60.00 | 4.09 |  | 120.0 |  |
|  |  | Z | 100.00 | 91.23 | 12.90 |  | 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.

Calibration Laboratory of Schmid \& Partner

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Client PCTest
Certificate No: EX3-7357 Apr18

CALIBRATION CERTIFICATE

Object
EX3DV4 - SN:7357

Calibration procedure(s)

Calibration date:

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

Apil 18, 2018

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

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$.
Calibration Equipment used (M\&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
| :--- | :--- | :--- | :--- |
| Power meter NRP | SN: 104778 | 04-Apr-18 (No. 217-02672/02673) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-18 (No. 217-02672) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-18 (No. 217-02673) | Apr-19 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 04-Apr-18 (No. 217-02682) | Apr-19 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-17 (No. ES3-3013_Dec17) | Dec-18 |
| DAE4 | SN: 660 | 21-Dec-17 (No. DAE4-660_Dec17) | Dec-18 |
|  |  | Check Date (in house) |  |
| Secondary Standards | ID | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-16) | In house check: Jun-18 |
| Power sensor E4412A | SN: 000110210 | 04-Aug-99 (in house check Jun-16) | In house check: Jun-18 |
| RF generator HP 8648C | SN: US3642U01700 | 18-Oct-01 (in house check Oct-17) | In house check: Oct-18 |
| Network Analyzer HP 8753E | SN: US37390585 |  |  |

Calibrated by: $\quad$ Claudio Leubler,

Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzeriand



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

Connector Angle information used in DASY system to align probe sensor $X$ to the robot coordinate system

## Calibration is Performed According to the Following Standards:

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 handheld 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 "

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $9=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- $N O R M(f) x, y, z=N O R M x, y, z *$ frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- $A x, y, z ; B x, y, z ; C x, y, z ; D x, y, z ; V R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. $V R$ is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $f>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy ( $3 D$ deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no uncertainty required).


# Probe EX3DV4 

## SN:7357

Manufactured: February 5, 2015
Calibrated:
April 18, 2018

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

## Basic Calibration Parameters

|  | Sensor $\mathbf{X}$ | Sensor $\mathbf{Y}$ | Sensor $\mathbf{Z}$ | Unc (k=2) |
| :--- | :---: | :---: | :---: | :---: |
| Norm $\left(\mu \mathrm{V} /(\mathrm{V} / \mathrm{m})^{2}\right)^{\mathrm{A}}$ | 0.37 | 0.48 | 0.40 | $\pm 10.1 \%$ |
| DCP $(\mathrm{mV})^{\mathrm{B}}$ | 89.1 | 99.1 | 96.4 |  |

## Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \boldsymbol{\mu} \mathbf{V}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c}^{\mathbf{E}}$ <br> $(\mathbf{k}=\mathbf{2})$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 151.5 | $\pm 2.7 \%$ |
|  |  | $\mathbf{Y}$ | 0.0 | 0.0 | 1.0 |  | 139.1 |  |
|  |  | Z | 0.0 | 0.0 | 1.0 |  | 158.4 |  |

Note: For details on UID parameters see Appendix.

## Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{\alpha}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s} . \mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s .} \mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 37.91 | 303.3 | 40.25 | 6.413 | 0.832 | 4.998 | 0.00 | 0.454 | 1.006 |
| Y | 48.33 | 363.1 | 36.01 | 10.58 | 0.113 | 5.100 | 0.00 | 0.458 | 1.004 |
| Z | 39.38 | 305.2 | 38.03 | 5.76 | 0.610 | 5.046 | 0.00 | 0.461 | 1.008 |

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 $95 \%$.

[^4]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

Calibration Parameter Determined in Head Tissue Simulating Media

| $\mathrm{f}(\mathrm{MHz})^{\text {c }}$ | Relative Permittivity ${ }^{\text {F }}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{F}$ | ConvF X | ConvF Y | ConvF Z | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{6} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{gathered} \text { Unc } \\ (k=2) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64 | 54.2 | 0.75 | 14.92 | 14.92 | 14.92 | 0.00 | 1.00 | $\pm 13.3 \%$ |
| 150 | 52.3 | 0.76 | 13.49 | 13.49 | 13.49 | 0.00 | 1.00 | $\pm 13.3 \%$ |
| 300 | 45.3 | 0.87 | 12.37 | 12.37 | 12.37 | 0.08 | 1.20 | $\pm 13.3 \%$ |
| 450 | 43.5 | 0.87 | 11.17 | 11.17 | 11.17 | 0.14 | 1.20 | $\pm 13.3 \%$ |
| 750 | 41.9 | 0.89 | 10.50 | 10.50 | 10.50 | 0.45 | 0.85 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 10.11 | 10.11 | 10.11 | 0.37 | 0.93 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 8.80 | 8.80 | 8.80 | 0.38 | 0.86 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 8.47 | 8.47 | 8.47 | 0.18 | 0.83 | $\pm 12.0 \%$ |
| 2300 | 39.5 | 1.67 | 7.83 | 7.83 | 7.83 | 0.33 | 0.86 | $\pm 12.0$ \% |
| 2450 | 39.2 | 1.80 | 7.43 | 7.43 | 7.43 | 0.37 | 0.89 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 7.13 | 7.13 | 7.13 | 0.27 | 0.98 | $\pm 12.0 \%$ |
| 5250 | 35.9 | 4.71 | 5.62 | 5.62 | 5.62 | 0.35 | 1.80 | $\pm 13.1$ \% |
| 5600 | 35.5 | 5.07 | 4.93 | 4.93 | 4.93 | 0.40 | 1.80 | $\pm 13.1$ \% |
| 5750 | 35.4 | 5.22 | 5.23 | 5.23 | 5.23 | 0.40 | 1.80 | $\pm 13.1$ \% |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( E and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( E and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{G}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathrm{f}(\mathrm{MHz})^{\text {c }}$ | Relative Permittivity ${ }^{F}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{G} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & \text { Unc } \\ & (k=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 150 | 61.9 | 0.80 | 12.99 | 12.99 | 12.99 | 0.00 | 1.00 | $\pm 13.3 \%$ |
| 300 | 58.2 | 0.92 | 12.08 | 12.08 | 12.08 | 0.05 | 1.20 | $\pm 13.3$ \% |
| 450 | 56.7 | 0.94 | 11.52 | 11.52 | 11.52 | 0.08 | 1.20 | $\pm 13.3 \%$ |
| 750 | 55.5 | 0.96 | 10.37 | 10.37 | 10.37 | 0.47 | 0.85 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 10.17 | 10.17 | 10.17 | 0.37 | 0.93 | $\pm 12.0$ \% |
| 1750 | 53.4 | 1.49 | 8.43 | 8.43 | 8.43 | 0.37 | 0.86 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 8.08 | 8.08 | 8.08 | 0.36 | 0.83 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 7.74 | 7.74 | 7.74 | 0.38 | 0.85 | $\pm 12.0$ \% |
| 2450 | 52.7 | 1.95 | 7.60 | 7.60 | 7.60 | 0.35 | 0.88 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 7.44 | 7.44 | 7.44 | 0.33 | 0.93 | $\pm 12.0$ \% |
| 5250 | 48.9 | 5.36 | 4.78 | 4.78 | 4.78 | 0.50 | 1.80 | $\pm 13.1$ \% |
| 5600 | 48.5 | 5.77 | 4.20 | 4.20 | 4.20 | 0.50 | 1.80 | $\pm 13.1$ \% |
| 5750 | 48.3 | 5.94 | 4.21 | 4.21 | 4.21 | 0.50 | 1.80 | $\pm 13.1 \%$ |

[^5]
## Frequency Response of E-Field



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

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



## Dynamic Range $f\left(S_{\text {A }}^{\text {head }}\right.$ ) (TEM cell, $\mathrm{f}_{\text {eval }}=1900 \mathrm{MHz}$ )



Uncertainty of Linearity Assessment: $\pm \mathbf{0 . 6 \%}(\mathbf{k = 2 )}$

## Conversion Factor Assessment



Error $(\phi, \vartheta), \mathbf{f}=\mathbf{9 0 0} \mathbf{~ M H z}$



## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7357

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle $\left(^{\circ}\right.$ ) | 11.4 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

## Appendix: Modulation Calibration Parameters

| UID | Communication System Name |  | $\begin{gathered} \mathrm{A} \\ \mathrm{~dB} \end{gathered}$ | $\underset{d B \cup \mu v}{B}$ | C | $\begin{gathered} \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \hline \text { VR } \\ & \mathrm{mV} \end{aligned}$ | $\begin{aligned} & \text { Max } \\ & \operatorname{Unc}^{E} \\ & (k=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | $X$ | 0.00 | 0.00 | 1.00 | 0.00 | 151.5 | $\pm 2.7 \%$ |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 139.1 |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 158.4 |  |
| $\begin{aligned} & 10010- \\ & \text { CAA } \end{aligned}$ | SAR Validation (Square, 100 $\mathrm{ms}, 10 \mathrm{~ms}$ ) | X | 1.67 | 61.93 | 7.65 | 10.00 | 20.0 | $\pm 9.6$ \% |
|  |  | Y | 2.82 | 69.17 | 11.50 |  | 20.0 |  |
|  |  | Z | 1.68 | 62.20 | 7.72 |  | 20.0 |  |
| 10011- CAB | UMTS-FDD (WCDMA) | X | 0.91 | 67.36 | 14.64 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.03 | 67.52 | 15.32 |  | 150.0 |  |
|  |  | Z | 0.87 | 67.00 | 14.33 |  | 150.0 |  |
| $\begin{aligned} & 10012- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 1.03 | 63.20 | 14.83 | 0.41 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.15 | 63.79 | 15.34 |  | 150.0 |  |
|  |  | Z | 1.01 | 63.27 | 14.81 |  | 150.0 |  |
| $\begin{aligned} & 10013- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps ) | X | 4.63 | 66.39 | 16.96 | 1.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 66.69 | 17.19 |  | 150.0 |  |
|  |  | Z | 4.64 | 66.53 | 16.99 |  | 150.0 |  |
| $\begin{aligned} & 10021- \\ & \text { DAC } \end{aligned}$ | GSM-FDD (TDMA, GMSK) | X | 3.67 | 70.27 | 12.79 | 9.39 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 116.17 | 27.83 |  | 50.0 |  |
|  |  | Z | 17.04 | 87.58 | 18.77 |  | 50.0 |  |
| $\begin{aligned} & 10023- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0) | X | 3.48 | 69.40 | 12.45 | 9.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 115.39 | 27.52 |  | 50.0 |  |
|  |  | Z | 8.91 | 80.25 | 16.55 |  | 50.0 |  |
| $\begin{aligned} & 10024- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 1.80 | 66.18 | 9.84 | 6.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 120.19 | 28.55 |  | 60.0 |  |
|  |  | Z | 100.00 | 103.30 | 20.82 |  | 60.0 |  |
| $\begin{aligned} & 10025- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0) | X | 3.42 | 64.49 | 22.34 | 12.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 6.04 | 85.62 | 35.55 |  | 50.0 |  |
|  |  | Z | 3.44 | 65.04 | 22.85 |  | 50.0 |  |
| $\begin{aligned} & \hline 10026- \\ & \text { DAC } \\ & \hline \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 6.25 | 83.47 | 29.08 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 9.24 | 95.88 | 35.47 |  | 60.0 |  |
|  |  | Z | 6.56 | 85.41 | 30.17 |  | 60.0 |  |
| $\begin{aligned} & 10027- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | X | 0.96 | 63.24 | 7.67 | 4.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 125.59 | 30.06 |  | 80.0 |  |
|  |  | Z | 100.00 | 100.14 | 18.62 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10028- \\ \text { DAC } \\ \hline \end{array}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 0.48 | 60.36 | 5.50 | 3.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 132.37 | 32.13 |  | 100.0 |  |
|  |  | Z | 99.97 | 95.45 | 15.98 |  | 100.0 |  |
| $\begin{aligned} & 10029- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | X | 4.19 | 75.28 | 24.64 | 7.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 81.78 | 28.49 |  | 80.0 |  |
|  |  | Z | 4.26 | 76.21 | 25.31 |  | 80.0 |  |
| $\begin{aligned} & 10030- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 1.09 | 63.09 | 7.76 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 120.14 | 28.06 |  | 70.0 |  |
|  |  | Z | 4.93 | 76.05 | 12.90 |  | 70.0 |  |
| $\begin{aligned} & 10031- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 0.27 | 60.00 | 3.17 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 135.00 | 31.47 |  | 100.0 |  |
|  |  | Z | 0.26 | 60.00 | 3.07 |  | 100.0 |  |


| $\begin{aligned} & 10032- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 27.08 | 314.20 | 3.36 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 149.06 | 35.68 |  | 100.0 |  |
|  |  | Z | 1.21 | 330.96 | 55.77 |  | 100.0 |  |
| $\begin{aligned} & 10033- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH1) | X | 3.08 | 73.10 | 16.00 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 136.30 | 37.75 |  | 70.0 |  |
|  |  | Z | 7.37 | 86.92 | 21.69 |  | 70.0 |  |
| $\begin{array}{\|l\|} \hline 10034- \\ \text { CAA } \\ \hline \end{array}$ | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH3) | X | 1.25 | 65.91 | 11.39 | 1.88 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.27 | 87.77 | 22.72 |  | 100.0 |  |
|  |  | Z | 1.70 | 70.42 | 13.93 |  | 100.0 |  |
| 10035-CAA | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH5) | X | 0.99 | 64.64 | 10.52 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 2.59 | 77.96 | 18.88 |  | 100.0 |  |
|  |  | Z | 1.19 | 67.26 | 12.19 |  | 100.0 |  |
| $\begin{aligned} & 10036- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 3.48 | 74.91 | 16.77 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 136.90 | 38.02 |  | 70.0 |  |
|  |  | Z | 11.33 | 93.27 | 23.71 |  | 70.0 |  |
| $\begin{array}{\|l\|} \hline 10037- \\ \text { CAA } \\ \hline \end{array}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 1.18 | 65.50 | 11.18 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 86.12 | 22.16 |  | 100.0 |  |
|  |  | Z | 1.56 | 69.56 | 13.55 |  | 100.0 |  |
| $10038-$CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 1.00 | 64.92 | 10.78 | 1.17 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.61 | 78.41 | 19.18 |  | 100.0 |  |
|  |  | Z | 1.21 | 67.70 | 12.52 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \mathrm{CAB} \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 0.95 | 64.99 | 10.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.84 | 72.12 | 15.71 |  | 150.0 |  |
|  |  | Z | 1.02 | 65.84 | 10.98 |  | 150.0 |  |
| $\begin{aligned} & 10042- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, PI/4DQPSK, Halfrate) | X | 1.77 | 64.37 | 9.09 | 7.78 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.16 | 25.71 |  | 50.0 |  |
|  |  | Z | 2.56 | 68.32 | 10.93 |  | 50.0 |  |
| 10044-CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.31 | 133.81 | 11.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.00 | 104.03 | 5.27 |  | 150.0 |  |
|  |  | Z | 0.33 | 142.49 | 0.98 |  | 150.0 |  |
| $\begin{aligned} & \text { 10048- } \\ & \text { CAA } \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 4.01 | 66.51 | 12.74 | 13.80 | 25.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 110.91 | 26.95 |  | 25.0 |  |
|  |  | Z | 5.44 | 70.40 | 14.40 |  | 25.0 |  |
| $\begin{array}{\|l} \hline 10049- \\ \text { CAA } \\ \hline \end{array}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 3.70 | 68.56 | 12.33 | 10.79 | 40.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 112.50 | 26.54 |  | 40.0 |  |
|  |  | Z | 5.22 | 72.87 | 14.17 |  | 40.0 |  |
| $\begin{array}{\|l\|} \hline 10056- \\ \text { CAA } \\ \hline \end{array}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | X | 6.09 | 76.95 | 17.81 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 128.62 | 35.43 |  | 50.0 |  |
|  |  | Z | 13.22 | 89.10 | 22.41 |  | 50.0 |  |
| $\begin{array}{\|l\|} \hline 10058- \\ \text { DAC } \\ \hline \end{array}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 3.39 | 71.63 | 22.33 | 6.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.14 | 76.10 | 25.11 |  | 100.0 |  |
|  |  | Z | 3.42 | 72.27 | 22.83 |  | 100.0 |  |
| $\begin{aligned} & 10059- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.03 | 63.98 | 15.22 | 0.61 | 110.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.18 | 64.90 | 16.05 |  | 110.0 |  |
|  |  | Z | 1.02 | 64.18 | 15.34 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 5.25 | 93.28 | 23.11 | 1.30 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 145.92 | 38.93 |  | 110.0 |  |
|  |  | Z | 39.44 | 123.36 | 31.22 |  | 110.0 |  |


| $\begin{aligned} & 10061- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 1.80 | 74.31 | 19.24 | 2.04 | 110.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.02 | 83.93 | 24.56 |  | 110.0 |  |
|  |  | Z | 2.14 | 78.36 | 21.37 |  | 110.0 |  |
| $\begin{aligned} & 10062- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 6 | X | 4.44 | 66.41 | 16.45 | 0.49 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.68 | 66.67 | 16.57 |  | 100.0 |  |
|  |  | Z | 4.45 | 66.51 | 16.42 |  | 100.0 |  |
| $\begin{aligned} & 10063- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 4.45 | 66.48 | 16.52 | 0.72 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.69 | 66.78 | 16.69 |  | 100.0 |  |
|  |  | Z | 4.46 | 66.59 | 16.51 |  | 100.0 |  |
| $\begin{aligned} & 10064- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | X | 4.70 | 66.70 | 16.72 | 0.86 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.99 | 67.05 | 16.93 |  | 100.0 |  |
|  |  | Z | 4.72 | 66.83 | 16.73 |  | 100.0 |  |
| $\begin{aligned} & 10065- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps) | X | 4.56 | 66.53 | 16.77 | 1.21 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.85 | 66.96 | 17.05 |  | 100.0 |  |
|  |  | Z | 4.58 | 66.69 | 16.81 |  | 100.0 |  |
| $\begin{aligned} & 10066- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 24 Mbps) | X | 4.57 | 66.51 | 16.90 | 1.46 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.87 | 66.98 | 17.22 |  | 100.0 |  |
|  |  | Z | 4.60 | 66.69 | 16.96 |  | 100.0 |  |
| $\begin{aligned} & 10067- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps) | X | 4.86 | 66.77 | 17.36 | 2.04 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.15 | 67.13 | 17.68 |  | 100.0 |  |
|  |  | Z | 4.89 | 66.94 | 17.44 |  | 100.0 |  |
| $\begin{aligned} & 10068- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 48 Mbps) | X | 4.88 | 66.65 | 17.49 | 2.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 5.20 | 67.19 | 17.93 |  | 100.0 |  |
|  |  | Z | 4.91 | 66.87 | 17.60 |  | 100.0 |  |
| $\begin{aligned} & 10069- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFI 5 GHz (OFDM, 54 Mbps) | X | 4.95 | 66.72 | 17.70 | 2.67 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.28 | 67.17 | 18.11 |  | 100.0 |  |
|  |  | Z | 4.99 | 66.91 | 17.80 |  | 100.0 |  |
| $\begin{aligned} & 10071- \\ & C A B \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps) | X | 4.71 | 66.43 | 17.22 | 1.99 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.96 | 66.77 | 17.51 |  | 100.0 |  |
|  |  | Z | 4.73 | 66.59 | 17.28 |  | 100.0 |  |
| $\begin{aligned} & 10072- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | X | 4.67 | 66.65 | 17.37 | 2.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 67.10 | 17.75 |  | 100.0 |  |
|  |  | Z | 4.69 | 66.85 | 17.47 |  | 100.0 |  |
| $\begin{aligned} & 10073- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | X | 4.72 | 66.79 | 17.66 | 2.83 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.99 | 67.24 | 18.08 |  | 100.0 |  |
|  |  | Z | 4.75 | 67.01 | 17.79 |  | 100.0 |  |
| $\begin{aligned} & 10074- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | X | 4.72 | 66.70 | 17.78 | 3.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.95 | 67.09 | 18.23 |  | 100.0 |  |
|  |  | Z | 4.74 | 66.91 | 17.92 |  | 100.0 |  |
| $\begin{aligned} & 10075- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | X | 4.74 | 66.71 | 18.01 | 3.82 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 67.20 | 18,56 |  | 90.0 |  |
|  |  | Z | 4.76 | 66.94 | 18.18 |  | 90.0 |  |
| $\begin{aligned} & 10076- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | X | 4.77 | 66.58 | 18.17 | 4.15 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 66.93 | 18.66 |  | 90.0 |  |
|  |  | Z | 4.79 | 66.78 | 18.33 |  | 90.0 |  |
| $\begin{aligned} & 10077- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | X | 4.80 | 66.66 | 18.27 | 4.30 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 5.00 | 66.98 | 18.75 |  | 90.0 |  |
|  |  | Z | 4.82 | 66.86 | 18.43 |  | 90.0 |  |


| $\begin{aligned} & 10081- \\ & \text { CAB } \\ & \hline \end{aligned}$ | CDMA2000 (1xRTT, RC3) | X | 0.45 | 61.00 | 7.50 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 0.83 | 65.94 | 12.49 |  | 150.0 |  |
|  |  | Z | 0.46 | 61.34 | 7.83 |  | 150.0 |  |
| $\begin{aligned} & 10082- \\ & \mathrm{CAB} \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, PI/4DQPSK, Fullrate) | X | 0.68 | 60.00 | 3.10 | 4.77 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.78 | 61.11 | 4.54 |  | 80.0 |  |
|  |  | Z | 0.72 | 60.00 | 2.85 |  | 80.0 |  |
| $\begin{aligned} & 10090- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 1.84 | 66.30 | 9.91 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 100.00 | 120,24 | 28.59 |  | 60.0 |  |
|  |  | Z | 100.00 | 103.44 | 20.90 |  | 60.0 |  |
| $\begin{aligned} & 10097- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSDPA) | X | 1.71 | 67.90 | 15.28 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 1.82 | 67.70 | 15.69 |  | 150.0 |  |
|  |  | Z | 1.68 | 67.71 | 15.15 |  | 150.0 |  |
| $\begin{aligned} & 10098- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 2) | X | 1.67 | 67.85 | 15.26 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.79 | 67.66 | 15.66 |  | 150.0 |  |
|  |  | Z | 1.64 | 67.65 | 15.11 |  | 150.0 |  |
| $\begin{aligned} & \text { 10099- } \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 6.29 | 83.56 | 29.10 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 9.34 | 96.14 | 35.56 |  | 60.0 |  |
|  |  | Z | 6.61 | 85.53 | 30.21 |  | 60.0 |  |
| $\begin{aligned} & 10100- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 20 MHz, QPSK) | X | 2.90 | 69.76 | 16.53 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.14 | 70.37 | 16.71 |  | 150.0 |  |
|  |  | Z | 2.89 | 69.82 | 16.39 |  | 150.0 |  |
| $\begin{aligned} & 10101- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 20$ $\mathrm{MHz}, 16-\mathrm{QAM})$ | X | 3.04 | 67.08 | 15.83 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.24 | 67.51 | 15.94 |  | 150.0 |  |
|  |  | Z | 3.03 | 67.13 | 15.70 |  | 150.0 |  |
| $\begin{aligned} & 10102- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 20 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 3.15 | 67.10 | 15.95 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.34 | 67.47 | 16.02 |  | 150.0 |  |
|  |  | Z | 3.13 | 67.15 | 15.83 |  | 150.0 |  |
| $\begin{aligned} & 10103- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 4.81 | 72.04 | 18.88 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.41 | 77.25 | 21.56 |  | 65.0 |  |
|  |  | Z | 5.14 | 73.67 | 19.73 |  | 65.0 |  |
| $\begin{aligned} & 10104- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 20 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 5.09 | 70.84 | 19.13 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.94 | 73.69 | 20.83 |  | 65.0 |  |
|  |  | Z | 5.16 | 71.44 | 19.51 |  | 65.0 |  |
| $\begin{aligned} & 10105- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20$ $\mathrm{MHz}, 64-\mathrm{QAM})$ | X | 4.78 | 69.37 | 18.75 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.83 | 73.15 | 20.89 |  | 65.0 |  |
|  |  | Z | 4.90 | 70.20 | 19.25 |  | 65.0 |  |
| $\begin{aligned} & 10108- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK) | X | 2.51 | 69.24 | 16.41 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.74 | 69.60 | 16.54 |  | 150.0 |  |
|  |  | Z | 2.49 | 69.21 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & 10109- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 10$ $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 2.68 | 67.06 | 15.67 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.89 | 67.36 | 15.84 |  | 150.0 |  |
|  |  | Z | 2.67 | 67.07 | 15.55 |  | 150.0 |  |
| $\begin{aligned} & 10110- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 1.99 | 68.49 | 15.84 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.22 | 68.71 | 16.15 |  | 150.0 |  |
|  |  | Z | 1.98 | 68.38 | 15.68 |  | 150.0 |  |
| $\begin{aligned} & 10111- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM) | X | 2.41 | 68.19 | 15.80 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.61 | 68.17 | 16.11 |  | 150.0 |  |
|  |  | Z | 2.40 | 68.17 | 15.74 |  | 150.0 |  |

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| 10112CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 2.81 | 67.12 | 15.76 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.02 | 67.35 | 15.89 |  | 150.0 |  |
|  |  | Z | 2.80 | 67.12 | 15.64 |  | 150.0 |  |
| $\begin{aligned} & 10113- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM) | X | 2.56 | 68.40 | 15.97 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.76 | 68.30 | 16.24 |  | 150.0 |  |
|  |  | Z | 2.55 | 68.39 | 15.92 |  | 150.0 |  |
| 10114-$\mathrm{CAC}$ | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | X | 4.95 | 66.96 | 16.54 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.12 | 67.17 | 16.44 |  | 150.0 |  |
|  |  | Z | 4.92 | 66.97 | 16.39 |  | 150.0 |  |
| $\begin{aligned} & 10115- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 81 Mbps , 16-QAM) | X | 5.23 | 67.14 | 16.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.41 | 67.31 | 16.52 |  | 150.0 |  |
|  |  | Z | 5.18 | 67.06 | 16.45 |  | 150.0 |  |
| $\begin{aligned} & \text { 10116- } \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 135 Mbps , 64-QAM) | X | 5.04 | 67.18 | 16.57 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.22 | 67.37 | 16.47 |  | 150.0 |  |
|  |  | Z | 5.01 | 67.18 | 16.42 |  | 150.0 |  |
| 10117CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps , BPSK) | X | 4.94 | 66.92 | 16.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.09 | 67.03 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.91 | 16.38 |  | 150.0 |  |
| 10118CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16QAM) | X | 5.34 | 67.47 | 16.81 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.50 | 67.52 | 16.63 |  | 150.0 |  |
|  |  | Z | 5.27 | 67.32 | 16.58 |  | 150.0 |  |
| 10119-$\mathrm{CAC}$ | IEEE 802.11n (HT Mixed, 135 Mbps , 64QAM) | X | 5.06 | 67.24 | 16.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.20 | 67.31 | 16.45 |  | 150.0 |  |
|  |  | Z | 5.01 | 67.18 | 16.43 |  | 150.0 |  |
| $\begin{aligned} & 10140- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 3.17 | 67.11 | 15.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.38 | 67.48 | 15.94 |  | 150.0 |  |
|  |  | Z | 3.16 | 67.15 | 15.73 |  | 150.0 |  |
| $\begin{aligned} & \hline 10141- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 15 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 3.30 | 67.28 | 16.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.50 | 67.57 | 16.11 |  | 150.0 |  |
|  |  | Z | 3.29 | 67.32 | 15.94 |  | 150.0 |  |
| $\begin{aligned} & 10142- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 1.73 | 68.17 | 14.94 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.00 | 68.71 | 15.82 |  | 150.0 |  |
|  |  | Z | 1.72 | 68.11 | 14.89 |  | 150.0 |  |
| $\begin{aligned} & \hline 10143- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM) | X | 2.15 | 68.15 | 14.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.47 | 68.91 | 15.82 |  | 150.0 |  |
|  |  | Z | 2.17 | 68.32 | 14.76 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10144- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 1.86 | 65.26 | 12.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.24 | 66.62 | 14.22 |  | 150.0 |  |
|  |  | Z | 1.88 | 65.43 | 12.77 |  | 150.0 |  |
| 10145- <br> CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \mathrm{MHz}, \text { QPSK) } \end{aligned}$ | X | 0.67 | 60.16 | 6.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.22 | 65.11 | 11.80 |  | 150.0 |  |
|  |  | Z | 0.71 | 60.61 | 7.39 |  | 150.0 |  |
| 10146- <br> CAE | LTE-FDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHZ}, 16-\mathrm{QAM}$ ) | X | 0.95 | 60.06 | 6.44 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.65 | 64.56 | 10.76 |  | 150.0 |  |
|  |  | Z | 1.07 | 61.07 | 7.44 |  | 150.0 |  |
| 10147-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 0.99 | 60.33 | 6.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.85 | 65.94 | 11.59 |  | 150.0 |  |
|  |  | Z | 1.13 | 61.55 | 7.80 |  | 150.0 |  |


| $\begin{aligned} & \hline 10149- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | X | 2.69 | 67.13 | 15.72 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.90 | 67.42 | 15.88 |  | 150.0 |  |
|  |  | Z | 2.68 | 67.14 | 15.60 |  | 150.0 |  |
| $\begin{aligned} & 10150- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | X | 2.82 | 67.19 | 15.80 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.03 | 67.40 | 15.93 |  | 150.0 |  |
|  |  | Z | 2.81 | 67.19 | 15.69 |  | 150.0 |  |
| $\begin{aligned} & 10151 \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 5.01 | 74.56 | 19.93 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.65 | 79.71 | 22.70 |  | 65.0 |  |
|  |  | Z | 5.36 | 76.27 | 20.86 |  | 65.0 |  |
| $\begin{aligned} & 10152- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | X | 4.60 | 70.61 | 18.55 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.50 | 73.80 | 20.64 |  | 65.0 |  |
|  |  | Z | 4.69 | 71.33 | 19.06 |  | 65.0 |  |
| $\begin{aligned} & 10153- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | X | 4.95 | 71.72 | 19.46 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.84 | 74.66 | 21.37 |  | 65.0 |  |
|  |  | Z | 5.05 | 72.49 | 19.99 |  | 65.0 |  |
| $10154-$CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 2.04 | 68.92 | 16.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.27 | 69.12 | 16.41 |  | 150.0 |  |
|  |  | Z | 2.03 | 68.83 | 15.96 |  | 150.0 |  |
| 10155- CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM) | X | 2.41 | 68.23 | 15.84 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.61 | 68.18 | 16.13 |  | 150.0 |  |
|  |  | Z | 2.40 | 68.21 | 15.77 |  | 150.0 |  |
| 10156-CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK) | X | 1.51 | 67.60 | 14.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.84 | 68.81 | 15.61 |  | 150.0 |  |
|  |  | Z | 1.52 | 67.67 | 14.19 |  | 150.0 |  |
| 10157CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 1.63 | 65.15 | 12.07 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.08 | 67.20 | 14.25 |  | 150.0 |  |
|  |  | Z | 1.66 | 65.43 | 12.31 |  | 150.0 |  |
| $\begin{aligned} & 10158-1 \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 10 MHz , 64-QAM) | X | 2.57 | 68.50 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.77 | 68.36 | 16.29 |  | 150.0 |  |
|  |  | Z | 2.56 | 68.48 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10159- \\ & \mathrm{CAE} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 1.70 | 65.38 | 12.24 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.19 | 67.65 | 14.54 |  | 150.0 |  |
|  |  | Z | 1.74 | 65.76 | 12.53 |  | 150.0 |  |
| $\begin{aligned} & 10160- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | X | 2.62 | 68.99 | 16.41 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.74 | 68.65 | 16.32 |  | 150.0 |  |
|  |  | Z | 2.56 | 68.70 | 16.16 |  | 150.0 |  |
| $\begin{aligned} & 10161- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 2.71 | 67.15 | 15.66 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.92 | 67.34 | 15.86 |  | 150.0 |  |
|  |  | Z | 2.70 | 67.15 | 15.57 |  | 150.0 |  |
| $\begin{aligned} & 10162- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 64-QAM) | X | 2.82 | 67.38 | 15.82 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.03 | 67.49 | 15.97 |  | 150.0 |  |
|  |  | Z | 2.81 | 67.37 | 15.72 |  | 150.0 |  |
| $\begin{aligned} & 10166- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 3.14 | 68.82 | 18.96 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.40 | 68.62 | 18.58 |  | 150.0 |  |
|  |  | Z | 3.24 | 69.38 | 19.21 |  | 150.0 |  |
| $\begin{aligned} & 10167- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 16-QAM) | X | 3.68 | 71.26 | 19.14 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.01 | 70.93 | 18.84 |  | 150.0 |  |
|  |  | Z | 3.86 | 71.98 | 19.46 |  | 150.0 |  |

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| $\begin{aligned} & 10168- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM) | X | 4.20 | 74.21 | 20.88 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.39 | 72.91 | 20.06 |  | 150.0 |  |
|  |  | Z | 4.45 | 75.16 | 21.28 |  | 150.0 |  |
| $\begin{aligned} & 10169- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 2.49 | 66.95 | 18.11 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.73 | 67.59 | 18.14 |  | 150.0 |  |
|  |  | Z | 2.58 | 67.69 | 18.47 |  | 150.0 |  |
| $\begin{aligned} & \text { 10170- } \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.17 | 72.06 | 20.27 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.45 | 72,20 | 20.01 |  | 150.0 |  |
|  |  | Z | 3.40 | 73.44 | 20.89 |  | 150.0 |  |
| $\begin{aligned} & 10171- \\ & \text { AAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.61 | 67.98 | 17.29 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.93 | 68.85 | 17.54 |  | 150.0 |  |
|  |  | Z | 2.74 | 68.83 | 17.69 |  | 150.0 |  |
| $\begin{aligned} & 10172- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.59 | 76.79 | 22.90 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.70 | 92.12 | 29.64 |  | 65.0 |  |
|  |  | Z | 4.50 | 82.04 | 25.61 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.40 | 81.69 | 22.80 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.31 | 100.07 | 30.15 |  | 65.0 |  |
|  |  | Z | 8.60 | 91.21 | 26.84 |  | 65.0 |  |
| $\begin{aligned} & \hline 10174- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.41 | 73.68 | 19.23 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 12.55 | 96.17 | 28.30 |  | 65.0 |  |
|  |  | Z | 5.50 | 82.57 | 23.30 |  | 65.0 |  |
| 10175-CAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 2.47 | 66.66 | 17.85 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.70 | 67.34 | 17.92 |  | 150.0 |  |
|  |  | Z | 2.55 | 67.36 | 18.19 |  | 150.0 |  |
| 10176-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.18 | 72.09 | 20.28 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.46 | 72.22 | 20.02 |  | 150.0 |  |
|  |  | Z | 3.41 | 73.46 | 20.90 |  | 150.0 |  |
| $\begin{aligned} & 10177- \\ & \text { CAG } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.48 | 66.79 | 17.93 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.72 | 67.46 | 18.00 |  | 150.0 |  |
|  |  | Z | 2.57 | 67.51 | 18.28 |  | 150.0 |  |
| $\begin{aligned} & 10178- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16QAM) | X | 3.15 | 71.92 | 20.18 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.43 | 72.05 | 19.92 |  | 150.0 |  |
|  |  | Z | 3.38 | 73.25 | 20.78 |  | 150.0 |  |
| 10179-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.85 | 69.85 | 18.61 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.17 | 70.44 | 18.65 |  | 150.0 |  |
|  |  | Z | 3.03 | 70.94 | 19.12 |  | 150.0 |  |
| 10180- CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 64QAM) | X | 2.61 | 67.94 | 17.25 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.92 | 68.79 | 17.50 |  | 150.0 |  |
|  |  | Z | 2.74 | 68.78 | 17.65 |  | 150.0 |  |
| $\begin{aligned} & 10181- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 2.48 | 66.77 | 17.93 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.71 | 67.45 | 18.00 |  | 150.0 |  |
|  |  | Z | 2.56 | 67.49 | 18.28 |  | 150.0 |  |
| $\begin{aligned} & 10182- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 16-QAM) | X | 3.15 | 71.89 | 20.17 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.42 | 72.03 | 19.91 |  | 150.0 |  |
|  |  | Z | 3.37 | 73.22 | 20.77 |  | 150.0 |  |
| $\begin{aligned} & 10183- \\ & \text { AAC } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.60 | 67.92 | 17.24 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.92 | 68.77 | 17.49 |  | 150.0 |  |
|  |  | Z | 2.73 | 68.75 | 17.64 |  | 150.0 |  |


| $\begin{aligned} & 10184- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.49 | 66.81 | 17.95 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.72 | 67.49 | 18.02 |  | 150.0 |  |
|  |  | Z | 2.57 | 67.53 | 18.30 |  | 150.0 |  |
| $\begin{aligned} & 10185- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , 16QAM) | X | 3.16 | 71.97 | 20.21 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.44 | 72.09 | 19.94 |  | 150.0 |  |
|  |  | Z | 3.39 | 73.31 | 20.81 |  | 150.0 |  |
| 10186-AAD | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , 64QAM) | X | 2.62 | 67.98 | 17.28 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.93 | 68.83 | 17.52 |  | 150.0 |  |
|  |  | Z | 2.74 | 68.82 | 17.67 |  | 150.0 |  |
| 10187-CAE | LTE-FDD (SC-FDMA, 1RB, 1.4 MHz, QPSK) | X | 2.50 | 66.88 | 18.03 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.73 | 67.53 | 18.08 |  | 150.0 |  |
|  |  | Z | 2.58 | 67.61 | 18.38 |  | 150.0 |  |
| $\begin{aligned} & 10188- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, 1RB, 1.4 MHz, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.26 | 72.60 | 20.60 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.53 | 72.62 | 20.27 |  | 150.0 |  |
|  |  | Z | 3.51 | 74.04 | 21.24 |  | 150.0 |  |
| $10189-$$\mathrm{AAE}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, 1 RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.67 | 68.35 | 17.55 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.99 | 69.18 | 17.77 |  | 150.0 |  |
|  |  | Z | 2.80 | 69.24 | 17.97 |  | 150.0 |  |
| 10193-$\mathrm{CAC}$ | IEEE 802.11n (HT Greenfield, 6.5 Mbps , BPSK) | X | 4.32 | 66.50 | 16.16 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.52 | 66.59 | 16.14 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.50 | 16.05 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10194- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11 n (HT Greenfield, 39 Mbps , 16-QAM) | X | 4.47 | 66.75 | 16.31 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.69 | 66.90 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.46 | 66.77 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 65 Mbps , 64-QAM) | X | 4.51 | 66.78 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 66.93 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.50 | 66.80 | 16.21 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10196- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | X | 4.31 | 66.51 | 16.16 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.52 | 66.65 | 16.16 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.52 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10197- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 39 Mbps, 16QAM) | X | 4.48 | 66.77 | 16.32 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.70 | 66.92 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.78 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & 10198- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 65 Mbps , 64QAM) | X | 4.50 | 66.79 | 16.33 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.73 | 66.95 | 16.30 |  | 150.0 |  |
|  |  | Z | 4.49 | 66.81 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & 10219- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.26 | 66.54 | 16.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 66.66 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.25 | 66.55 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16QAM) | X | 4.47 | 66.73 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 66.89 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.46 | 66.74 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10221- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64QAM) | X | 4.51 | 66.73 | 16.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.87 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.74 | 16.20 |  | 150.0 |  |
| $\begin{aligned} & 10222- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 15 Mbps , BPSK) | X | 4.91 | 66.89 | 16.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 67.05 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.88 | 66.88 | 16.36 |  | 150.0 |  |

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| $\begin{aligned} & 10223- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 90 Mbps , 16QAM) | X | 5.21 | 67.18 | 16.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.37 | 67.24 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.17 | 67.14 | 16.51 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10224- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 150 Mbps , 64QAM) | X | 4.95 | 66.99 | 16.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.11 | 67.16 | 16.37 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.98 | 16.33 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10225- \\ \mathrm{CAB} \\ \hline \end{array}$ | UMTS-FDD (HSPA+) | X | 2.57 | 65.87 | 14.82 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.79 | 66.10 | 15.32 |  | 150.0 |  |
|  |  | Z | 2.57 | 65.89 | 14.81 |  | 150.0 |  |
| $\begin{aligned} & \text { 10226- } \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.70 | 82.73 | 23.27 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 15.45 | 101.64 | 30.73 |  | 65.0 |  |
|  |  | Z | 9.36 | 92.89 | 27.50 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10227- \\ \text { CAA } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 5.51 | 81.11 | 22.01 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 15.16 | 99.52 | 29.37 |  | 65.0 |  |
|  |  | Z | 9.33 | 91.39 | 26.29 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10228- \\ \text { CAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | X | 4.37 | 80.87 | 24.58 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 8.06 | 93.39 | 30.16 |  | 65.0 |  |
|  |  | Z | 5.51 | 86.54 | 27.40 |  | 65.0 |  |
| $\begin{aligned} & 10229- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 16 QAM) | X | 5.43 | 81.78 | 22.83 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.43 | 100.19 | 30.19 |  | 65.0 |  |
|  |  | Z | 8.67 | 91.34 | 26.89 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10230- \\ \mathrm{CAB} \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 64QAM) | X | 5.22 | 80.18 | 21.60 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 14.07 | 98.09 | 28.85 |  | 65.0 |  |
|  |  | Z | 8.56 | 89.82 | 25.70 |  | 65.0 |  |
| $\begin{aligned} & 10231- \\ & \text { CAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 4.21 | 80.08 | 24.19 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.72 | 92.42 | 29.75 |  | 65.0 |  |
|  |  | Z | 5.25 | 85.50 | 26.93 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10232- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 5.42 | 81.76 | 22.83 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.40 | 100.18 | 30.19 |  | 65.0 |  |
|  |  | Z | 8.65 | 91.31 | 26.89 |  | 65.0 |  |
| $\begin{aligned} & 10233- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64QAM) | X | 5.21 | 80.16 | 21.59 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.03 | 98.05 | 28.84 |  | 65.0 |  |
|  |  | Z | 8.53 | 89.78 | 25.69 |  | 65.0 |  |
| $\begin{aligned} & 10234- \\ & \text { CAD } \\ & \hline \end{aligned}$ | ```lome-TDD (SC-FDMA, 1 RB, 5 MHz,``` | X | 4.09 | 79.41 | 23.80 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.46 | 91.57 | 29.34 |  | 65.0 |  |
|  |  | Z | 5.06 | 84.64 | 26.49 |  | 65.0 |  |
| $\begin{aligned} & 10235- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.43 | 81.79 | 22.84 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.42 | 100.22 | 30.20 |  | 65.0 |  |
|  |  | Z | 8.66 | 91.36 | 26.90 |  | 65.0 |  |
| $\begin{aligned} & 10236- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.25 | 80.28 | 21.63 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.26 | 98.30 | 28.91 |  | 65.0 |  |
|  |  | Z | 8.64 | 89.96 | 25.74 |  | 65.0 |  |
| $\begin{aligned} & 10237- \\ & \text { CAD } \\ & \hline \end{aligned}$ | ```L.TE-TDD (SC-FDMA, 1RB, 10 MHz, QPSK)``` | X | 4.21 | 80.11 | 24.20 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.73 | 92.49 | 29.78 |  | 65.0 |  |
|  |  | Z | 5.25 | 85.54 | 26.95 |  | 65.0 |  |
| $\begin{aligned} & 10238- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.41 | 81.74 | 22.82 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 14.37 | 100.15 | 30.18 |  | 65.0 |  |
|  |  | Z | 8.63 | 91.28 | 26.88 |  | 65.0 |  |


| $\begin{aligned} & 10239- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.19 | 80.13 | 21.58 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 13.97 | 98.01 | 28.83 |  | 65.0 |  |
|  |  | Z | 8.50 | 89.73 | 25.67 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 4.20 | 80.08 | 24.19 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.71 | 92.44 | 29.76 |  | 65.0 |  |
|  |  | Z | 5.24 | 85.50 | 26.94 |  | 65.0 |  |
| $10241$ CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 6.28 | 77.75 | 23.74 | 6.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.17 | 79.66 | 25.20 |  | 65.0 |  |
|  |  | Z | 6.62 | 79.11 | 24.64 |  | 65.0 |  |
| $\begin{aligned} & 10242- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 50\% RB, 1.4 MHz, 64-QAM) | X | 5.61 | 75.51 | 22.71 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.01 | 79.22 | 24.95 |  | 65.0 |  |
|  |  | Z | 6.04 | 77.21 | 23.74 |  | 65.0 |  |
| $\begin{aligned} & 10243- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | X | 4.77 | 72.80 | 22.43 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.72 | 75.84 | 24.40 |  | 65.0 |  |
|  |  | Z | 4.99 | 73.88 | 23.19 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \mathrm{CAB} \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.08 | 66.71 | 12.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.65 | 76.51 | 19.16 |  | 65.0 |  |
|  |  | Z | 3.79 | 70.31 | 15.20 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10245- \\ \text { CAB } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.05 | 66.35 | 12.65 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.47 | 75.72 | 18.77 |  | 65.0 |  |
|  |  | Z | 3.68 | 69.62 | 14.83 |  | 65.0 |  |
| $\begin{aligned} & 10246- \\ & \text { CAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 2.73 | 68.50 | 14.10 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.90 | 84.10 | 22.59 |  | 65.0 |  |
|  |  | Z | 3.38 | 72.30 | 16.31 |  | 65.0 |  |
| $\begin{aligned} & 10247- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 3.32 | 68.16 | 14.83 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.00 | 75.29 | 19.75 |  | 65.0 |  |
|  |  | Z | 3.63 | 70.11 | 16.18 |  | 65.0 |  |
| $\begin{aligned} & 10248- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | X | 3.35 | 67.83 | 14.68 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.95 | 74.49 | 19.36 |  | 65.0 |  |
|  |  | Z | 3.62 | 69.55 | 15.90 |  | 65.0 |  |
| $\begin{aligned} & 10249- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 3.90 | 73.79 | 17.79 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.87 | 86.63 | 24.46 |  | 65.0 |  |
|  |  | Z | 4.87 | 78.17 | 20.05 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHZ}$,,$~$ 16-QAM) | X | 4.46 | 72.43 | 19.10 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.61 | 76.63 | 21.92 |  | 65.0 |  |
|  |  | Z | 4.70 | 73.89 | 20.05 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10251- \\ \text { CAD } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.27 | 70.46 | 17.79 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.36 | 74.41 | 20.57 |  | 65.0 |  |
|  |  | Z | 4.43 | 71.53 | 18.56 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 4.80 | 76.28 | 20.36 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.12 | 83.67 | 24.31 |  | 65.0 |  |
|  |  | Z | 5.40 | 79.04 | 21.81 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10253- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM) | X | 4.54 | 70.25 | 18.29 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 73.18 | 20.35 |  | 65.0 |  |
|  |  | Z | 4.62 | 70.94 | 18.80 |  | 65.0 |  |
| $\begin{aligned} & \text { 10254- } \\ & \hline \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM) | X | 4.85 | 71.22 | 19.07 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.69 | 74.00 | 21.02 |  | 65.0 |  |
|  |  | Z | 4.94 | 71.96 | 19.60 |  | 65.0 |  |


| $\begin{aligned} & 10255- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 4.83 | 74.07 | 19.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.20 | 78.60 | 22.49 |  | 65.0 |  |
|  |  | Z | 5.10 | 75.57 | 20.75 |  | 65.0 |  |
| $\begin{aligned} & 10256- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 2.29 | 63.25 | 9.85 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.33 | 72.34 | 16.30 |  | 65.0 |  |
|  |  | Z | 2.61 | 65.28 | 11.48 |  | 65.0 |  |
| 10257-CAA | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 2.28 | 62.96 | 9.60 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.16 | 71.35 | 15.76 |  | 65.0 |  |
|  |  | Z | 2.56 | 64.75 | 11.10 |  | 65.0 |  |
| $\begin{aligned} & 10258- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, QPSK) | X | 1.96 | 64.07 | 10.75 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 78.32 | 19.50 |  | 65.0 |  |
|  |  | Z | 2.22 | 66.21 | 12.33 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10259- \\ \mathrm{CAB} \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM) | X | 3.77 | 69.86 | 16.44 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 75.82 | 20.54 |  | 65.0 |  |
|  |  | Z | 4.07 | 71.70 | 17.67 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10260- \\ \mathrm{CAB} \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 3.81 | 69.66 | 16.35 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 75.42 | 20.36 |  | 65.0 |  |
|  |  | Z | 4.10 | 71.41 | 17.53 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10261- \\ \mathrm{CAB} \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 4.13 | 74.31 | 18.63 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.91 | 83.89 | 23.89 |  | 65.0 |  |
|  |  | Z | 4.85 | 77.73 | 20.46 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10262- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 16-QAM) | X | 4.45 | 72.36 | 19.04 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.60 | 76.58 | 21.88 |  | 65.0 |  |
|  |  | Z | 4.68 | 73.81 | 19.99 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10263- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | X | 4.26 | 70.44 | 17.79 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 74.38 | 20.56 |  | 65.0 |  |
|  |  | Z | 4.42 | 71.51 | 18.55 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10264- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 4.75 | 76.08 | 20.25 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 7.04 | 83.44 | 24.20 |  | 65.0 |  |
|  |  | Z | 5.33 | 78.79 | 21.68 |  | 65.0 |  |
| $\begin{aligned} & 10265- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 16 \text {-QAM) } \end{aligned}$ | X | 4.60 | 70.61 | 18.56 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.50 | 73.80 | 20.64 |  | 65.0 |  |
|  |  | Z | 4.69 | 71.34 | 19.07 |  | 65.0 |  |
| $\begin{aligned} & \text { 10266- } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 64-Q A M) \end{aligned}$ | X | 4.95 | 71.71 | 19.45 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.83 | 74.64 | 21.36 |  | 65.0 |  |
|  |  | Z | 5.05 | 72.48 | 19.97 |  | 65.0 |  |
| $\begin{aligned} & 10267- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \text { MHz, QPSK) } \end{aligned}$ | X | 5.01 | 74.52 | 19.91 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.63 | 79.66 | 22.68 |  | 65.0 |  |
|  |  | Z | 5.35 | 76.22 | 20.84 |  | 65.0 |  |
| $\begin{aligned} & 10268- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16$-QAM) | X | 5.27 | 70.89 | 19.25 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.07 | 73.43 | 20.81 |  | 65.0 |  |
|  |  | Z | 5.33 | 71.43 | 19.60 |  | 65.0 |  |
| $\begin{aligned} & \hline 10269- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 64$-QAM) | X | 5.29 | 70.58 | 19.15 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.04 | 72.94 | 20.64 |  | 65.0 |  |
|  |  | Z | 5.34 | 71.06 | 19.47 |  | 65.0 |  |
| $\begin{aligned} & 10270- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, QPSK | X | 5.17 | 72.58 | 19.33 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.28 | 76.09 | 21.29 |  | 65.0 |  |
|  |  | Z | 5.35 | 73.62 | 19.93 |  | 65.0 |  |


| $\begin{aligned} & 10274- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.41 | 66.43 | 14.82 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.58 | 66.48 | 15.24 |  | 150.0 |  |
|  |  | Z | 2.39 | 66.38 | 14.76 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.45 | 67.76 | 15.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.61 | 67.98 | 15.58 |  | 150.0 |  |
|  |  | Z | 1.42 | 67.56 | 14.85 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 1.74 | 59.75 | 5.31 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 1.81 | 61.19 | 6.71 |  | 50.0 |  |
|  |  | Z | 1.73 | 59.88 | 5.41 |  | 50.0 |  |
| $\begin{aligned} & 10278- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 2.71 | 64.14 | 10.09 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 10.58 | 86.01 | 20.92 |  | 50.0 |  |
|  |  | Z | 2.95 | 65.66 | 11.11 |  | 50.0 |  |
| $\begin{aligned} & 10279- \\ & \text { CAA } \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 2.77 | 64.34 | 10.25 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 10.86 | 86.33 | 21.10 |  | 50.0 |  |
|  |  | Z | 3.03 | 65.92 | 11.30 |  | 50.0 |  |
| $\begin{aligned} & 10290- \\ & \mathrm{AAB} \end{aligned}$ | CDMA2000, RC1, SO55, Full Rate | X | 0.78 | 62.91 | 9.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.44 | 68.67 | 13.91 |  | 150.0 |  |
|  |  | Z | 0.82 | 63.50 | 9.52 |  | 150.0 |  |
| $\begin{aligned} & 10291- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 0.44 | 60.90 | 7.41 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.81 | 65.70 | 12.35 |  | 150.0 |  |
|  |  | Z | 0.46 | 61.22 | 7.73 |  | 150.0 |  |
| $\begin{aligned} & 10292- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, Full Rate | $X$ | 0.52 | 62.90 | 8.81 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.08 | 70.34 | 14.96 |  | 150.0 |  |
|  |  | Z | 0.54 | 63.47 | 9.26 |  | 150.0 |  |
| $\begin{aligned} & 10293- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 0.85 | 67.98 | 11.75 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.81 | 77.73 | 18.47 |  | 150.0 |  |
|  |  | Z | 0.93 | 69.19 | 12.44 |  | 150.0 |  |
| $\begin{aligned} & 10295- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 10.59 | 83.36 | 20.91 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 13.63 | 95.28 | 28.15 |  | 50.0 |  |
|  |  | Z | 12.33 | 87.48 | 22.99 |  | 50.0 |  |
| $\begin{aligned} & 10297- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 2.52 | 69.36 | 16.49 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.75 | 69.70 | 16.61 |  | 150.0 |  |
|  |  | Z | 2.51 | 69.33 | 16.32 |  | 150.0 |  |
| $\begin{aligned} & 10298- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 1.02 | 63.71 | 10.46 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.56 | 67.65 | 14.07 |  | 150.0 |  |
|  |  | Z | 1.06 | 64.21 | 10.86 |  | 150.0 |  |
| $\begin{aligned} & 10299- \\ & \text { AAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.41 | 63.10 | 9.49 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 2.20 | 67.48 | 13.20 |  | 150.0 |  |
|  |  | Z | 1.66 | 65.04 | 10.89 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 1.19 | 60.99 | 7.64 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.75 | 63.96 | 10.73 |  | 150.0 |  |
|  |  | Z | 1.30 | 61.89 | 8.49 |  | 150.0 |  |
| $\begin{aligned} & 10301- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5 ms , 10 MHz, QPSK, PUSC) | X | 4.40 | 65.21 | 17.25 | 4.17 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.79 | 65.64 | 17.57 |  | 50.0 |  |
|  |  | Z | 4.51 | 65.62 | 17.36 |  | 50.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5ms, 10 MHz , QPSK, PUSC, 3 CTRL symbols) | $X$ | 4.89 | 66.01 | 18.10 | 4.96 | 50.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.23 | 66.10 | 18.21 |  | 50.0 |  |
|  |  | Z | 4.90 | 65.76 | 17.79 |  | 50.0 |  |


| $10303-$ $\mathrm{AAA}$ | IEEE 802.16 e WIMAX ( $31: 15,5 \mathrm{~ms}$, $10 \mathrm{MHz}, 64 \mathrm{QAM}, \mathrm{PUSC}$ ) | X | 4.65 | 65.68 | 17.92 | 4.96 | 50.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.97 | 65.72 | 18.04 |  | 50.0 |  |
|  |  | Z | 4.66 | 65.38 | 17.59 |  | 50.0 |  |
| 10304- $\mathrm{AAA}$ | IEEE 802.16e WiMAX ( $29: 18$, 5 ms , $10 \mathrm{MHz}, 64 \mathrm{QAM}, \mathrm{PUSC}$ ) | X | 4.43 | 65.21 | 17.19 | 4.17 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.78 | 65.59 | 17.51 |  | 50.0 |  |
|  |  | Z | 4.47 | 65.30 | 17.12 |  | 50.0 |  |
| 10305- AAA | IEEE 802.16e WiMAX (31:15, 10ms, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 15 symbols) | X | 4.15 | 67.54 | 18.96 | 6.02 | 35.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.30 | 67.06 | 19.45 |  | 35.0 |  |
|  |  | Z | 4.22 | 67.78 | 19.08 |  | 35.0 |  |
| $\begin{aligned} & 10306- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10 ms , $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 18 symbols) | X | 4.43 | 66.43 | 18.72 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 66.30 | 19.12 |  | 35.0 |  |
|  |  | Z | 4.49 | 66.64 | 18.78 |  | 35.0 |  |
| 10307- <br> AAA | IEEE 802.16 e WiMAX ( $29: 18,10 \mathrm{~ms}$, 10 MHz, QPSK, PUSC, 18 symbols) | X | 4.32 | 66.52 | 18.64 | 6.02 | 35.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.55 | 66.42 | 19.07 |  | 35.0 |  |
|  |  | Z | 4.38 | 66.74 | 18.71 |  | 35.0 |  |
| $\begin{aligned} & \text { 10308- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10ms, $10 \mathrm{MHz}, 16 \mathrm{QAM}, \mathrm{PUSC}$ ) | X | 4.30 | 66.75 | 18.79 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.52 | 66.60 | 19.20 |  | 35.0 |  |
|  |  | Z | 4.37 | 66.98 | 18.86 |  | 35.0 |  |
| 10309- $\mathrm{AAA}$ | IEEE 802.16 e WiMAX $(29: 18,10 \mathrm{~ms}$, $10 \mathrm{MHz}, 16 \mathrm{QAM}$, AMC $2 \times 3,18$ symbols) | X | 4.46 | 66.55 | 18.83 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 66.54 | 19.28 |  | 35.0 |  |
|  |  | Z | 4.52 | 66.77 | 18.90 |  | 35.0 |  |
| $\begin{array}{\|l} \hline 10310- \\ \text { AAA } \\ \hline \end{array}$ | IEEE 802.16e WiMAX (29:18, 10ms, 10 MHz, QPSK, AMC $2 \times 3,18$ symbols) | X | 4.39 | 66.51 | 18.71 | 6.02 | 35.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.60 | 66.34 | 19.08 |  | 35.0 |  |
|  |  | Z | 4.45 | 66.72 | 18.77 |  | 35.0 |  |
| 10311" <br> AAC | LTE-FDD (SC-FDMA, 100\% RB, 15 MHz, QPSK) | X | 2.88 | 68.46 | 16.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.11 | 68.97 | 16.25 |  | 150.0 |  |
|  |  | Z | 2.86 | 68.50 | 15.98 |  | 150.0 |  |
| 10313- | IDEN 1:3 | X | 1.87 | 66.02 | 12.37 | 6.99 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 5.52 | 82.21 | 20.17 |  | 70.0 |  |
|  |  | Z | 2.06 | 67.90 | 13.38 |  | 70.0 |  |
| $\begin{aligned} & \text { 10314- } \\ & \text { AAA } \end{aligned}$ | iDEN 1:6 | X | 2.66 | 70.48 | 16.99 | 10.00 | 30.0 | $\pm 9.6$ \% |
|  |  | Y | 9.77 | 95.91 | 27.98 |  | 30.0 |  |
|  |  | Z | 4.14 | 77.84 | 20.07 |  | 30.0 |  |
| $\begin{aligned} & 10315- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle) | X | 0.95 | 63.27 | 14.86 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.06 | 63.68 | 15.21 |  | 150.0 |  |
|  |  | Z | 0.93 | 63.28 | 14.78 |  | 150.0 |  |
| $\begin{aligned} & 10316- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, $6 \mathrm{Mbps}, 96 \mathrm{pc}$ duty cycle) | X | 4.35 | 66.42 | 16.23 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.58 | 66.66 | 16.32 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.49 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & 10317- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle) | X | 4.35 | 66.42 | 16.23 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.58 | 66.66 | 16.32 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.49 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & 10400- \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle) | X | 4.44 | 66.78 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 66.96 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.43 | 66.80 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & 10401 ~ \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99 pc duty cycle) | X | 5.15 | 66.76 | 16.42 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.39 | 67.16 | 16.44 |  | 150.0 |  |
|  |  | Z | 5.17 | 66.92 | 16.36 |  | 150.0 |  |


| $\begin{aligned} & \text { 10402- } \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, $99 p \mathrm{c}$ duty cycle) | X | 5.46 | 67.17 | 16.51 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.63 | 67.44 | 16.43 |  | 150.0 |  |
|  |  | Z | 5.43 | 67.19 | 16.37 |  | 150.0 |  |
| $\begin{aligned} & 10403- \\ & A A B \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 0.78 | 62.91 | 9.04 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 1.44 | 68.67 | 13.91 |  | 115.0 |  |
|  |  | Z | 0.82 | 63.50 | 9.52 |  | 115.0 |  |
| $\begin{aligned} & 10404- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. A) | X | 0.78 | 62.91 | 9.04 | 0.00 | 115.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.44 | 68.67 | 13.91 |  | 115.0 |  |
|  |  | Z | 0.82 | 63.50 | 9.52 |  | 115.0 |  |
| $\begin{aligned} & 10406- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO32, SCH0, Full Rate | X | 100.00 | 119.25 | 28.40 | 0.00 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 9.50 | 91.59 | 22.98 |  | 100.0 |  |
|  |  | Z | 100.00 | 122.00 | 29,77 |  | 100.0 |  |
| $\begin{aligned} & 10410- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 3.12 | 77.42 | 16.90 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 127.40 | 32.46 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.01 | 30.73 |  | 80.0 |  |
| 10415-AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, $99 p$ duty cycle) | X | 0.90 | 62.74 | 14.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.00 | 62.96 | 14.62 |  | 150.0 |  |
|  |  | Z | 0.88 | 62.66 | 14.28 |  | 150.0 |  |
| $10416$AAA | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.32 | 66.51 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.52 | 66.62 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.52 | 16.13 |  | 150.0 |  |
| 10417- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.32 | 66.51 | 16.25 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.52 | 66.62 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.52 | 16.13 |  | 150.0 |  |
| $10418-$ <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle, Long preambule) | X | 4.31 | 66.71 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.79 | 16.23 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.71 | 16.18 |  | 150.0 |  |
| $10419-$AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps, 99 pc duty cycle, Short preambule) | X | 4.33 | 66.64 | 16.29 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.53 | 66.73 | 16.23 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.65 | 16.17 |  | 150.0 |  |
| 10422-$\mathrm{AAB}$ | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 4.44 | 66.62 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.73 | 16.25 |  | 150.0 |  |
|  |  | Z | 4.43 | 66.63 | 16.18 |  | 150.0 |  |
| $10423-$ AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 4.57 | 66.89 | 16.39 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.81 | 67.05 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.56 | 66.90 | 16.28 |  | 150.0 |  |
| $\begin{aligned} & 10424- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64 -QAM) | X | 4.50 | 66.84 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 67.00 | 16.33 |  | 150.0 |  |
|  |  | Z | 4.49 | 66.86 | 16.25 |  | 150.0 |  |
| $\begin{aligned} & 10425- \\ & A A B \end{aligned}$ | IEEE 802.11 n (HT Greenfield, 15 Mbps , BPSK) | X | 5.17 | 67.18 | 16.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 67.30 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.13 | 67.14 | 16.48 |  | 150.0 |  |
| $\begin{aligned} & 10426- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 90 Mbps , 16-QAM) | X | 5.23 | 67.40 | 16.76 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 67.33 | 16.52 |  | 150.0 |  |
|  |  | Z | 5.16 | 67.27 | 16.54 |  | 150.0 |  |


| $\begin{aligned} & 10427- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 150 Mbps , 64-QAM) | X | 5.16 | 67.07 | 16.58 | 0,00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.35 | 67.30 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.13 | 67.07 | 16.44 |  | 150.0 |  |
| $\begin{aligned} & 10430- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, 5 MHz , E-TM 3.1) | X | 4.20 | 72.13 | 18.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.22 | 70.70 | 18.10 |  | 150.0 |  |
|  |  | Z | 4.22 | 72.19 | 18.46 |  | 150.0 |  |
| 10431- <br> AAB | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1) | X | 3.93 | 67.10 | 16.09 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.20 | 67.18 | 16.20 |  | 150.0 |  |
|  |  | Z | 3.93 | 67.10 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10432- \\ & A A B \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, $15 \mathrm{MHz}, \mathrm{E}$-TM 3.1) | X | 4.26 | 66.93 | 16.28 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 67.05 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.25 | 66.94 | 16.17 |  | 150.0 |  |
| 10433- $A A B$ | LTE-FDD (OFDMA, $20 \mathrm{MHz}, \mathrm{E}$-TM 3.1) | X | 4.52 | 66.87 | 16.39 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.75 | 67.03 | 16.35 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.89 | 16.27 |  | 150.0 |  |
| $\begin{aligned} & 10434- \\ & \text { AAA } \end{aligned}$ | W-CDMA (BS Test Model 1, 64 DPCH) | X | 4.28 | 72.84 | 18.10 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.33 | 71.56 | 18.07 |  | 150.0 |  |
|  |  | Z | 4.34 | 73.06 | 18.24 |  | 150.0 |  |
| 10435- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.96 | 76.73 | 16.60 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 127.17 | 32.36 |  | 80.0 |  |
|  |  | Z | 100.00 | 124.69 | 30.58 |  | 80.0 |  |
| 10447- <br> AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44\%) | X | 3.15 | 66.77 | 14.81 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.49 | 67.18 | 15.50 |  | 150.0 |  |
|  |  | Z | 3.17 | 66.84 | 14.85 |  | 150.0 |  |
| $\begin{aligned} & 10448- \\ & A A B \end{aligned}$ | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | X | 3.79 | 66.88 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 66.96 | 16.06 |  | 150.0 |  |
|  |  | Z | 3.79 | 66.88 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & \text { 10449- } \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1, Cliping 44\%) | X | 4.09 | 66.75 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.31 | 66.88 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.08 | 66.77 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10450- \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 4.31 | 66.64 | 16.24 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.51 | 66.80 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.66 | 16.12 |  | 150.0 |  |
| $\begin{aligned} & 10451- \\ & \text { AAA } \\ & \hline \end{aligned}$ | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44\%) | X | 2.94 | 66.45 | 13.98 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.38 | 67.33 | 15.10 |  | 150.0 |  |
|  |  | Z | 2.98 | 66.61 | 14.10 |  | 150.0 |  |
| $\begin{aligned} & 10456- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, 64$-QAM, 99 pc duty cycle) | X | 6.17 | 67.89 | 16.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.20 | 67.84 | 16.66 |  | 150.0 |  |
|  |  | Z | 6.10 | 67.86 | 16.74 |  | 150.0 |  |
| $10457$ <br> AAA | UMTS-FDD (DC-HSDPA) | X | 3.65 | 65.21 | 15.97 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.78 | 65.27 | 15.92 |  | 150.0 |  |
|  |  | Z | 3.63 | 65.21 | 15.85 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10458- \\ \text { AAA } \\ \hline \end{array}$ | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev, B, } 2 \\ & \text { carriers) } \end{aligned}$ | X | 3.63 | 70.67 | 16.50 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.97 | 70.83 | 17.45 |  | 150.0 |  |
|  |  | Z | 3.75 | 71.23 | 16.87 |  | 150.0 |  |
| $\begin{aligned} & \text { 10459- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev. B, } 3 \\ & \text { carriers) } \end{aligned}$ | X | 4.91 | 69.28 | 18.19 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 68.34 | 18.09 |  | 150.0 |  |
|  |  | Z | 4.97 | 69.44 | 18.31 |  | 150.0 |  |


| $\begin{aligned} & 10460- \\ & \text { AAA } \end{aligned}$ | UMTS-FDD (WCDMA, AMR) | X | 0.82 | 68.91 | 15.77 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.90 | 68.29 | 16.15 |  | 150.0 |  |
|  |  | Z | 0.77 | 68.38 | 15.37 |  | 150.0 |  |
| $10461$AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.32 | 75.39 | 17.14 | 3.29 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 131.59 | 34.49 |  | 80.0 |  |
|  |  | Z | 100.00 | 129.59 | 32.92 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10462- \\ \text { AAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.09 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 77.57 | 16.00 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.79 |  | 80.0 |  |
| 10463-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.50 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.49 | 65.34 | 10.90 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.16 |  | 80.0 |  |
| $10464-$AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.48 | 69.57 | 14.21 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 128.72 | 32.98 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.35 | 30.81 |  | 80.0 |  |
| $\begin{aligned} & 10465- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.02 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.92 | 72.75 | 14.31 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.72 |  | 80.0 |  |
| $\begin{aligned} & 10466- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.46 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.30 | 63.97 | 10.25 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.11 |  | 80.0 |  |
| 10467- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL. Subframe $=2,3,4,7,8,9$ ) | X | 1.57 | 70.35 | 14.56 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 129.06 | 33.13 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.82 | 31.02 |  | 80.0 |  |
| $\begin{aligned} & 10468- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.04 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.25 | 73.90 | 14.73 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.74 |  | 80.0 |  |
| $\begin{aligned} & 10469- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.46 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.30 | 64.00 | 10.26 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.11 |  | 80.0 |  |
| 10470- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.56 | 70.33 | 14.55 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 129.11 | 33.14 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.84 | 31.01 |  | 80.0 |  |
| 10471- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 16 QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.03 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.21 | 73.75 | 14.66 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.73 |  | 80.0 |  |
| 10472- AAC | LTE-TDD (SC-FDMA, 1 RB, $10 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.44 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.29 | 63.92 | 10.21 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.09 |  | 80.0 |  |
| 10473- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.56 | 70.28 | 14.52 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 129.06 | 33.12 |  | 80.0 |  |
|  |  | Z | 100.00 | 125.78 | 30.99 |  | 80.0 |  |
| $\begin{aligned} & \hline 10474- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 16 QAM, UL. Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.02 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.17 | 73.64 | 14.62 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.73 |  | 80.0 |  |
| $10475-$ <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.78 | 60.00 | 6.45 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.29 | 63.89 | 10.20 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.09 |  | 80.0 |  |


| $10477$ $\mathrm{AAC}$ | LTE-TDD (SC-FDMA, 1 RB, $20 \mathrm{MHz}, 16$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.76 | 60.00 | 7.00 | 3.23 | 80.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.91 | 72.72 | 14.27 |  | 80.0 |  |
|  |  | Z | 0.74 | 60.00 | 7.70 |  | 80.0 |  |
| 10478- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, $20 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.79 | 60.00 | 6.43 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.28 | 63.82 | 10.16 |  | 80.0 |  |
|  |  | Z | 0.76 | 60.00 | 7.08 |  | 80.0 | $\pm 9.6$ \% |
| 10479- AAA | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.36 | 78.87 | 19.25 | 3.23 | 80.0 |  |
|  |  | Y | 6.72 | 85.93 | 23.37 |  | 80.0 | $\pm 9.6$ \% |
| 10480-AAA |  | Z | 31.53 | 108.71 | 28.80 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.01 | 65.44 | 11.92 | 3.23 | 80.0 |  |
|  |  | Y | 7.23 | 81.86 | 20.03 |  | 80.0 | $\pm 9.6 \%$ |
| 10481- <br> AAA |  | Z | 6.32 | 79.43 | 17.87 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.64 | 62.93 | 10.36 | 3.23 | 80.0 |  |
|  |  | Y | 5.72 | 78.02 | 18.32 |  | 80.0 | $\pm 9.6$ \% |
| 10482- <br> AAA |  | Z | 3.41 | 71.49 | 14.62 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.29 | 62.41 | 10.80 | 2.23 | 80.0 |  |
|  |  | Y | 3.64 | 76.21 | 18.93 |  | 80.0 | $\pm 9.6$ \% |
| 10483-AAA |  | Z | 1.66 | 65.83 | 12.91 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.52 | 61.14 | 9.55 | 2.23 | 80.0 |  |
|  |  | Y | 4.09 | 73.43 | 17.03 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 2.32 | 66.35 | 12.70 |  | 80.0 |  |
| 10484- <br> AAA | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.52 | 60.89 | 9.42 | 2.23 | 80.0 |  |
|  |  | Y | 3.80 | 72.18 | 16.53 |  | 80.0 | $\pm 9.6$ \% |
| 10485-$A A C$ |  | Z | 2.19 | 65.41 | 12.27 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.96 | 67.14 | 14.58 | 2.23 . | 80.0 |  |
|  |  | Y | 3.64 | 76.20 | 19.95 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 2.47 | 70.93 | 16.63 |  | 80.0 |  |
| $\begin{aligned} & 10486- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.93 | 63.65 | 12.21 | 2.23 | 80.0 |  |
|  |  | Y | 3.34 | 71.00 | 17.20 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 2.25 | 65.99 | 13.71 |  | 80.0 |  |
| $\begin{aligned} & 10487- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.95 | 63.41 | 12.07 | 2.23 | 80.0 |  |
|  |  | Y | 3.31 | 70.45 | 16.94 |  | 80.0 |  |
|  |  | Z | 2.25 | 65.61 | 13.50 |  | 80.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10488- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.57 | 68.84 | 16.72 | 2.23 | 80.0 |  |
|  |  | Y | 3.64 | 73.87 | 19.67 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 2.88 | 71.05 | 17.92 |  | 80.0 |  |
| 10489- $A A C$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 16 -QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.71 | 66.42 | 15.54 | 2.23 | 80.0 |  |
|  |  | Y | 3.41 | 69.51 | 17.78 |  | 80.0 |  |
|  |  | Z | 2.89 | 67.77 | 16.40 |  | 80.0 | $\pm 9.6$ \% |
| $\begin{aligned} & \hline 10490- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.80 | 66.35 | 15.53 | 2.23 | 80.0 |  |
|  |  | Y | 3.50 | 69.28 | 17.68 |  | 80.0 |  |
|  |  | Z | 2.97 | 67.63 | 16.34 |  | 80.0 | $\pm 9.6$ \% |
| $10491 \text { - }$ <br> AAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.93 | 68.13 | 16.75 | 2.23 | 80.0 |  |
|  |  | Y | 3.79 | 71.78 | 18.88 |  | 80.0 |  |
|  |  | Z | 3.14 | 69.61 | 17.57 |  | 80.0 |  |
| 10492-$A A C$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.14 | 66.26 | 16.05 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.72 | 68.46 | 17.58 |  | 80.0 |  |
|  |  | Z | 3.26 | 67.14 | 16.60 |  | 80.0 |  |


| $\begin{array}{\|l\|} \hline 10493- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.20 | 66.19 | 16.02 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.78 | 68.30 | 17.52 |  | 80.0 |  |
|  |  | Z | 3.32 | 67.03 | 16.55 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10494- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.09 | 69.16 | 17.09 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 73.66 | 19.49 |  | 80.0 |  |
|  |  | Z | 3.38 | 70.96 | 18.01 |  | 80.0 |  |
| 10495-AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.16 | 66.52 | 16.26 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.75 | 68.86 | 17.79 |  | 80.0 |  |
|  |  | Z | 3.28 | 67.44 | 16.81 |  | 80.0 |  |
| $\begin{aligned} & \text { 10496- } \\ & \text { AAC } \\ & \hline \end{aligned}$ | L.TE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM, UL. Subframe $=2,3,4,7,8,9$ ) | X | 3.25 | 66.39 | 16.25 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.82 | 68.54 | 17.67 |  | 80.0 |  |
|  |  | Z | 3.36 | 67.23 | 16.76 |  | 80.0 |  |
| $10497$ <br> AAA | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.98 | 60.00 | 8.08 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.67 | 71.65 | 16.05 |  | 80.0 |  |
|  |  | Z | 0.96 | 60.00 | 8.56 |  | 80.0 |  |
| $\begin{aligned} & 10498- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 1.18 | 60.00 | 7.01 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.73 | 63.28 | 11.10 |  | 80.0 |  |
|  |  | Z | 1.15 | 60.00 | 7.42 |  | 80.0 |  |
| 10499- <br> AAA | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 1.20 | 60.00 | 6.87 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.65 | 62.50 | 10.55 |  | 80.0 |  |
|  |  | Z | 1.17 | 60.00 | 7.27 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.22 | 67.95 | 15.51 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.54 | 74.72 | 19.65 |  | 80.0 |  |
|  |  | Z | 2.63 | 70.95 | 17.16 |  | 80.0 |  |
| $\begin{aligned} & \text { 10501- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM, UL. Subframe $=2,3,4,7,8,9$ ) | X | 2.29 | 65.10 | 13.66 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.38 | 70.39 | 17.41 |  | 80.0 |  |
|  |  | Z | 2.58 | 67.13 | 14.94 |  | 80.0 |  |
| $\begin{aligned} & \text { 10502~ } \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.32 | 64.94 | 13.52 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.43 | 70.21 | 17.27 |  | 80.0 |  |
|  |  | Z | 2.61 | 66.92 | 14.77 |  | 80.0 |  |
| 10503- <br> AAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.54 | 68.66 | 16.62 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.60 | 73.66 | 19.57 |  | 80.0 |  |
|  |  | Z | 2.84 | 70.82 | 17.80 |  | 80.0 |  |
| 10504-$A A C$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.69 | 66.32 | 15.48 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.40 | 69.42 | 17.73 |  | 80.0 |  |
|  |  | Z | 2.87 | 67.65 | 16.32 |  | 80.0 |  |
| $\begin{aligned} & 10505- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.78 | 66.26 | 15.46 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.48 | 69.19 | 17.63 |  | 80.0 |  |
|  |  | Z | 2.96 | 67.52 | 16.27 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10506- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.07 | 69.03 | 17.01 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.15 | 73.51 | 19.42 |  | 80.0 |  |
|  |  | Z | 3.35 | 70.80 | 17.93 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.15 | 66.46 | 16.22 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.73 | 68.80 | 17.76 |  | 80.0 |  |
|  |  | Z | 3.26 | 67.37 | 16.77 |  | 80.0 |  |

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| $\begin{aligned} & 10508- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.24 | 66.32 | 16.20 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.81 | 68.47 | 17.63 |  | 80.0 |  |
|  |  | Z | 3.35 | 67.15 | 16.71 |  | 80.0 |  |
| $\begin{aligned} & 10509- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.51 | 68.36 | 16.83 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.41 | 71.84 | 18.68 |  | 80.0 |  |
| 10510- <br> AAC |  | Z | 3.72 | 69.67 | 17.51 |  | 80.0 | $\pm 9.6$ \% |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.65 | 66.40 | 16.44 | 2.23 | 80.0 |  |
|  |  | Y | 4.20 | 68.42 | 17.64 |  | 80.0 | $\pm 9.6$ \% |
| 10511- <br> AAC |  | Z | 3.74 | 67.11 | 16.83 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.72 | 66.27 | 16.42 | 2.23 | 80.0 |  |
|  |  | Y | 4.25 | 68.13 | 17.55 |  | 80.0 | $\pm 9.6$ \% |
| 10512- <br> AAC |  | Z | 3.81 | 66.92 | 16.79 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 20 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.53 | 69.27 | 17.06 | 2.23 | 80.0 |  |
|  |  | Y | 4.71 | 73.81 | 19.35 |  | 80.0 | $\pm 9.6$ \% |
| 10513- <br> AAC |  | Z | 3.83 | 70.97 | 17.89 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.53 | 66.49 | 16.47 | 2.23 | 80.0 |  |
|  |  | Y | 4.09 | 68.73 | 17.78 |  | 80.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10514- \\ & \text { AAC } \end{aligned}$ |  | Z | 3.62 | 67.27 | 16.91 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.58 | 66.23 | 16.41 | 2.23 | 80.0 |  |
|  |  | Y | 4.11 | 68.25 | 17.62 |  | 80.0 | $\pm 9.6$ \% |
|  |  | Z | 3.67 | 66.92 | 16.81 |  | 80.0 |  |
| 10515- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 0.86 | 62.95 | 14.53 | 0.00 | 150.0 |  |
|  |  | Y | 0.96 | 63.14 | 14.68 |  | 150.0 | $\pm 9.6$ \% |
|  |  | 2 | 0.84 | 62.85 | 14.32 |  | 150.0 |  |
| $\begin{aligned} & 10516- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.68 | 75.09 | 17.93 | 0.00 | 150.0 |  |
|  |  | Y | 0.60 | 70.79 | 17.39 |  | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10517- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 0.59 | 73.58 | 17.02 |  | 150.0 |  |
|  | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.71 | 65.13 | 15.13 | 0.00 | 150.0 |  |
|  |  | Y | 0.81 | 65.08 | 15.31 |  | 150.0 |  |
|  |  | Z | 0.69 | 64.87 | 14.81 |  | 150.0 | $\pm 9.6$ \% |
| 10518- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.31 | 66.61 | 16.23 | 0.00 | 150.0 |  |
|  |  | Y | 4.51 | 66.70 | 16.19 |  | 150.0 | $\pm 9.6$ \% |
|  |  | Z | 4.30 | 66.61 | 16.12 |  | 150.0 |  |
| 10519- <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 <br> Mbps, 99pc duty cycle) | X | 4.46 | 66.79 | 16.33 | 0.00 | 150.0 |  |
|  |  | Y | 4.69 | 66.93 | 16.31 |  | 150.0 |  |
|  |  | Z | 4.45 | 66.80 | 16.22 |  | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10520- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.32 | 66.72 | 16.24 | 0.00 | 150.0 |  |
|  |  | Y | 4.55 | 66.89 | 16.23 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.74 | 16.13 |  | 150.0 | $\pm 9.6$ \% |
| $\begin{aligned} & 10521- \\ & A A B \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.25 | 66.68 | 16.22 | 0.00 | 150.0 |  |
|  |  | Y | 4.48 | 66.88 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.24 | 66.71 | 16.11 |  | 150.0 |  |
| $\begin{aligned} & 10522- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.30 | 66.84 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.98 | 16.30 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.85 | 16.22 |  | 150.0 |  |


| $\begin{aligned} & 10523- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | $X$ | 4.22 | 66.79 | 16.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 4.42 | 66.85 | 16.15 |  | 150.0 |  |
|  |  | Z | 4.21 | 66.79 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10524- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | $X$ | 4.25 | 66.78 | 16.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 66.90 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.24 | 66.79 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & 10525- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) | X | 4.28 | 65.85 | 15.93 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 65.95 | 15.86 |  | 150.0 |  |
|  |  | Z | 4.27 | 65.86 | 15.81 |  | 150.0 |  |
| $\begin{aligned} & 10526- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 99 pc duty cycle) | X | 4.41 | 66.15 | 16.05 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.64 | 66.31 | 16.00 |  | 150.0 |  |
|  |  | Z | 4.40 | 66.17 | 15.93 |  | 150.0 |  |
| $\begin{aligned} & 10527- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 99 pc duty cycle) | $X$ | 4.34 | 66.11 | 15.98 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.56 | 66.27 | 15.95 |  | 150.0 |  |
|  |  | Z | 4.33 | 66.13 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & 10528- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11 ac WiFi $(20 \mathrm{MHz}, \mathrm{MCS} 3$, 99pc duty cycle) | X | 4.35 | 66.13 | 16.02 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.58 | 66.29 | 15.98 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.15 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10529- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.35 | 66.13 | 16.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.58 | 66.29 | 15.98 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.15 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10531- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, $99 p c$ duty cycle) | X | 4.32 | 66.16 | 16.00 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.57 | 66.39 | 15.99 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.19 | 15.89 |  | 150.0 |  |
| $\begin{aligned} & 10532- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | X | 4.20 | 66.01 | 15.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.43 | 66.24 | 15.92 |  | 150.0 |  |
|  |  | Z | 4.19 | 66.04 | 15.81 |  | 150.0 |  |
| $\begin{aligned} & \hline 10533- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | X | 4.36 | 66.21 | 16.02 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.59 | 66.34 | 15.97 |  | 150.0 |  |
|  |  | Z | 4.35 | 66.22 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10534- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS0, 99 pc duty cycle) | X | 4.94 | 66.18 | 16.13 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.11 | 66.38 | 16.03 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.20 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & 10535- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 99 pc duty cycle) | X | 4.99 | 66.35 | 16.21 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.18 | 66.56 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.97 | 66.36 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10536- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 99 pc duty cycle) | X | 4.87 | 66.32 | 16.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.05 | 66.51 | 16.07 |  | 150.0 |  |
|  |  | Z | 4.85 | 66.34 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10537- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS} 3$, 99 pc duty cycle) | X | 4.94 | 66.34 | 16.18 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.10 | 66.48 | 16.06 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.31 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10538- \\ & A A B \\ & \hline \end{aligned}$ | ```IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)``` | X | 5.01 | 66.30 | 16.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.19 | 66.49 | 16.11 |  | 150.0 |  |
|  |  | Z | 4.98 | 66.30 | 16.06 |  | 150.0 |  |
| $\begin{aligned} & 10540- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 4.93 | 66.22 | 16.18 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.13 | 66.52 | 16.13 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.26 | 16.06 |  | 150.0 |  |

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| $\begin{aligned} & 10541- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | X | 4.90 | 66.09 | 16.10 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.10 | 66.38 | 16.06 |  | 150.0 |  |
|  |  | Z | 4.88 | 66.13 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & \hline 10542- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 99 pc duty cycle) | X | 5.07 | 66.24 | 16.19 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.25 | 66.45 | 16.11 |  | 150.0 |  |
|  |  | Z | 5.04 | 66.26 | 16.06 |  | 150.0 |  |
| $\begin{aligned} & \text { 10543- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | X | 5.16 | 66.37 | 16.29 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 66.48 | 16.14 |  | 150.0 |  |
|  |  | Z | 5.12 | 66.32 | 16.12 |  | 150.0 |  |
| $\begin{aligned} & \hline 10544- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCSO, 99 pc duty cycle) | X | 5.28 | 66.21 | 16.10 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.42 | 66.50 | 16.03 |  | 150.0 |  |
|  |  | Z | 5.25 | 66.26 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10545- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac Wifi ( 80 MHz , MCS1. 99pc duty cycle) | X | 5.51 | 66.84 | 16.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.61 | 66.90 | 16.18 |  | 150.0 |  |
|  |  | Z | 5.45 | 66.77 | 16.19 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10546- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS2, 99 pc duty cycle) | X | 5.32 | 66.36 | 16.14 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.48 | 66.70 | 16.10 |  | 150.0 |  |
|  |  | Z | 5.29 | 66.40 | 16.02 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10547- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS3, 99pc duty cycle) | X | 5.43 | 66.58 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.55 | 66.74 | 16.11 |  | 150.0 |  |
|  |  | Z | 5.37 | 66.52 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10548- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, $99 p \mathrm{duty}$ cycle) | X | 5.67 | 67.49 | 16.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.79 | 67.62 | 16.52 |  | 150.0 |  |
|  |  | Z | 5.59 | 67.37 | 16.46 |  | 150.0 |  |
| $\begin{aligned} & 10550- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle) | X | 5.44 | 66.73 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.51 | 66.72 | 16.12 |  | 150.0 |  |
|  |  | Z | 5.36 | 66.62 | 16.14 |  | 150.0 |  |
| $\begin{aligned} & 10551- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS7, 99pc duty cycle) | X | 5.31 | 66.31 | 16.10 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.52 | 66.76 | 16.10 |  | 150.0 |  |
|  |  | Z | 5.30 | 66.41 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & \hline 10552- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle) | X | 5.28 | 66.30 | 16.09 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.44 | 66.57 | 16.01 |  | 150.0 |  |
|  |  | Z | 5.25 | 66.34 | 15.96 |  | 150.0 |  |
| $\begin{aligned} & 10553- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 5.34 | 66.26 | 16.10 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.52 | 66.60 | 16.06 |  | 150.0 |  |
|  |  | Z | 5.31 | 66.32 | 15.98 |  | 150.0 |  |
| 10554- <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS0, 99pc duty cycle) | X | 5.72 | 66.58 | 16.20 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.83 | 66.86 | 16.12 |  | 150.0 |  |
|  |  | Z | 5.67 | 66.61 | 16.06 |  | 150.0 |  |
| 10555- <br> AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | X | 5.84 | 66.90 | 16.34 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.95 | 67.15 | 16.24 |  | 150.0 |  |
|  |  | Z | 5.79 | 66.90 | 16.19 |  | 150.0 |  |
| $\begin{aligned} & \text { 10556- } \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS2, 99pc duty cycle) | X | 5.87 | 66.98 | 16.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.98 | 67.20 | 16.26 |  | 150.0 |  |
|  |  | Z | 5.82 | 66.99 | 16.23 |  | 150.0 |  |
| 10557- <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 99pc duty cycle) | X | 5.81 | 66.79 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.94 | 67.10 | 16.23 |  | 150.0 |  |
|  |  | Z | 5.77 | 66.83 | 16.17 |  | 150.0 |  |


| $\begin{aligned} & 10558- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 4$, $99 p \mathrm{duty}$ cycle) | X | 5.82 | 66.86 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.99 | 67.26 | 16.33 |  | 150.0 |  |
|  |  | Z | 5.79 | 66.94 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & 10560- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS6, 99 pc duty cycle) | X | 5.84 | 66.78 | 16.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.98 | 67.11 | 16.29 |  | 150.0 |  |
|  |  | Z | 5.80 | 66.82 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & 10561- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 99pc duty cycle) | X | 5.78 | 66.81 | 16.39 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.91 | 67.08 | 16.31 |  | 150.0 |  |
|  |  | Z | 5.74 | 66.84 | 16.26 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle) | X | 5.83 | 66.94 | 16.46 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.02 | 67.44 | 16.49 |  | 150.0 |  |
|  |  | Z | 5.80 | 67.03 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10563- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 99pc duty cycle) | X | 5.98 | 67.08 | 16.50 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.21 | 67.62 | 16.54 |  | 150.0 |  |
|  |  | Z | 5.91 | 67.01 | 16.31 |  | 150.0 |  |
| $\begin{aligned} & \text { 10564- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.63 | 66.62 | 16.36 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 66.79 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.61 | 66.63 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & 10565- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, $12 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.83 | 67.05 | 16.69 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.06 | 67.22 | 16.67 |  | 150.0 |  |
|  |  | Z | 4.82 | 67.07 | 16.58 |  | 150.0 |  |
| $\begin{aligned} & \text { 10566- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 99 pc duty cycle) | X | 4.66 | 66.85 | 16.48 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 67.07 | 16.49 |  | 150.0 |  |
|  |  | Z | 4.65 | 66.88 | 16.38 |  | 150.0 |  |
| $\begin{aligned} & 10567 \text { - } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps, $99 p \mathrm{duty}$ cycle) | X | 4.70 | 67.27 | 16.87 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.93 | 67.45 | 16.84 |  | 150.0 |  |
|  |  | Z | 4.69 | 67.33 | 16.78 |  | 150.0 |  |
| $\begin{aligned} & \text { 10568- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 99 pc duty cycle) | X | 4.56 | 66.58 | 16.20 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.81 | 66.86 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.55 | 66.62 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & \text { 10569- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $48 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.68 | 67.48 | 17.00 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.88 | 67.55 | 16.91 |  | 150.0 |  |
|  |  | Z | 4.67 | 67.53 | 16.91 |  | 150.0 |  |
| $\begin{aligned} & 10570- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps , 99 pc duty cycle) | X | 4.69 | 67.30 | 16.91 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.92 | 67.39 | 16.83 |  | 150.0 |  |
|  |  | Z | 4.68 | 67.31 | 16.79 |  | 150.0 |  |
| $\begin{aligned} & 10571- \\ & \mathrm{AAA} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 1.00 | 63.45 | 14.91 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.13 | 64.20 | 15.58 |  | 130.0 |  |
|  |  | Z | 0.98 | 63.57 | 14.96 |  | 130.0 |  |
| $\begin{aligned} & 10572- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 1.01 | 64.01 | 15.28 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.14 | 64.75 | 15.94 |  | 130.0 |  |
|  |  | Z | 0.99 | 64.16 | 15.34 |  | 130.0 |  |
| $\begin{aligned} & 10573- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 1.87 | 85.75 | 21.98 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.92 | 86.55 | 24.04 |  | 130.0 |  |
|  |  | Z | 2.25 | 89.51 | 23.31 |  | 130.0 |  |
| $\begin{aligned} & 10574- \\ & \mathrm{AAA} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 1.08 | 70.06 | 18.36 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.22 | 70.33 | 18.86 |  | 130.0 |  |
|  |  | Z | 1.09 | 70.58 | 18.62 |  | 130.0 |  |

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| $\begin{aligned} & 10575- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.39 | 66.32 | 16.32 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.62 | 66.58 | 16.43 |  | 130.0 |  |
|  |  | Z | 4.39 | 66.40 | 16.27 |  | 130.0 |  |
| $10576$AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 9 Mbps, 90 pc duty cycle) | X | 4.42 | 66.53 | 16.41 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.74 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.42 | 66.60 | 16.36 |  | 130.0 |  |
| 10577-AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps, 90 pc duty cycle) | X | 4.59 | 66.78 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 67.03 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.59 | 66.86 | 16.52 |  | 130.0 |  |
| 10578- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 90 pc duty cycle) | X | 4.49 | 66.94 | 16.68 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 67.18 | 16.75 |  | 130.0 |  |
|  |  | Z | 4.50 | 67.02 | 16.64 |  | 130.0 |  |
| 10579-AAA | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps , 90 pc duty cycle) | X | 4.24 | 66.07 | 15.88 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.48 | 16.08 |  | 130.0 |  |
|  |  | Z | 4.24 | 66.15 | 15.83 |  | 130.0 |  |
| $\begin{aligned} & 10580- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps, 90 pc duty cycle) | X | 4.28 | 66.14 | 15.91 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.56 | 66.53 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.29 | 66.22 | 15.86 |  | 130.0 |  |
| $10581-$ <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps, 90 pc duty cycle) | X | 4.40 | 66.99 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 67.22 | 16.70 |  | 130.0 |  |
|  |  | Z | 4.40 | 67.08 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & 10582- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.17 | 65.84 | 15.66 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.45 | 66.25 | 15.88 |  | 130.0 |  |
|  |  | Z | 4.18 | 65.90 | 15.60 |  | 130.0 |  |
| $\begin{aligned} & \text { 10583- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 6 Mbps, 90 pc duty cycle) | X | 4.39 | 66.32 | 16.32 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 66.58 | 16.43 |  | 130.0 |  |
|  |  | Z | 4.39 | 66.40 | 16.27 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10584- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.42 | 66.53 | 16.41 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 66.74 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.42 | 66.60 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10585- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90 pc duty cycle) | X | 4.59 | 66.78 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 67.03 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.59 | 66.86 | 16.52 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10586- \\ A A B \\ \hline \end{array}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.49 | 66.94 | 16.68 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.74 | 67.18 | 16.75 |  | 130.0 |  |
|  |  | Z | 4.50 | 67.02 | 16.64 |  | 130.0 |  |
| $\begin{aligned} & \hline 10587- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | X | 4.24 | 66.07 | 15.88 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 66.48 | 16.08 |  | 130.0 |  |
|  |  | Z | 4.24 | 66.15 | 15.83 |  | 130.0 |  |
| $\begin{aligned} & 10588- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.28 | 66.14 | 15.91 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.56 | 66.53 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.29 | 66.22 | 15.86 |  | 130.0 |  |
| $\begin{aligned} & 10589- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90 pc duty cycle) | X | 4.40 | 66.99 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.64 | 67.22 | 16.70 |  | 130.0 |  |
|  |  | Z | 4.40 | 67.08 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & \hline 10590- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.17 | 65.84 | 15.66 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.45 | 66.25 | 15.88 |  | 130.0 |  |
|  |  | Z | 4.18 | 65.90 | 15.60 |  | 130.0 |  |


| $\begin{aligned} & 10591- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90 pc duty cycle) | X | 4.55 | 66.42 | 16.46 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.78 | 66.64 | 16.53 |  | 130.0 |  |
|  |  | Z | 4.55 | 66.49 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & 10592- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20 MHz , MCS1, 90pc duty cycle) | X | 4.67 | 66.72 | 16.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.93 | 66.98 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.68 | 66.80 | 16.53 |  | 130.0 |  |
| $\begin{aligned} & 10593- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.59 | 66.59 | 16.43 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 66.88 | 16.54 |  | 130.0 |  |
|  |  | Z | 4.59 | 66.67 | 16.38 |  | 130.0 |  |
| $\begin{aligned} & 10594- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 4.64 | 66.77 | 16.61 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 67.05 | 16.69 |  | 130.0 |  |
|  |  | Z | 4.65 | 66.86 | 16.56 |  | 130.0 |  |
| $\begin{aligned} & 10595- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.61 | 66.75 | 16.51 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 67.00 | 16.59 |  | 130.0 |  |
|  |  | Z | 4.61 | 66.82 | 16.45 |  | 130.0 |  |
| $\begin{aligned} & 10596- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS5, 90pc duty cycle) | X | 4.54 | 66.71 | 16.50 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 67.00 | 16.60 |  | 130.0 |  |
|  |  | Z | 4.54 | 66.79 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10597- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | X | 4.49 | 66.57 | 16.34 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.75 | 66.90 | 16.48 |  | 130.0 |  |
|  |  | Z | 4.49 | 66.65 | 16.29 |  | 130.0 |  |
| $\begin{aligned} & 10598- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20 MHz , MCS7, 90pc duty cycle) | X | 4.48 | 66.81 | 16.63 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 67.12 | 16.73 |  | 130.0 |  |
|  |  | Z | 4.49 | 66.91 | 16.58 |  | 130.0 |  |
| $\begin{aligned} & 10599- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS0, 90pc duty cycle) | X | 5.31 | 67.13 | 16.85 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.45 | 67.20 | 16.74 |  | 130.0 |  |
|  |  | Z | 5.25 | 67.05 | 16.69 |  | 130.0 |  |
| $\begin{aligned} & 10600- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | X | 5.48 | 67.76 | 17.14 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.57 | 67.58 | 16.91 |  | 130.0 |  |
|  |  | Z | 5.39 | 67.54 | 16.90 |  | 130.0 |  |
| $\begin{aligned} & 10601- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS2, 90pc duty cycle) | X | 5.31 | 67.28 | 16.91 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.47 | 67.34 | 16.80 |  | 130.0 |  |
|  |  | Z | 5.27 | 67.22 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10602- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS3, 90pc duty cycle) | X | 5.43 | 67.41 | 16.89 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.56 | 67.39 | 16.75 |  | 130.0 |  |
|  |  | Z | 5.40 | 67.36 | 16.75 |  | 130.0 |  |
| $\begin{aligned} & 10603- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS4, 90pc duty cycle) | X | 5.54 | 67.82 | 17.25 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.64 | 67.67 | 17.02 |  | 130.0 |  |
|  |  | Z | 5.49 | 67.76 | 17.09 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & A A B \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS5, 90pe duty cycle) | X | 5.42 | 67.47 | 17.05 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.46 | 67.19 | 16.76 |  | 130.0 |  |
|  |  | Z | 5.37 | 67.38 | 16.88 |  | 130.0 |  |
| $\begin{aligned} & 10605- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS6, 90pc duty cycle) | X | 5.43 | 67.47 | 17.04 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.56 | 67.49 | 16.91 |  | 130.0 |  |
|  |  | Z | 5.37 | 67.38 | 16.87 |  | 130.0 |  |
| $\begin{aligned} & 10606- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS7, 90pc duty cycle) | X | 5.17 | 66.77 | 16.54 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.31 | 66.83 | 16.45 |  | 130.0 |  |
|  |  | Z | 5.12 | 66.68 | 16.37 |  | 130.0 |  |


| $10607-$ $\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 90 pc duty cycle) | X | 4.40 | 65.75 | 16.09 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.62 | 65.97 | 16.16 |  | 130.0 |  |
| $\begin{aligned} & 10608- \\ & \text { AAB } \end{aligned}$ |  | Z | 4.40 | 65.83 | 16.04 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS1, 90 pc duty cycle) | X | 4.54 | 66.09 | 16.24 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.80 | 66.37 | 16.32 |  | 130.0 |  |
| $\begin{aligned} & 10609- \\ & \text { AAB } \end{aligned}$ |  | Z | 4.55 | 66.18 | 16.20 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi (20MHz, MCS2, 90 pc duty cycle) | X | 4.43 | 65.91 | 16.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 66.22 | 16.16 |  | 130.0 |  |
|  |  | Z | 4.44 | 66.00 | 16.00 |  | 130.0 |  |
| $\begin{aligned} & 10610- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS3}$, 90 pc duty cycle) | X | 4.49 | 66.09 | 16.23 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.38 | 16.32 |  | 130.0 |  |
|  |  | Z | 4.49 | 66.18 | 16.19 |  | 130.0 |  |
| $\begin{aligned} & 10611- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS} 4$, 90pc duty cycle) | X | 4.40 | 65.88 | 16.06 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 66.19 | 16.17 |  | 130.0 |  |
|  |  | Z | 4.40 | 65.97 | 16.02 |  | 130.0 |  |
| 10612-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS5, 90 pc duty cycle) | X | 4.39 | 66.01 | 16.10 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 66.35 | 16.22 |  | 130.0 |  |
|  |  | Z | 4.40 | 66.10 | 16.06 |  | 130.0 |  |
| 10613-$A A B$ | IEEE 802.11ac WiFi (20MHz, MCS6, 90 pc duty cycle) | X | 4.38 | 65.82 | 15.94 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.67 | 66.22 | 16.10 |  | 130.0 |  |
|  |  | Z | 4.39 | 65.92 | 15.90 |  | 130.0 |  |
| 10614-$A A B$ | IEEE 802.11ac WiFi (20MHz, MCS7, 90 pc duty cycle) | X | 4.35 | 66.06 | 16.21 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 66.40 | 16.32 |  | 130.0 |  |
|  |  | Z | 4.36 | 66.17 | 16.17 |  | 130.0 |  |
| 10615AAB | IEEE 802.11ac WiFi ( 20 MHz , MCS8, 90 pc duty cycle) | X | 4.39 | 65.69 | 15.81 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 66.03 | 15.96 |  | 130.0 |  |
|  |  | Z | 4.39 | 65.77 | 15.76 |  | 130.0 |  |
| $\begin{aligned} & 10616- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCSO}$, 90 pc duty cycle) | X | 5.07 | 66.15 | 16.34 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.27 | 66.44 | 16.35 |  | 130.0 |  |
|  |  | Z | 5.05 | 66.21 | 16.25 |  | 130.0 |  |
| $\begin{aligned} & 10617- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 90 pc duty cycle) | X | 5.14 | 66.37 | 16.43 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 66.62 | 16.41 |  | 130.0 |  |
|  |  | Z | 5.12 | 66.42 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10618- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 90 pc duty cycle) | X | 5.03 | 66.38 | 16.45 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.22 | 66.62 | 16.43 |  | 130.0 |  |
|  |  | Z | 5.02 | 66.45 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10619- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS} 3$, 90 pc duty cycle) | X | 5.07 | 66.24 | 16.31 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.24 | 66.43 | 16.27 |  | 130.0 |  |
|  |  | Z | 5.03 | 66.23 | 16.18 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10620- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 40 MHz , MCS4, 90 pc duty cycle) | X | 5.13 | 66.23 | 16.35 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 66.47 | 16.34 |  | 130.0 |  |
|  |  | Z | 5.11 | 66.25 | 16.24 |  | 130.0 |  |
| $\begin{aligned} & 10621- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS5, 90 pc duty cycle) | X | 5.12 | 66.28 | 16.51 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.33 | 66.60 | 16.51 |  | 130.0 |  |
|  |  | Z | 5.11 | 66.38 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10622- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 90 pc duty cycle) | X | 5.11 | 66.38 | 16.55 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.34 | 66.76 | 16.59 |  | 130.0 |  |
|  |  | Z | 5.11 | 66.50 | 16.49 |  | 130.0 |  |


| $\begin{aligned} & 10623- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi ( 40 MHz , MCS7, 90 pc duty cycle) | X | 4.99 | 65.86 | 16.14 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.22 | 66.30 | 16.24 |  | 130.0 |  |
|  |  | Z | 4.98 | 65.96 | 16.08 |  | 130.0 |  |
| $\begin{aligned} & 10624- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi (40MHz, MCS8, 90 pc duty cycle) | X | 5.20 | 66.20 | 16.38 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.41 | 66.49 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.19 | 66.26 | 16.30 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90 pc duty cycle) | X | 5.30 | 66.37 | 16.54 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.75 | 67.41 | 16.90 |  | 130.0 |  |
|  |  | Z | 5.33 | 66.58 | 16.52 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCSO, 90 pc duty cycle) | X | 5.40 | 66.14 | 16.28 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.57 | 66.51 | 16.31 |  | 130.0 |  |
|  |  | Z | 5.38 | 66.23 | 16.21 |  | 130.0 |  |
| $\begin{aligned} & 10627-1 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 5.71 | 67.03 | 16.70 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.80 | 67.06 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.65 | 66.96 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 90 pc duty cycle) | X | 5.40 | 66.15 | 16.18 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.60 | 66.59 | 16.25 |  | 130.0 |  |
|  |  | Z | 5.38 | 66.23 | 16.10 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90 pc duty cycle) | X | 5.55 | 66.49 | 16.35 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.67 | 66.64 | 16.26 |  | 130.0 |  |
|  |  | Z | 5.49 | 66.42 | 16.19 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( 80 MHz , MCS4, 90 pc duty cycle) | X | 5.95 | 67.89 | 17.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.08 | 68.07 | 16.98 |  | 130.0 |  |
|  |  | Z | 5.84 | 67.71 | 16.83 |  | 130.0 |  |
| $\begin{aligned} & 10631- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 5.77 | 67.48 | 17.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.99 | 67.89 | 17.07 |  | 130.0 |  |
|  |  | Z | 5.74 | 67.53 | 16.95 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 90 pc duty cycle) | X | 5.72 | 67.25 | 16.96 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.77 | 67.11 | 16.70 |  | 130.0 |  |
|  |  | Z | 5.64 | 67.12 | 16.77 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS7. 90 pc duty cycle) | X | 5.44 | 66.28 | 16.29 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.66 | 66.76 | 16.36 |  | 130.0 |  |
|  |  | Z | 5.44 | 66.43 | 16.24 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS8, 90 pc duty cycle) | X | 5.44 | 66.38 | 16.39 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.64 | 66.78 | 16.43 |  | 130.0 |  |
|  |  | Z | 5.43 | 66.48 | 16.32 |  | 130.0 |  |
| $\begin{aligned} & 10635- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 90 pc duty cycle) | X | 5.30 | 65.61 | 15.72 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.53 | 66.14 | 15.85 |  | 130.0 |  |
|  |  | Z | 5.29 | 65.70 | 15.64 |  | 130.0 |  |
| $\begin{aligned} & 10636- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCSO, 90pc duty cycle) | X | 5.86 | 66.55 | 16.40 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.98 | 66.87 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.82 | 66.61 | 16.30 |  | 130.0 |  |
| $\begin{aligned} & 10637- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 1$, 90 pc duty cycle) | X | 6.02 | 66.98 | 16.61 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.13 | 67.25 | 16.56 |  | 130.0 |  |
|  |  | Z | 5.97 | 67.00 | 16.48 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS2, 90 pc duty cycle) | X | 6.03 | 67.01 | 16.60 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.13 | 67.22 | 16.53 |  | 130.0 |  |
|  |  | Z | 5.97 | 67.00 | 16.46 |  | 130.0 |  |


| $\begin{array}{\|l\|} \hline 10639- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 90 pc duty cycle) | X | 5.96 | 66.80 | 16.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.11 | 67.17 | 16.55 |  | 130.0 |  |
|  |  | Z | 5.93 | 66.87 | 16.44 |  | 130.0 |  |
| $\begin{aligned} & 10640- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS4, 90 pc duty cycle) | X | 5.92 | 66.70 | 16.42 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.12 | 67.19 | 16.50 |  | 130.0 |  |
|  |  | Z | 5.91 | 66.82 | 16.35 |  | 130.0 |  |
| $10641-$ <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS5, 90 pc duty cycle) | X | 6.06 | 66.91 | 16.55 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.16 | 67.10 | 16.47 |  | 130.0 |  |
|  |  | Z | 6.01 | 66.89 | 16.41 |  | 130.0 |  |
| $\begin{aligned} & 10642- \\ & \text { AAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { IEEE } 802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCS} 6 \text {, } \\ & 90 \mathrm{pc} \text { duty cycle) } \end{aligned}$ | X | 6.04 | 66.98 | 16.76 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.20 | 67.33 | 16.75 |  | 130.0 |  |
|  |  | Z | 6.02 | 67.07 | 16.68 |  | 130.0 |  |
| 10643- <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 90 pc duty cycle) | X | 5.90 | 66.69 | 16.50 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.04 | 67.03 | 16.51 |  | 130.0 |  |
|  |  | Z | 5.87 | 66.78 | 16.42 |  | 130.0 |  |
| $\begin{aligned} & 10644- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( 160 MHz , MCS8, 90 pc duty cycle) | X | 5.95 | 66.86 | 16.60 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.19 | 67.50 | 16.76 |  | 130.0 |  |
|  |  | Z | 5.94 | 66.99 | 16.54 |  | 130.0 |  |
| $\begin{aligned} & 10645- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS9, 90 pc duty cycle) | X | 6.44 | 67.99 | 17.14 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.47 | 67.94 | 16.94 |  | 130.0 |  |
|  |  | Z | 6.16 | 67.33 | 16.68 |  | 130.0 |  |
| $\begin{aligned} & 10646- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe=2,7) | X | 7.50 | 90.48 | 30.44 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 17.43 | 112.38 | 39.34 |  | 60.0 |  |
|  |  | Z | 9.26 | 96.56 | 33.29 |  | 60.0 |  |
| 10647-$A A C$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,7$ ) | X | 6.74 | 88.72 | 29.93 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 14.54 | 108.61 | 38.31 |  | 60.0 |  |
|  |  | Z | 8.10 | 94.14 | 32.60 |  | 60.0 |  |
| $\begin{aligned} & \text { 10648- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | CDMA2000 (1x Advanced) | X | 0.39 | 60.00 | 6.32 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.67 | 63.31 | 10.55 |  | 150.0 |  |
|  |  | Z | 0.38 | 60.00 | 6.43 |  | 150.0 |  |
| $\begin{aligned} & 10652- \\ & \mathrm{A} A \mathrm{~B} \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | X | 3.10 | 65.49 | 15.51 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.52 | 66.85 | 16.73 |  | 80.0 |  |
|  |  | Z | 3.18 | 66.07 | 15.91 |  | 80.0 |  |
| 10653-$\mathrm{AAB}$ | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44\%) | X | 3.70 | 65.11 | 16.04 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.03 | 66.07 | 16.78 |  | 80.0 |  |
|  |  | Z | 3.73 | 65.44 | 16.24 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10654- \\ \text { AAB } \\ \hline \end{array}$ | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | X | 3.73 | 64.77 | 16.12 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.00 | 65.69 | 16.76 |  | 80.0 |  |
|  |  | Z | 3.74 | 65.07 | 16.28 |  | 80.0 |  |
| $10655-$$\mathrm{AAB}$ | LTE-TDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 3.81 | 64.71 | 16.17 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 4.06 | 65.68 | 16.79 |  | 80.0 |  |
|  |  | Z | 3.81 | 65.01 | 16.32 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10658- \\ \text { AAA } \\ \hline \end{array}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | X | 3.06 | 66.59 | 11.16 | 10.00 | 50.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 100.00 | 111.68 | 26.09 |  | 50.0 |  |
|  |  | Z | 3.93 | 69.81 | 12.66 |  | 50.0 |  |
| $\begin{aligned} & 10659- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | X | 1.63 | 63.81 | 8.65 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 113.13 | 25.67 |  | 60.0 |  |
|  |  | Z | 2.52 | 68.36 | 10.82 |  | 60.0 |  |


| 10660- <br> AAA | Pulse Waveform (200Hz, 40\%) | X | 0.57 | 60.00 | 5.26 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 118.24 | 26.52 |  | 80.0 |  |
|  |  | Z | 0.68 | 61.70 | 6.30 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform (200Hz, 60\%) | X | 0.32 | 60.00 | 3.83 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 125.46 | 28.15 |  | 100.0 |  |
|  |  | Z | 0.29 | 60.00 | 3.83 |  | 100.0 |  |
| $10662-$ <br> AAA | Pulse Waveform (200Hz, 80\%) | X | 7.43 | 367.15 | 53.93 | 0.97 | 120.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 135.73 | 30.13 |  | 120.0 |  |

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

## Calibration Laboratory of

Schmid \& Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland


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

Accredited by the Swiss Accreditation Service (SAS)
Accreditation No.: SCS 0108
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates
Client


Certifcate No: EX3-7409_Jun18
CALIBRATION CERTIFICATE

Object

Calibration procedure(s)

Calibration date:

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

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$.

Calibration Equipment used (M\&TE critical for calibration)

| Primary Standards | 1D | Cal Date (Certificate No.) | Scheduled Calibration |
| :---: | :---: | :---: | :---: |
| Power meter NRP | SN: 104778 | 04-Apr-18 (No. 217-02672/02673) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-18 (No. 217-02672) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-18 (No. 217-02673) | Apr-19 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 04-Apr-18 (No.217-02682) | Apr-19 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-17 (No. ES3-3013 Dec17) | Dec-18 |
| DAE4 | SN: 660 | 21-Dec-17 (No. DAE4-660_Dec17) | Dec-18 |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer HP 8753E | SN: US37390585 | 18-Oct-01 (in house check Oct-17) | In house check: Oct-18 |

Calibrated by: $\quad$ Name

Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzerland

Accredited by the Swiss Accreditation Service (SAS)
Accreditation No.: SCS 0108
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates
Glossary:

TSL
NORMx,y,z
ConvF
DCP
CF
A, B, C, D
Polarization $\varphi$
Polarization $\vartheta$
Connector Angle
tissue simulating liquid
sensitivity in free space
sensitivity in TSL / NORMx,y,z
diode compression point
crest factor (1/duty_cycle) of the RF signal modulation dependent linearization parameters $\varphi$ rotation around probe axis $\vartheta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta=0$ is normal to probe axis information used in DASY system to align probe sensor $X$ to the robot coordinate system

## 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 handheld 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 "

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $9=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORM $x, y, z$ are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z = NORMx,y,z* frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- $D C P x, y, z$ : DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- $A x, y, z ; B x, y, z ; C x, y, z ; D x, y, z ; V R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. $V R$ is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $\mathrm{f} \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $\mathrm{f}>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy ( $3 D$ deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).


# Probe EX3DV4 

## SN:7409

Manufactured: $\quad$ November 24, 2015
Calibrated: June 25, 2018

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

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Basic Calibration Parameters

|  | Sensor X | Sensor $Y$ | Sensor $\mathbf{Z}$ | Unc (k=2) |
| :--- | :---: | :---: | :---: | :---: |
| Norm $\left(\mu \mathrm{V} /(\mathrm{V} / \mathrm{m})^{2}\right)^{\mathrm{A}}$ | 0.38 | 0.33 | 0.38 | $\pm 10.1 \%$ |
| $\mathrm{DCP}(\mathrm{mV})^{\mathrm{B}}$ | 100.8 | 102.3 | 97.7 |  |

## Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \mathbf{~} \mathbf{V}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c}^{\mathbf{E}}$ <br> $\mathbf{( k = 2 )}$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 157.1 | $\mathbf{\pm 2 . 2 \%}$ |
|  |  | Y | 0.0 | 0.0 | 1.0 |  | 172.6 |  |
|  |  | Z | 0.0 | 0.0 | 1.0 |  | 175.7 |  |

Note: For details on UID parameters see Appendix.
Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\boldsymbol{\alpha}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s .} \mathbf{V}^{-\mathbf{2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s . \mathbf { V } ^ { - 1 }}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 15.40 | 116.5 | 36.38 | 2.655 | 0.140 | 4.978 | 0.000 | 0.017 | 1.008 |
| Y | 27.94 | 206.6 | 35.20 | 4.338 | 0.095 | 4.989 | 1.642 | 0.000 | 1.004 |
| Z | 31.47 | 244.0 | 37.99 | 3.819 | 0.313 | 5.030 | 0.103 | 0.363 | 1.006 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $\mathrm{k}=2$, which for a normal distribution corresponds to a coverage probability of approximately $95 \%$.

[^6]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Calibration Parameter Determined in Head Tissue Simulating Media

| $f(\mathrm{MHz})^{\text {c }}$ | Relative Permittivity ${ }^{F}$ | $\begin{gathered} \hline \text { Conductivity } \\ (\mathrm{S} / \mathrm{m})^{\mathrm{F}} \end{gathered}$ | ConvF X | ConvF Y | ConvF Z | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{6} \\ (\mathrm{~mm}) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Unc } \\ (k=2) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 9.91 | 9.91 | 9.91 | 0.44 | 0.90 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 9.67 | 9.67 | 9.67 | 0.46 | 0.85 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 8.43 | 8.43 | 8.43 | 0.38 | 0.80 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 8.05 | 8.05 | 8.05 | 0.38 | 0.84 | $\pm 12.0 \%$ |
| 2300 | 39.5 | 1.67 | 7.57 | 7.57 | 7.57 | 0.32 | 0.80 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 7.23 | 7.23 | 7.23 | 0.34 | 0.86 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 6.98 | 6.98 | 6.98 | 0.39 | 0.86 | $\pm 12.0 \%$ |
| 5250 | 35.9 | 4.71 | 5.20 | 5.20 | 5.20 | 0.40 | 1.80 | $\pm 13.1$ \% |
| 5600 | 35.5 | 5.07 | 4.77 | 4.77 | 4.77 | 0.40 | 1.80 | $\pm 13.1 \%$ |
| 5750 | 35.4 | 5.22 | 4.82 | 4.82 | 4.82 | 0.40 | 1.80 | $\pm 13.1 \%$ |

${ }^{\text {c }}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{G}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathbf{f ( M H z})^{\mathbf{c}}$ | Relative <br> Permittivity $^{\mathbf{F}}$ | Conductivity <br> $(\mathbf{S} / \mathbf{m})^{\mathbf{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha $^{\mathbf{G}}$ | Depth <br> $(\mathbf{m m})$ | Unc <br> $(\mathbf{k}=\mathbf{2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 9.82 | 9.82 | 9.82 | 0.52 | 0.84 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 9.63 | 9.63 | 9.63 | 0.48 | 0.80 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 7.91 | 7.91 | 7.91 | 0.36 | 0.93 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 7.60 | 7.60 | 7.60 | 0.44 | 0.80 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 7.36 | 7.36 | 7.36 | 0.38 | 0.88 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 7.24 | 7.24 | 7.24 | 0.33 | 0.89 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 7.07 | 7.07 | 7.07 | 0.32 | 0.96 | $\pm 12.0 \%$ |
| 5250 | 48.9 | 5.36 | 4.67 | 4.67 | 4.67 | 0.50 | 1.90 | $\pm 13.1 \%$ |
| 5600 | 48.5 | 5.77 | 4.25 | 4.25 | 4.25 | 0.50 | 1.90 | $\pm 13.1 \%$ |
| 5750 | 48.3 | 5.94 | 4.32 | 4.32 | 4.32 | 0.50 | 1.90 | $\pm 13.1 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{6}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

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

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

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

$\mathrm{f}=600 \mathrm{MHz}$,TEM

$\mathrm{f}=1800 \mathrm{MHz}, \mathrm{R} 22$



Uncertainty of Axial Isotropy Assessment: $\pm \mathbf{0 . 5 \%}(\mathbf{k}=2)$

## Dynamic Range f(SAR $\left.{ }_{\text {head }}\right)$

(TEM cell , $\mathrm{f}_{\text {eval }}=\mathbf{1 9 0 0} \mathbf{~ M H z}$ )


Uncertainty of Linearity Assessment: $\pm \mathbf{0 . 6 \%}(\mathbf{k}=2)$

## Conversion Factor Assessment



Deviation from Isotropy in Liquid
Error ( $\phi, \vartheta$ ), $\mathrm{f}=900 \mathrm{MHz}$



## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7409

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle ( ${ }^{\circ}$ ) | 41.5 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

Appendix: Modulation Calibration Parameters

| UID | Communication System Name |  | $\underset{d B}{A}$ | $\frac{B}{d B \sqrt{\mu} V}$ | C | $\begin{gathered} \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \mathrm{VR} \\ & \mathrm{mV} \end{aligned}$ | $\begin{aligned} & \operatorname{Max}^{2 n c} \\ & \mathrm{Unc}^{E} \\ & (\mathrm{k}=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 157.1 | $\pm 2.2 \%$ |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 172.6 |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 175.7 |  |
| $\begin{aligned} & 10010- \\ & \text { CAA } \\ & \hline \end{aligned}$ | SAR Validation (Square, 100ms, 10 ms ) | X | 1.25 | 60.42 | 5.97 | 10.00 | 20.0 | $\pm 9.6$ \% |
|  |  | Y | 1.37 | 61.35 | 6.72 |  | 20.0 |  |
|  |  | Z | 1.46 | 61.54 | 7.06 |  | 20.0 |  |
| $\begin{aligned} & 10011- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (WCDMA) | X | 0.71 | 66.47 | 12.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.49 | 76.31 | 19.52 |  | 150.0 |  |
|  |  | Z | 0.80 | 65.38 | 13.27 |  | 150.0 |  |
| $\begin{aligned} & 10012- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.1 tb WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 0.97 | 63.61 | 14.22 | 0.41 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.14 | 65.32 | 16.39 |  | 150.0 |  |
|  |  | Z | 1.01 | 62.66 | 14.20 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10013- \\ \text { CAB } \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps ) | X | 3.98 | 66.92 | 16.39 | 1.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 67.09 | 17.14 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.48 | 16.81 |  | 150.0 |  |
| 10021- DAC | GSM-FDD (TDMA, GMSK) | X | 2.93 | 68.02 | 10.47 | 9.39 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 74.12 | 13.20 |  | 50.0 |  |
|  |  | Z | 8.30 | 79.26 | 15.55 |  | 50.0 |  |
| 10023- DAC | GPRS-FDD (TDMA, GMSK, TN 0) | X | 2.04 | 64.26 | 8.75 | 9.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 3.75 | 70.52 | 11.87 |  | 50.0 |  |
|  |  | Z | 5.18 | 74.16 | 13.81 |  | 50.0 |  |
| $\begin{aligned} & 10024- \\ & \text { DAC } \\ & \hline \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 0.77 | 60.84 | 5.97 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 98.81 | 18.33 |  | 60.0 |  |
|  |  | Z | 7.39 | 79.44 | 14.17 |  | 60.0 |  |
| $10025-$ DAC | EDGE-FDD (TDMA, 8PSK, TN 0) | X | 2.92 | 62.32 | 21.25 | 12.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 3.79 | 70.21 | 26.28 |  | 50.0 |  |
|  |  | Z | 3.08 | 62.64 | 21.59 |  | 50.0 |  |
| $\begin{array}{\|l} \hline 10026- \\ \text { DAC } \\ \hline \end{array}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 4.19 | 76.79 | 26.73 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 5.08 | 81.51 | 29.10 |  | 60.0 |  |
|  |  | Z | 4.89 | 79.35 | 27.91 |  | 60.0 |  |
| $\begin{aligned} & 10027- \\ & \text { DAC } \\ & \hline \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | X | 0.43 | 60.00 | 4.84 | 4.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 98.82 | 17.61 |  | 80.0 |  |
|  |  | Z | 99.96 | 97.90 | 17.31 |  | 80.0 |  |
| $\begin{aligned} & 10028- \\ & \text { DAC } \\ & \hline \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 0.29 | 60.00 | 4.20 | 3.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 100.72 | 17.79 |  | 100.0 |  |
|  |  | Z | 0.57 | 63.31 | 6.83 |  | 100.0 |  |
| $\begin{aligned} & 10029- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | X | 3.08 | 70.55 | 22.84 | 7.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.50 | 73.17 | 24.28 |  | 80.0 |  |
|  |  | Z | 3.45 | 72.07 | 23.57 |  | 80.0 |  |
| $\begin{aligned} & 10030- \\ & \mathrm{CAA} \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 0.52 | 60.00 | 4.79 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 1.54 | 67.33 | 9.06 |  | 70.0 |  |
|  |  | Z | 1.17 | 65.26 | 8.49 |  | 70.0 |  |
| $\begin{aligned} & 10031- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 0.04 | 196.26 | 30.81 | 1.88 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.17 | 60.00 | 4.10 |  | 100.0 |  |
|  |  | Z | 15.90 | 60.96 | 1.69 |  | 100.0 |  |


| $\begin{aligned} & 10032- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 0.00 | 86.08 | 35.43 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 99.99 | 344.89 | 100.44 |  | 100.0 |  |
|  |  | Z | 1.14 | 132.41 | 13.71 |  | 100.0 |  |
| $\begin{aligned} & 10033- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | X | 0.95 | 60.75 | 6.54 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 80.79 | 18.23 |  | 70.0 |  |
|  |  | Z | 3.25 | 75.39 | 16.74 |  | 70.0 |  |
| $\begin{aligned} & 10034- \\ & \mathrm{CAA} \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | X | 3.04 | 65.72 | 5.34 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 1.68 | 70.56 | 12.82 |  | 100.0 |  |
|  |  | Z | 0.99 | 64.34 | 10.07 |  | 100.0 |  |
| $\begin{aligned} & 10035- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5) | X | 24.75 | 218.80 | 26.78 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 1.37 | 69.43 | 12.15 |  | 100.0 |  |
|  |  | Z | 0.77 | 62.85 | 8.95 |  | 100.0 |  |
| $\begin{aligned} & \text { 10036- } \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 0.94 | 60.83 | 6.63 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 7.23 | 85.73 | 19.90 |  | 70.0 |  |
|  |  | Z | 3.94 | 78.17 | 17.83 |  | 70.0 |  |
| $\begin{aligned} & 10037- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 1.41 | 63.61 | 4.82 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 1.40 | 68.85 | 12.14 |  | 100.0 |  |
|  |  | Z | 0.93 | 63.88 | 9.84 |  | 100.0 |  |
| $\begin{array}{\|l\|} \hline 10038- \\ \text { CAA } \\ \hline \end{array}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 26.17 | 217.46 | 26.16 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 1.45 | 70.29 | 12.67 |  | 100.0 |  |
|  |  | Z | 0.78 | 63.02 | 9.17 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \text { CAB } \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 21.96 | 306.20 | 30.49 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.63 | 72.13 | 12.95 |  | 150.0 |  |
|  |  | Z | 0.63 | 61.62 | 7.75 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10042- \\ \mathrm{CAB} \\ \hline \end{array}$ | IS-54 / IS-136 FDD (TDMA/FDM, P//4DQPSK, Halfrate) | X | 1.01 | 60.95 | 6.26 | 7.78 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 1.74 | 65.58 | 9.03 |  | 50.0 |  |
|  |  | Z | 1.77 | 65.58 | 9.34 |  | 50.0 |  |
| $\begin{aligned} & 10044- \\ & \text { CAA } \end{aligned}$ | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.10 | 124.30 | 3.45 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.01 | 119.74 | 2.99 |  | 150.0 |  |
|  |  | Z | 0.14 | 123.41 | 9.03 |  | 150.0 |  |
| $\begin{aligned} & 10048- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 2.82 | 62.25 | 9.34 | 13.80 | 25.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.46 | 64.98 | 10.90 |  | 25.0 |  |
|  |  | Z | 4.35 | 67.54 | 12.61 |  | 25.0 |  |
| $\begin{aligned} & 10049= \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 2.47 | 64.28 | 8.96 | 10.79 | 40.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.27 | 67.55 | 10.82 |  | 40.0 |  |
|  |  | Z | 4.02 | 69.88 | 12.36 |  | 40.0 |  |
| $\begin{aligned} & 10056- \\ & \text { CAA } \\ & \hline \end{aligned}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps ) | X | 2.81 | 66.64 | 10.78 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 11.82 | 86.24 | 20.09 |  | 50.0 |  |
|  |  | Z | 9.59 | 84.12 | 20.02 |  | 50.0 |  |
| $\begin{aligned} & 10058- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 2.65 | 68.11 | 20.96 | 6.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 2.94 | 70.05 | 22.07 |  | 100.0 |  |
|  |  | Z | 2.91 | 69.15 | 21.44 |  | 100.0 |  |
| $\begin{aligned} & 10059- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 0.95 | 64.02 | 14.39 | 0.61 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 1.14 | 66.10 | 16.82 |  | 110.0 |  |
|  |  | Z | 1.00 | 63.23 | 14.55 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 1.76 | 81.26 | 19.48 | 1.30 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 150.16 | 40.00 |  | 110.0 |  |
|  |  | Z | 1.90 | 81.85 | 20.27 |  | 110.0 |  |


| $\begin{aligned} & 10061- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 1.18 | 69.71 | 16.58 | 2.04 | 110.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 1.94 | 78.32 | 21.99 |  | 110.0 |  |
|  |  | Z | 1.40 | 71.35 | 18.33 |  | 110.0 |  |
| $\begin{array}{\|l\|} \hline 10062- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 3.80 | 66.99 | 15.87 | 0.49 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.35 | 67.21 | 16.69 |  | 100.0 |  |
|  |  | Z | 4.31 | 66.43 | 16.23 |  | 100.0 |  |
| $\begin{aligned} & 10063- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 3.81 | 67.06 | 15.96 | 0.72 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.36 | 67.29 | 16.77 |  | 100.0 |  |
|  |  | Z | 4.32 | 66.52 | 16.32 |  | 100.0 |  |
| $\begin{array}{\|l} \hline 10064- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | X | 3.97 | 67.23 | 16.12 | 0.86 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 67.40 | 16.91 |  | 100.0 |  |
|  |  | Z | 4.55 | 66.72 | 16.52 |  | 100.0 |  |
| $\begin{aligned} & 10065- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps) | X | 3.85 | 66.82 | 16.06 | 1.21 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.42 | 67.15 | 16.92 |  | 100.0 |  |
|  |  | Z | 4.42 | 66.52 | 16.58 |  | 100.0 |  |
| $\begin{aligned} & 10066- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps) | X | 3.83 | 66.65 | 16.06 | 1.46 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.41 | 67.05 | 17.01 |  | 100.0 |  |
|  |  | Z | 4.42 | 66.49 | 16.71 |  | 100.0 |  |
| $\begin{aligned} & 10067- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 36 Mbps) | X | 4.01 | 66.66 | 16.35 | 2.04 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 67.23 | 17.40 |  | 100.0 |  |
|  |  | Z | 4.70 | 66.78 | 17.19 |  | 100.0 |  |
| $\begin{aligned} & 10068- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | X | 4.12 | 66.97 | 16.78 | 2.55 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.69 | 67.14 | 17.56 |  | 100.0 |  |
|  |  | Z | 4.73 | 66.69 | 17.36 |  | 100.0 |  |
| $\begin{aligned} & 10069- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps) | X | 4.11 | 66.73 | 16.77 | 2.67 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 67.08 | 17.69 |  | 100.0 |  |
|  |  | Z | 4.78 | 66.70 | 17.53 |  | 100.0 |  |
| $\begin{array}{\|l} \hline 10071- \\ \text { CAB } \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | X | 4.07 | 66.96 | 16.68 | 1.99 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 67.07 | 17.37 |  | 100.0 |  |
|  |  | Z | 4.60 | 66.53 | 17.10 |  | 100.0 |  |
| $\begin{aligned} & 10072- \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | X | 3.98 | 66.89 | 16.71 | 2.30 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.51 | 67.19 | 17.50 |  | 100.0 |  |
|  |  | Z | 4.54 | 66.70 | 17.26 |  | 100.0 |  |
| $\begin{array}{\|l} \hline 10073- \\ \mathrm{CAB} \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | X | 4.03 | 67.09 | 17.06 | 2.83 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 67.35 | 17.81 |  | 100.0 |  |
|  |  | Z | 4.59 | 66.87 | 17.58 |  | 100.0 |  |
| $\begin{aligned} & 10074- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | X | 4.11 | 67.36 | 17.40 | 3.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.57 | 67.31 | 17.95 |  | 100.0 |  |
|  |  | Z | 4.60 | 66.82 | 17.73 |  | 100.0 |  |
| $\begin{array}{\|l\|} \hline 10075- \\ \text { CAB } \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | X | 4.18 | 67.58 | 17.73 | 3.82 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.58 | 67.25 | 18.15 |  | 90.0 |  |
|  |  | Z | 4.61 | 66.79 | 17.96 |  | 90.0 |  |
| $\begin{aligned} & 10076- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | X | 4.24 | 67.48 | 17.91 | 4.15 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 67.08 | 18.28 |  | 90.0 |  |
|  |  | Z | 4.65 | 66.67 | 18.13 |  | 90.0 |  |
| $\begin{aligned} & 10077- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | X | 4.28 | 67.60 | 18.06 | 4.30 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.64 | 67.18 | 18.41 |  | 90.0 |  |
|  |  | Z | 4.68 | 66.76 | 18.25 |  | 90.0 |  |


| $\begin{aligned} & 10081- \\ & \mathrm{CAB} \end{aligned}$ | CDMA2000 (1xRTT, RC3) | X | 7.85 | 258.95 | 40.09 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.57 | 64.50 | 9.19 |  | 150.0 |  |
|  |  | Z | 0.37 | 60.00 | 6.09 |  | 150.0 |  |
| $\begin{aligned} & 10082- \\ & \mathrm{CAB} \end{aligned}$ | IS-54 / IS-136 FDD (TDMA/FDM, Pl/4DQPSK, Fullrate) | X | 72.13 | 59.07 | 0.77 | 4.77 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 7.02 | 60.09 | 1.53 |  | 80.0 |  |
|  |  | Z | 7.63 | 60.12 | 1.53 |  | 80.0 |  |
| $\begin{aligned} & 10090- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 0.78 | 60.88 | 6.00 | 6.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 98.83 | 18.35 |  | 60.0 |  |
|  |  | Z | 8.66 | 80.77 | 14.58 |  | 60.0 |  |
| $\begin{array}{\|l\|} \hline 10097- \\ \mathrm{CAB} \\ \hline \end{array}$ | UMTS-FDD (HSDPA) | X | 1.12 | 65.69 | 11.46 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.39 | 74.48 | 18.29 |  | 150.0 |  |
|  |  | Z | 1.58 | 66.95 | 14.31 |  | 150.0 |  |
| $\begin{aligned} & 10098- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 2) | X | 1.11 | 65.81 | 11.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.34 | 74.47 | 18.31 |  | 150.0 |  |
|  |  | Z | 1.54 | 66.88 | 14.28 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10099 \text { - } \\ \text { DAC } \\ \hline \end{array}$ | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 4.22 | 76.90 | 26.77 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 5.12 | 81.66 | 29.15 |  | 60.0 |  |
|  |  | Z | 4.92 | 79.46 | 27.95 |  | 60.0 |  |
| $\begin{array}{\|l} \hline 10100- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 2.39 | 69.31 | 16.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.20 | 72.58 | 18.18 |  | 150.0 |  |
|  |  | Z | 2.69 | 68.81 | 15.94 |  | 150.0 |  |
| $\begin{aligned} & 10101- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 16-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 2.61 | 67.07 | 15.44 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.12 | 68.53 | 16.66 |  | 150.0 |  |
|  |  | Z | 2.91 | 66.65 | 15.40 |  | 150.0 |  |
| $\begin{aligned} & 10102- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 2.71 | 67.23 | 15.58 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.22 | 68.53 | 16.74 |  | 150.0 |  |
|  |  | Z | 3.02 | 66.72 | 15.54 |  | 150.0 |  |
| $\begin{aligned} & 10103- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHZ , QPSK) | X | 3.72 | 71.26 | 18.49 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 73.63 | 19.84 |  | 65.0 |  |
|  |  | Z | 4.41 | 71.81 | 18.98 |  | 65.0 |  |
| $\begin{aligned} & 10104- \\ & \text { CAD } \end{aligned}$ | ```LTE-TDD (SC-FDMA, 100% RB, }2 MHz, 16-QAM)``` | X | 3.95 | 69.27 | 17.90 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 71.04 | 19.29 |  | 65.0 |  |
|  |  | Z | 4.63 | 70.10 | 18.86 |  | 65.0 |  |
| $\begin{aligned} & 10105- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \end{aligned}$ | X | 3.78 | 68.25 | 17.72 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.47 | 69.73 | 18.97 |  | 65.0 |  |
|  |  | Z | 4.37 | 68.68 | 18.48 |  | 65.0 |  |
| 10108- <br> CAE | LTE-FDD (SC-FDMA, 100\% RB, 10 MHz, QPSK) | X | 1.98 | 69.15 | 15.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.77 | 72.39 | 18.20 |  | 150.0 |  |
|  |  | Z | 2.29 | 68.22 | 15.72 |  | 150.0 |  |
| 10109-CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 $\mathrm{MHz}, 16$-QAM) | X | 2.19 | 67.24 | 14.70 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.80 | 69.06 | 16.71 |  | 150.0 |  |
|  |  | Z | 2.54 | 66.58 | 15.14 |  | 150.0 |  |
| 10110- <br> CAE | LTE-FDD (SC-FDMA, 100\% RB, 5 MHz , QPSK) | X | 1.35 | 66.94 | 13.41 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.32 | 72.63 | 18.00 |  | 150.0 |  |
|  |  | Z | 1.78 | 67.28 | 14.92 |  | 150.0 |  |
| 10111CAE | LTE-FDD (SC-FDMA, 100\% RB, 5 MHz , 16-QAM) | X | 1.58 | 65.90 | 12.12 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.81 | 72.30 | 17.60 |  | 150.0 |  |
|  |  | Z | 2.22 | 67.49 | 14.99 |  | 150.0 |  |


| $10112$ CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 64-\mathrm{QAM} \text { ) } \\ & \hline \end{aligned}$ | X | 2.30 | 67.45 | 14.81 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.93 | 69.12 | 16.76 |  | 150.0 |  |
|  |  | Z | 2.66 | 66.72 | 15.26 |  | 150.0 |  |
| 10113- <br> CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \mathrm{RB}, 5 \mathrm{MHz} \text {, } \\ & 64-\mathrm{QAM}) \end{aligned}$ | X | 1.64 | 65.77 | 12.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.95 | 72.32 | 17.65 |  | 150.0 |  |
|  |  | Z | 2.37 | 67.73 | 15.17 |  | 150.0 |  |
| $\begin{aligned} & 10114 \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | X | 4.34 | 66.99 | 16.28 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 67.57 | 16.78 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10115- \\ \text { CAC } \\ \hline \end{array}$ |  | Z | 4.82 | 66.90 | 16.32 |  | 150.0 |  |
|  | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM) | X | 4.58 | 67.29 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.08 | 67.61 | 16.77 |  | 150.0 |  |
|  |  | Z | 5.06 | 66.98 | 16.35 |  | 150.0 |  |
| $\begin{aligned} & 10116- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | X | 4.40 | 67.26 | 16.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.93 | 67.75 | 16.79 |  | 150.0 |  |
|  |  | Z | 4.89 | 67.04 | 16.31 |  | 150.0 |  |
| 10117-CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps , BPSK) | X | 4.33 | 66.90 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 67.46 | 16.74 |  | 150.0 |  |
|  |  | Z | 4.79 | 66.75 | 16.26 |  | 150.0 |  |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps , 16QAM) | X | 4.58 | 67.24 | 16.31 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.15 | 67.78 | 16.86 |  | 150.0 |  |
|  |  | Z | 5.14 | 67.21 | 16.48 |  | 150.0 |  |
| 10119CAC | IEEE 802.11n (HT Mixed, 135 Mbps , 64QAM) | X | 4.39 | 67.16 | 16.27 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 67.78 | 16.81 |  | 150.0 |  |
|  |  | Z | 4.90 | 67.08 | 16.34 |  | 150.0 |  |
| $\begin{aligned} & 10140- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 2.65 | 67.18 | 15.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.23 | 68.57 | 16.65 |  | 150.0 |  |
|  |  | Z | 3.03 | 66.74 | 15.44 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10141- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 15 $\mathrm{MHz}, 64$-QAM) | X | 2.80 | 67.68 | 15.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.37 | 68.79 | 16.86 |  | 150.0 |  |
|  |  | Z | 3.16 | 66.97 | 15.67 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10142- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 0.71 | 61.44 | 8.06 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.27 | 74.06 | 17.56 |  | 150.0 |  |
|  |  | Z | 1.48 | 66.51 | 13.59 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10143- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 3 MHz , $16-\mathrm{QAM}$ ) | X | 0.73 | 60.00 | 6.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.80 | 73.44 | 16.54 |  | 150.0 |  |
|  |  | Z | 1.85 | 66.55 | 13.15 |  | 150.0 |  |
| $10144-$CAD | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 0.73 | 60.00 | 5.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.85 | 66.75 | 12.85 |  | 150.0 |  |
|  |  | Z | 1.61 | 64.01 | 11.28 |  | 150.0 |  |
| 10145- <br> CAE | $\text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 1.4$ $\mathrm{MHz}, \mathrm{QPSK})$ | X | 5.16 | 385.51 | 36.59 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.54 | 60.00 | 5.91 |  | 150.0 |  |
|  |  | Z | 0.58 | 60.00 | 5.88 |  | 150.0 |  |
| 10146- CAE | LTE-FDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16$-QAM) | X | 0.00 | 60.00 | 0.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.74 | 60.00 | 4.95 |  | 150.0 |  |
|  |  | Z | 0.80 | 60.00 | 5.53 |  | 150.0 |  |
| 10147- <br> CAE | LTE-FDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 64-\mathrm{QAM})$ | X | 0.00 | 60.00 | 0.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.60 | 58.26 | 3.86 |  | 150.0 |  |
|  |  | Z | 0.82 | 60.00 | 5.58 |  | 150.0 |  |


| $\begin{aligned} & 10149- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | X | 2.21 | 67.36 | 14.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.81 | 69.16 | 16.77 |  | 150.0 |  |
|  |  | Z | 2.55 | 66.65 | 15.19 |  | 150.0 |  |
| $\begin{aligned} & 10150- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM) | X | 2.32 | 67.56 | 14.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.94 | 69.22 | 16.82 |  | 150.0 |  |
|  |  | Z | 2.67 | 66.78 | 15.30 |  | 150.0 |  |
| $\begin{aligned} & 10151- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 3.66 | 73.29 | 18.78 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.98 | 76.80 | 21.12 |  | 65.0 |  |
|  |  | Z | 4.55 | 74.40 | 20.06 |  | 65.0 |  |
| $\begin{aligned} & 10152- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 16-QAM) | X | 3.31 | 68.29 | 16.15 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.23 | 70.96 | 18.67 |  | 65.0 |  |
|  |  | Z | 4.14 | 69.89 | 18.22 |  | 65.0 |  |
| $\begin{aligned} & \hline 10153- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | X | 3.64 | 69.78 | 17.29 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.61 | 72.30 | 19.68 |  | 65.0 |  |
|  |  | Z | 4.49 | 71.11 | 19.19 |  | 65.0 |  |
| $10154-$ <br> CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 1.38 | 67.29 | 13.63 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.40 | 73.30 | 18.35 |  | 150.0 |  |
|  |  | Z | 1.82 | 67.63 | 15.14 |  | 150.0 |  |
| 10155-CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 10 MHz , 16-QAM) | X | 1.60 | 66.02 | 12.20 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.83 | 72.40 | 17.66 |  | 150.0 |  |
|  |  | Z | 2.23 | 67.54 | 15.03 |  | 150.0 |  |
| 10156-CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 0.51 | 60.00 | 5.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.15 | 74.23 | 16.90 |  | 150.0 |  |
|  |  | Z | 1.25 | 65.50 | 12.43 |  | 150.0 |  |
| 10157-CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 0.57 | 60.00 | 4.69 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.61 | 66.51 | 12.13 |  | 150.0 |  |
|  |  | Z | 1.35 | 63.41 | 10.38 |  | 150.0 |  |
| 10158- CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 10 MHz , 64-QAM) | X | 1.65 | 65.90 | 12.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.98 | 72.51 | 17.74 |  | 150.0 |  |
|  |  | Z | 2.38 | 67.83 | 15.24 |  | 150.0 |  |
| $\begin{aligned} & 10159- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 0.59 | 60.00 | 4.69 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.68 | 66.77 | 12.27 |  | 150.0 |  |
|  |  | Z | 1.39 | 63.54 | 10.48 |  | 150.0 |  |
| $\begin{aligned} & 10160- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 1.93 | 68.16 | 15.00 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.76 | 71.39 | 17.74 |  | 150.0 |  |
|  |  | Z | 2.38 | 67.93 | 15.64 |  | 150.0 |  |
| $\begin{aligned} & 10161- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 2.12 | 67.05 | 14.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.84 | 69.35 | 16.71 |  | 150.0 |  |
|  |  | Z | 2.55 | 66.69 | 15.09 |  | 150.0 |  |
| $\begin{aligned} & 10162- \\ & \text { CAD } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM) | X | 2.21 | 67.37 | 14.17 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.96 | 69.65 | 16.87 |  | 150.0 |  |
|  |  | Z | 2.66 | 66.96 | 15.26 |  | 150.0 |  |
| 10166-CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 2.13 | 65.17 | 17.70 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.00 | 69.75 | 19.60 |  | 150.0 |  |
|  |  | Z | 2.90 | 67.96 | 18.43 |  | 150.0 |  |
| $\begin{aligned} & 10167- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 16-QAM) | X | 1.98 | 65.92 | 17.43 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.74 | 74.17 | 20.63 |  | 150.0 |  |
|  |  | Z | 3.28 | 70.17 | 18.57 |  | 150.0 |  |


| $\begin{aligned} & 10168- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM) | X | 2.18 | 68.43 | 19.32 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.55 | 78.58 | 22.96 |  | 150.0 |  |
|  |  | Z | 3.73 | 73.08 | 20.34 |  | 150.0 |  |
| $\begin{aligned} & 10169- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 1.87 | 64.00 | 17.04 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 2.53 | 68.75 | 19.16 |  | 150.0 |  |
|  |  | Z | 2.36 | 66.10 | 17.52 |  | 150.0 |  |
| $\begin{aligned} & 10170- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, }$ 16-QAM) | X | 1.85 | 66.74 | 18.73 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.84 | 78.32 | 23.19 |  | 150.0 |  |
|  |  | Z | 2.87 | 70.66 | 19.54 |  | 150.0 |  |
| $\begin{aligned} & 10171- \\ & \text { AAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , 64-QAM) | X | 1.59 | 63.66 | 15.82 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 2.83 | 71.75 | 19.17 |  | 150.0 |  |
|  |  | $Z$ | 2.39 | 66.90 | 16.66 |  | 150.0 |  |
| $\begin{aligned} & 10172- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | X | 1.63 | 66.94 | 19.47 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.64 | 75.18 | 23.09 |  | 65.0 |  |
|  |  | Z | 2.68 | 72.94 | 21.86 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.75 | 70.70 | 19.61 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 6.55 | 90.87 | 26.66 |  | 65.0 |  |
|  |  | Z | 4.15 | 79.90 | 22.82 |  | 65.0 |  |
| $\begin{aligned} & \text { 10174- } \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 1.33 | 66.12 | 16.85 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.87 | 81.08 | 22.62 |  | 65.0 |  |
|  |  | Z | 2.77 | 72.65 | 19.43 |  | 65.0 |  |
| $\begin{aligned} & 10175- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 1.85 | 63.78 | 16.81 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.49 | 68.40 | 18.88 |  | 150.0 |  |
|  |  | Z | 2.33 | 65.83 | 17.28 |  | 150.0 |  |
| $\begin{aligned} & 10176- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.86 | 66.75 | 18.74 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.85 | 78.36 | 23.20 |  | 150.0 |  |
|  |  | Z | 2.87 | 70.68 | 19.55 |  | 150.0 |  |
| $\begin{aligned} & 10177- \\ & \text { CAG } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , QPSK) | X | 1.86 | 63.82 | 16.84 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 2.51 | 68.53 | 18.95 |  | 150.0 |  |
|  |  | Z | 2.34 | 65.93 | 17.35 |  | 150.0 |  |
| $\begin{aligned} & 10178- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 1.85 | 66.70 | 18.70 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 3.81 | 78.15 | 23.10 |  | 150.0 |  |
|  |  | Z | 2.85 | 70.55 | 19.47 |  | 150.0 |  |
| $\begin{aligned} & \hline 10179- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , 64-QAM) | X | 1.70 | 65.12 | 17.16 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.27 | 74.82 | 21.01 |  | 150.0 |  |
|  |  | Z | 2.59 | 68.61 | 17.93 |  | 150.0 |  |
| $\begin{aligned} & 10180- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , $64-$ QAM) | X | 1.59 | 63.66 | 15.82 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.82 | 71.71 | 19.14 |  | 150.0 |  |
|  |  | Z | 2.39 | 66.88 | 16.63 |  | 150.0 |  |
| $\begin{aligned} & 10181- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 1.86 | 63.82 | 16.84 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.50 | 68.51 | 18.95 |  | 150.0 |  |
|  |  | Z | 2.34 | 65.92 | 17.34 |  | 150.0 |  |
| $\begin{aligned} & 10182- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 16-QAM) | X | 1.85 | 66.68 | 18.69 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.80 | 78.11 | 23.08 |  | 150.0 |  |
|  |  | Z | 2.85 | 70.52 | 19.45 |  | 150.0 |  |
| $\begin{aligned} & 10183- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 15 MHz , 64-QAM) | X | 1.59 | 63.65 | 15.80 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.82 | 71.68 | 19.12 |  | 150.0 |  |
|  |  | Z | 2.38 | 66.86 | 16.62 |  | 150.0 |  |


| $\begin{aligned} & \hline 10184 \text { - } \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , QPSK) | X | 1.86 | 63.84 | 16.85 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.51 | 68.55 | 18.97 |  | 150.0 |  |
|  |  | Z | 2.35 | 65.96 | 17.36 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10185- \\ \text { CAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}$, 16QAM) | X | 1.86 | 66.74 | 18.73 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.83 | 78.22 | 23.13 |  | 150.0 |  |
|  |  | Z | 2.86 | 70.59 | 19.49 |  | 150.0 |  |
| $\begin{aligned} & \hline 10186- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64QAM) | X | 1.59 | 63.69 | 15.83 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.83 | 71.76 | 19.16 |  | 150.0 |  |
|  |  | Z | 2.39 | 66.91 | 16.65 |  | 150.0 |  |
| 10187- CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | X | 1.87 | 63.97 | 16.99 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.53 | 68.67 | 19.08 |  | 150.0 |  |
|  |  | Z | 2.36 | 66.04 | 17.45 |  | 150.0 |  |
| 10188- CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.89 | 67.14 | 19.05 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.00 | 79.20 | 23.64 |  | 150.0 |  |
|  |  | Z | 2.94 | 71.15 | 19.86 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10189- \\ \text { AAE } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 1.61 | 63.93 | 16.07 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.91 | 72.32 | 19.52 |  | 150.0 |  |
|  |  | Z | 2.43 | 67.24 | 16.90 |  | 150.0 |  |
| 10193- $\mathrm{CAC}$ | IEEE 802.11n (HT Greenfield, 6.5 Mbps , BPSK) | X | 3.74 | 67.40 | 15.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.29 | 67.57 | 16.55 |  | 150.0 |  |
|  |  | Z | 4.20 | 66.51 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10194- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | X | 3.82 | 67.41 | 15.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 67.71 | 16.67 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.72 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 65 Mbps , 64-QAM) | X | 3.83 | 67.37 | 15.89 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.42 | 67.68 | 16.66 |  | 150.0 |  |
|  |  | Z | 4.35 | 66.72 | 16.06 |  | 150.0 |  |
| 10196- CAC | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | X | 3.72 | 67.37 | 15.75 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 67.52 | 16.51 |  | 150.0 |  |
|  |  | Z | 4.17 | 66.48 | 15.88 |  | 150.0 |  |
| $\begin{aligned} & 10197- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 39 Mbps, 16QAM) | X | 3.82 | 67.41 | 15.91 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.41 | 67.70 | 16.67 |  | 150.0 |  |
|  |  | Z | 4.33 | 66.72 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10198- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 65 Mbps, 64QAM) | X | 3.82 | 67.36 | 15.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.41 | 67.66 | 16.65 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.71 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10219- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 3.68 | 67.48 | 15.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.22 | 67.61 | 16.52 |  | 150.0 |  |
|  |  | Z | 4.13 | 66.53 | 15.85 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16QAM) | X | 3.82 | 67.41 | 15.91 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.40 | 67.66 | 16.65 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.68 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10221- \\ & \mathrm{CAC} \end{aligned}$ | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64QAM) | X | 3.85 | 67.40 | 15.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.43 | 67.62 | 16.64 |  | 150.0 |  |
|  |  | Z | 4.36 | 66.67 | 16.05 |  | 150.0 |  |
| 10222- CAC | IEEE 802.11 n (HT Mixed, 15 Mbps , BPSK) | X | 4.34 | 66.97 | 16.27 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.82 | 67.47 | 16.73 |  | 150.0 |  |
|  |  | Z | 4.77 | 66.77 | 16.26 |  | 150.0 |  |


| $\begin{aligned} & 10223- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 90 Mbps , 16QAM) | X | 4.49 | 67.10 | 16.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.02 | 67.50 | 16.74 |  | 150.0 |  |
|  |  | Z | 5.01 | 66.90 | 16.33 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10224- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 150 Mbps , 64QAM) | X | 4.35 | 67.14 | 16.26 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 67.63 | 16.73 |  | 150.0 |  |
|  |  | Z | 4.81 | 66.90 | 16.25 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10225- \\ \text { CAB } \\ \hline \end{array}$ | UMTS-FDD (HSPA+) | X | 1.60 | 62.87 | 10.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.64 | 67.73 | 15.37 |  | 150.0 |  |
|  |  | Z | 2.42 | 65.46 | 14.06 |  | 150.0 |  |
| $\begin{aligned} & 10226- \\ & \text { CAA } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.83 | 71.58 | 20.13 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.36 | 93.10 | 27.50 |  | 65.0 |  |
|  |  | Z | 4.39 | 80.98 | 23.33 |  | 65.0 |  |
| $\begin{aligned} & \hline 10227- \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 1.73 | 70.59 | 18.93 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.00 | 90.72 | 25.86 |  | 65.0 |  |
|  |  | Z | 4.34 | 79.99 | 22.28 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10228- \\ \text { CAA } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 1.83 | 69.36 | 20.71 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.28 | 79.62 | 24.97 |  | 65.0 |  |
|  |  | Z | 3.15 | 76.53 | 23.48 |  | 65.0 |  |
| $\begin{aligned} & 10229- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 16 QAM) | X | 1.76 | 70.79 | 19.64 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.63 | 91.03 | 26.72 |  | 65.0 |  |
|  |  | Z | 4.18 | 80.00 | 22.86 |  | 65.0 |  |
| $\begin{aligned} & 10230- \\ & \mathrm{CAB} \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64QAM) | X | 1.65 | 69.73 | 18.45 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.22 | 88.63 | 25.09 |  | 65.0 |  |
|  |  | Z | 4.10 | 78.96 | 21.82 |  | 65.0 |  |
| $\begin{aligned} & 10231- \\ & \mathrm{CAB} \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 1.79 | 68.81 | 20.33 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.15 | 78.74 | 24.52 |  | 65.0 |  |
|  |  | Z | 3.06 | 75.85 | 23.10 |  | 65.0 |  |
| $\begin{aligned} & 10232- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM) | X | 1.76 | 70.77 | 19.64 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.61 | 91.00 | 26.71 |  | 65.0 |  |
|  |  | Z | 4.18 | 79.98 | 22.86 |  | 65.0 |  |
| $\begin{aligned} & 10233- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 64-$ QAM) | X | 1.65 | 69.70 | 18.44 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.19 | 88.57 | 25.08 |  | 65.0 |  |
|  |  | Z | 4.09 | 78.93 | 21.81 |  | 65.0 |  |
| $\begin{aligned} & 10234- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK) | X | 1.76 | 68.43 | 20.02 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.07 | 78.12 | 24.14 |  | 65.0 |  |
|  |  | Z | 2.98 | 75.33 | 22.76 |  | 65.0 |  |
| $\begin{aligned} & \hline 10235- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.76 | 70.76 | 19.64 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.61 | 91.04 | 26.73 |  | 65.0 |  |
|  |  | Z | 4.18 | 80.00 | 22.87 |  | 65.0 |  |
| $\begin{aligned} & 10236- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 1.66 | 69.79 | 18.48 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.30 | 88.80 | 25.14 |  | 65.0 |  |
|  |  | Z | 4.13 | 79.05 | 21.85 |  | 65.0 |  |
| $\begin{aligned} & 10237- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 1.78 | 68.76 | 20.32 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.15 | 78.74 | 24.53 |  | 65.0 |  |
|  |  | Z | 3.05 | 75.85 | 23.11 |  | 65.0 |  |
| $\begin{aligned} & 10238- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.76 | 70.75 | 19.64 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.59 | 90.97 | 26.70 |  | 65.0 |  |
|  |  | Z | 4.17 | 79.95 | 22.85 |  | 65.0 |  |


| $\begin{aligned} & \hline 10239- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 64-QAM) | X | 1.65 | 69.67 | 18.43 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.16 | 88.50 | 25.06 |  | 65.0 |  |
|  |  | Z | 4.07 | 78.89 | 21.79 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 1.78 | 68.77 | 20.32 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.14 | 78.73 | 24.52 |  | 65.0 |  |
|  |  | Z | 3.05 | 75.83 | 23.10 |  | 65.0 |  |
| $\begin{aligned} & 10241- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM) | X | 3.09 | 71.04 | 21.81 | 6.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.84 | 80.29 | 25.20 |  | 65.0 |  |
|  |  | Z | 5.54 | 77.13 | 23.79 |  | 65.0 |  |
| $\begin{aligned} & 10242- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, $1.4 \mathrm{MHz}_{\text {, }}$ 64-QAM) | X | 2.70 | 68.41 | 20.47 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 76.94 | 23.76 |  | 65.0 |  |
|  |  | Z | 4.89 | 74.64 | 22.64 |  | 65.0 |  |
| $\begin{aligned} & \text { 10243- } \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 2.78 | 67.24 | 20.54 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.14 | 72.94 | 22.88 |  | 65.0 |  |
|  |  | Z | 4.22 | 71.72 | 22.18 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \text { CAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM) | X | 0.80 | 57.73 | 3.36 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 2.15 | 64.01 | 10.18 |  | 65.0 |  |
|  |  | Z | 2.44 | 64.99 | 11.42 |  | 65.0 |  |
| $\begin{aligned} & 10245- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 0.82 | 57.61 | 3.20 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 2.13 | 63.69 | 9.96 |  | 65.0 |  |
|  |  | Z | 2.42 | 64.65 | 11.19 |  | 65.0 |  |
| $\begin{aligned} & 10246- \\ & \mathrm{CAB} \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 0.87 | 60.00 | 5.50 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 2.12 | 67.09 | 12.65 |  | 65.0 |  |
|  |  | Z | 2.17 | 66.84 | 12.89 |  | 65.0 |  |
| $\begin{aligned} & 10247- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.26 | 60.00 | 6.38 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.78 | 67.32 | 13.60 |  | 65.0 |  |
|  |  | Z | 2.82 | 66.99 | 13.82 |  | 65.0 |  |
| $\begin{aligned} & 10248- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | X | 1.30 | 60.00 | 6.40 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.73 | 66.64 | 13.26 |  | 65.0 |  |
|  |  | Z | 2.81 | 66.52 | 13.58 |  | 65.0 |  |
| $\begin{aligned} & 10249- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 1.24 | 61.72 | 8.36 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.85 | 75.74 | 18.20 |  | 65.0 |  |
|  |  | Z | 3.35 | 73.06 | 17.32 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 50\% RB, 10 MHz , 16-QAM) | X | 2.74 | 67.58 | 14.25 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.25 | 73.58 | 19.37 |  | 65.0 |  |
|  |  | Z | 4.02 | 71.93 | 18.78 |  | 65.0 |  |
| $\begin{aligned} & 10251 \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 64-QAM) | X | 2.46 | 65.14 | 12.48 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.86 | 70.68 | 17.56 |  | 65.0 |  |
|  |  | Z | 3.78 | 69.64 | 17.25 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 2.82 | 71.28 | 16.40 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 79.52 | 21.77 |  | 65.0 |  |
|  |  | Z | 4.29 | 76.11 | 20.42 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10253- \\ \text { CAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM) | X | 3.12 | 67.32 | 15.07 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.18 | 70.66 | 18.33 |  | 65.0 |  |
|  |  | Z | 4.10 | 69.61 | 17.93 |  | 65.0 |  |
| $\begin{aligned} & 10254- \\ & \mathrm{CAD} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 64-QAM) | X | 3.39 | 68.52 | 15.96 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 71.75 | 19.15 |  | 65.0 |  |
|  |  | Z | 4.39 | 70.63 | 18.74 |  | 65.0 |  |


| $\begin{aligned} & 10255- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 3.40 | 72.07 | 17.90 | 3.98 | 65.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.72 | 76.03 | 20.86 |  | 65.0 |  |
|  |  | Z | 4.36 | 73.79 | 19.90 |  | 65.0 |  |
| $\begin{aligned} & 10256- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 0.74 | 56.57 | 1.48 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 1.50 | 60.83 | 7.03 |  | 65.0 |  |
|  |  | Z | 1.77 | 61.73 | 8.31 |  | 65.0 |  |
| $\begin{aligned} & 10257- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 64-\mathrm{QAM})$ | X | 0.63 | 56.72 | 1.58 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 1.50 | 60.62 | 6.80 |  | 65.0 |  |
|  |  | Z | 1.77 | 61.47 | 8.06 |  | 65.0 |  |
| $\begin{aligned} & \text { 10258- } \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, \mathrm{QPSK}$ ) | X | 0.75 | 60.00 | 4.13 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.38 | 61.96 | 8.52 |  | 65.0 |  |
|  |  | Z | 1.52 | 62.42 | 9.24 |  | 65.0 |  |
| $\begin{aligned} & 10259- \\ & \text { CAB } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 1.62 | 61.68 | 8.48 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.35 | 69.89 | 15.82 |  | 65.0 |  |
|  |  | Z | 3.28 | 68.97 | 15.69 |  | 65.0 |  |
| $\begin{aligned} & 10260- \\ & \text { CAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM) | X | 1.65 | 61.61 | 8.42 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.36 | 69.55 | 15.64 |  | 65.0 |  |
|  |  | Z | 3.31 | 68.75 | 15.57 |  | 65.0 |  |
| $\begin{aligned} & 10261- \\ & \text { CAB } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 3 MHz , QPSK) | X | 1.63 | 64.06 | 10.69 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.19 | 76.83 | 19.42 |  | 65.0 |  |
|  |  | Z | 3.63 | 73.87 | 18.36 |  | 65.0 |  |
| $\begin{aligned} & 10262- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 16-QAM) | X | 2.73 | 67.47 | 14.17 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.22 | 73.47 | 19.30 |  | 65.0 |  |
|  |  | Z | 4.00 | 71.83 | 18.72 |  | 65.0 |  |
| $\begin{aligned} & 10263- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM) | X | 2.46 | 65.13 | 12.47 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.85 | 70.66 | 17.56 |  | 65.0 |  |
|  |  | Z | 3.77 | 69.62 | 17.25 |  | 65.0 |  |
| $\begin{aligned} & 10264- \\ & \text { CAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 2.78 | 71.03 | 16.25 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.91 | 79.23 | 21.63 |  | 65.0 |  |
|  |  | Z | 4.25 | 75.88 | 20.29 |  | 65.0 |  |
| $\begin{aligned} & 10265- \\ & \text { CAD } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 10 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 3.31 | 68.31 | 16.16 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.23 | 70.96 | 18.67 |  | 65.0 |  |
|  |  | Z | 4.14 | 69.89 | 18.23 |  | 65.0 |  |
| $\begin{aligned} & 10266- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 3.64 | 69.75 | 17.27 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.61 | 72.28 | 19.66 |  | 65.0 |  |
|  |  | Z | 4.48 | 71.09 | 19.18 |  | 65.0 |  |
| $\begin{aligned} & 10267- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK) | X | 3.65 | 73.23 | 18.74 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.96 | 76.74 | 21.09 |  | 65.0 |  |
|  |  | Z | 4.55 | 74.35 | 20.04 |  | 65.0 |  |
| $\begin{aligned} & 10268- \\ & \text { CAD } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 15 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 4.08 | 69.60 | 17.97 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.89 | 71.20 | 19.41 |  | 65.0 |  |
|  |  | Z | 4.81 | 70.25 | 18.99 |  | 65.0 |  |
| $\begin{aligned} & 10269- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 4.15 | 69.51 | 17.90 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.93 | 70.92 | 19.29 |  | 65.0 |  |
|  |  | Z | 4.85 | 69.98 | 18.89 |  | 65.0 |  |
| $\begin{aligned} & 10270- \\ & \text { CAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, QPSK $)$ | X | 4.11 | 72.44 | 19.03 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.01 | 74.05 | 20.18 |  | 65.0 |  |
|  |  | Z | 4.76 | 72.38 | 19.41 |  | 65.0 |  |


| $\begin{aligned} & 10274- \\ & \mathrm{CAB} \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 1.45 | 63.39 | 10.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.58 | 68.99 | 15.79 |  | 150.0 |  |
|  |  | Z | 2.26 | 65.99 | 14.08 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.00 | 66.09 | 12.05 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.98 | 74.04 | 18.23 |  | 150.0 |  |
|  |  | Z | 1.30 | 66.38 | 13.95 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \mathrm{CAA} \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 4.43 | 65.00 | 5.66 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.25 | 57.54 | 2.57 |  | 50.0 |  |
|  |  | Z | 1.34 | 58.35 | 3.69 |  | 50.0 |  |
| $\begin{array}{\|l\|} \hline 10278- \\ \text { CAA } \\ \hline \end{array}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 1.39 | 58.79 | 4.19 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 2.00 | 62.01 | 7.70 |  | 50.0 |  |
|  |  | Z | 2.27 | 62.99 | 8.81 |  | 50.0 |  |
| $\begin{aligned} & 10279- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 1.42 | 58.87 | 4.28 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.04 | 62.14 | 7.84 |  | 50.0 |  |
|  |  | Z | 2.32 | 63.16 | 8.96 |  | 50.0 |  |
| $\begin{aligned} & \hline 10290- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC1, SO55, Full Rate | X | 24.89 | 264.54 | 21.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.75 | 64.32 | 9.28 |  | 150.0 |  |
|  |  | Z | 0.55 | 60.53 | 6.84 |  | 150.0 |  |
| $\begin{aligned} & 10291- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 8.17 | 257.05 | 37.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.54 | 64.12 | 8.98 |  | 150.0 |  |
|  |  | Z | 0.37 | 60.00 | 6.07 |  | 150.0 |  |
| $\begin{aligned} & \hline 10292- \\ & A A B \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, Full Rate | X | 2.31 | 326.58 | 8.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 114.29 | 23.68 |  | 150.0 |  |
|  |  | Z | 0.37 | 60.29 | 6.50 |  | 150.0 |  |
| $\begin{aligned} & \hline 10293- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 2.41 | 304.08 | 37.98 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 121.87 | 26.96 |  | 150.0 |  |
|  |  | Z | 0.47 | 62.33 | 8.10 |  | 150.0 |  |
| $\begin{aligned} & 10295- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 11.16 | 76.14 | 13.68 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 24.30 | 94.04 | 23.00 |  | 50.0 |  |
|  |  | Z | 21.29 | 93.19 | 23.41 |  | 50.0 |  |
| $\begin{aligned} & 10297- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 2.00 | 69.33 | 16.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.80 | 72.57 | 18.31 |  | 150.0 |  |
|  |  | Z | 2.31 | 68.33 | 15.80 |  | 150.0 |  |
| $\begin{aligned} & 10298- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 8.49 | 243.95 | 30.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.98 | 64.80 | 10.42 |  | 150.0 |  |
|  |  | Z | 0.78 | 61.52 | 8.38 |  | 150.0 |  |
| $\begin{aligned} & 10299- \\ & \text { AAC } \\ & \hline \end{aligned}$ | $\underset{\text { 16-QAM }}{\text { LTE-FDD (SC-FDMA, }} 50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 16-QAM) | X | 12.17 | 331.10 | 45.12 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.99 | 61.11 | 7.01 |  | 150.0 |  |
|  |  | Z | 1.06 | 61.03 | 7.46 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz 64-QAM) | X | 10.15 | 348.38 | 28.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.82 | 59.43 | 5.36 |  | 150.0 |  |
|  |  | Z | 0.95 | 60.00 | 6.23 |  | 150.0 |  |
| 10301-AAA | IEEE 802.16e WIMAX (29:18, 5ms, 10 MHz, QPSK, PUSC) | X | 3.30 | 64.31 | 15.03 | 4.17 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.07 | 65.29 | 17.00 |  | 50.0 |  |
|  |  | Z | 4.16 | 64.88 | 16.72 |  | 50.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX ( $29: 18$, 5 ms , 10 MHz , QPSK, PUSC, 3 CTRL symbols) | X | 3.81 | 65.12 | 15.99 | 4.96 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.52 | 65.76 | 17.66 |  | 50.0 |  |
|  |  | Z | 4.66 | 65.71 | 17.60 |  | 50.0 |  |


| $\begin{aligned} & 10303- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16 e WIMAX ( $31: 15,5 \mathrm{~ms}$, 10MHz, 64QAM, PUSC) | X | 3.64 | 65.07 | 15.71 | 4.96 | 50.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.29 | 65.44 | 17.44 |  | 50.0 |  |
|  |  | Z | 4.42 | 65.39 | 17.39 |  | 50.0 |  |
| $\begin{aligned} & 10304- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16 e WIMAX $(29: 18,5 \mathrm{~ms}$, 10MHz, 64QAM, PUSC) | X | 3.46 | 64.98 | 15.29 | 4.17 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.15 | 65.58 | 17.11 |  | 50.0 |  |
|  |  | Z | 4.21 | 64.95 | 16.68 |  | 50.0 |  |
| $\begin{aligned} & 10305- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16 e WiMAX ( $31: 15,10 \mathrm{~ms}$, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 15 symbols) | X | 2.52 | 62.00 | 12.12 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 3.52 | 65.78 | 17.45 |  | 35.0 |  |
|  |  | Z | 3.76 | 66.23 | 17.67 |  | 35.0 |  |
| $\begin{aligned} & 10306- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10ms, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 18 symbols) | X | 3.12 | 63.64 | 14.29 | 6.02 | 35.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.94 | 65.53 | 17.75 |  | 35.0 |  |
|  |  | Z | 4.14 | 65.73 | 17.85 |  | 35.0 |  |
| $\begin{aligned} & 10307- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10ms, 10 MHz, QPSK, PUSC, 18 symbols) | X | 3.01 | 63.42 | 14.02 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 3.81 | 65.44 | 17.59 |  | 35.0 |  |
|  |  | Z | 4.01 | 65.68 | 17.70 |  | 35.0 |  |
| $\begin{aligned} & 10308- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC) | X | 3.02 | 63.75 | 14.28 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 3.78 | 65.60 | 17.74 |  | 35.0 |  |
|  |  | Z | 3.98 | 65.86 | 17.83 |  | 35.0 |  |
| $10309-$ <br> AAA | IEEE 802.16e WiMAX (29:18, 10ms, $10 \mathrm{MHz}, 16 \mathrm{QAM}, \mathrm{AMC} 2 \times 3,18$ symbols) | X | 3.17 | 63.94 | 14.58 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 3.94 | 65.55 | 17.83 |  | 35.0 |  |
|  |  | Z | 4.14 | 65.77 | 17.93 |  | 35.0 |  |
| $10310-$ <br> AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10 MHz, QPSK, AMC $2 \times 3,18$ symbols) | X | 3.11 | 63.82 | 14.42 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 3.89 | 65.58 | 17.76 |  | 35.0 |  |
|  |  | Z | 4.09 | 65.78 | 17.84 |  | 35.0 |  |
| 10311- <br> AAC | LTE-FDD (SC-FDMA, 100\% RB, 15 MHz, QPSK) | X | 2.31 | 68.15 | 15.92 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.15 | 71.23 | 17.71 |  | 150.0 |  |
|  |  | Z | 2.66 | 67.57 | 15.55 |  | 150.0 |  |
| 10313-AAA | iDEN 1:3 | X | 1.67 | 67.67 | 13.40 | 6.99 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 2.25 | 71.10 | 15.22 |  | 70.0 |  |
|  |  | Z | 1.73 | 67.06 | 13.24 |  | 70.0 |  |
| $\begin{aligned} & 10314- \\ & \text { AAA } \\ & \hline \end{aligned}$ | iDEN 1:6 | X | 6.12 | 86.17 | 23.14 | 10.00 | 30.0 | $\pm 9.6$ \% |
|  |  | Y | 7.14 | 89.19 | 24.60 |  | 30.0 |  |
|  |  | Z | 3.49 | 76.84 | 20.05 |  | 30.0 |  |
| $\begin{aligned} & 10315- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 1 Mbps, 96 pc duty cycle) | X | 0.91 | 63.92 | 14.34 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.09 | 65.84 | 16.70 |  | 150.0 |  |
|  |  | Z | 0.93 | 62.70 | 14.16 |  | 150.0 |  |
| $\begin{aligned} & 10316- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, 6 Mbps , 96 pc duty cycle) | X | 3.71 | 66.95 | 15.64 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 67.26 | 16.51 |  | 150.0 |  |
|  |  | Z | 4.21 | 66.40 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10317- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle) | X | 3.71 | 66.95 | 15.64 | 0.17 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.26 | 67.26 | 16.51 |  | 150.0 |  |
|  |  | Z | 4.21 | 66.40 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & \hline 10400- \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle) | X | 3.67 | 66.95 | 15.61 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.32 | 67.59 | 16.58 |  | 150.0 |  |
|  |  | Z | 4.27 | 66.67 | 15.99 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10401 \text { - } \\ \text { AAD } \end{array}$ | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle) | X | 4.49 | 66.84 | 16.09 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.01 | 67.23 | 16.55 |  | 150.0 |  |
|  |  | Z | 4.95 | 66.47 | 16.07 |  | 150.0 |  |


| $\begin{aligned} & \text { 10402- } \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle) | X | 4.90 | 67.23 | 16.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.37 | 67.75 | 16.72 |  | 150.0 |  |
|  |  | Z | 5.33 | 67.10 | 16.30 |  | 150.0 |  |
| $\begin{aligned} & \text { 10403- } \\ & \text { AAB } \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 24.89 | 264.54 | 21.43 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 0.75 | 64.32 | 9.28 |  | 115.0 |  |
|  |  | Z | 0.55 | 60.53 | 6.84 |  | 115.0 |  |
| $\begin{aligned} & 10404- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. A) | X | 24.89 | 264.54 | 21.43 | 0.00 | 115.0 | $\pm 9.6$ \% |
|  |  | Y | 0.75 | 64.32 | 9.28 |  | 115.0 |  |
|  |  | Z | 0.55 | 60.53 | 6.84 |  | 115.0 |  |
| 10406-$\mathrm{AAB}$ | CDMA2000, RC3, SO32, SCH0, Full Rate | X | 0.25 | 60.00 | 3.04 | 0.00 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 107.14 | 22.27 |  | 100.0 |  |
|  |  | Z | 35.03 | 104.04 | 23.84 |  | 100.0 |  |
| $\begin{aligned} & 10410- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 1.11 | 74.02 | 16.29 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 123.32 | 29.06 |  | 80.0 |  |
|  |  | Z | 3.02 | 80.23 | 18.57 |  | 80.0 |  |
| 10415- AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 0.88 | 63.60 | 14.08 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.05 | 65.44 | 16.40 |  | 150.0 |  |
|  |  | Z | 0.90 | 62.27 | 13.77 |  | 150.0 |  |
| 10416-AAA | IEEE 802.11g WiFi 2.4 GHz (ERPOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 3.72 | 67.22 | 15.78 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.26 | 67.46 | 16.59 |  | 150.0 |  |
|  |  | Z | 4.18 | 66.47 | 15.97 |  | 150.0 |  |
| $10417-$$\mathrm{AAB}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | X | 3.72 | 67.22 | 15.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 67.46 | 16.59 |  | 150.0 |  |
|  |  | Z | 4.18 | 66.47 | 15.97 |  | 150.0 |  |
| $\begin{aligned} & \text { 10418- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps , 99 pc duty cycle, Long preambule) | X | 3.67 | 67.37 | 15.86 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.26 | 67.73 | 16.69 |  | 150.0 |  |
|  |  | Z | 4.18 | 66.68 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10419- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps , 99 pc duty cycle, Short preambule) | X | 3.70 | 67.32 | 15.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.28 | 67.63 | 16.66 |  | 150.0 |  |
|  |  | Z | 4.19 | 66.61 | 16.02 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10422- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 3.79 | 67.23 | 15.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.37 | 67.55 | 16.64 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.59 | 16.04 |  | 150.0 |  |
| $10423-$$\mathrm{AAB}$ | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 3.85 | 67.43 | 15.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 67.79 | 16.72 |  | 150.0 |  |
|  |  | Z | 4.41 | 66.83 | 16.12 |  | 150.0 |  |
| $10424$ <br> AAB | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | X | 3.80 | 67.32 | 15.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.41 | 67.73 | 16.70 |  | 150.0 |  |
|  |  | Z | 4.34 | 66.77 | 16.09 |  | 150.0 |  |
| $\begin{aligned} & 10425- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 15 Mbps , BPSK) | X | 4.52 | 67.29 | 16.36 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.01 | 67.60 | 16.77 |  | 150.0 |  |
|  |  | Z | 5.00 | 66.98 | 16.36 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10426- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11n (HT Greenfield, 90 Mbps , 16-QAM) | X | 4.54 | 67.39 | 16.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.06 | 67.79 | 16.86 |  | 150.0 |  |
|  |  | Z | 5.04 | 67.17 | 16.45 |  | 150.0 |  |


| $\begin{aligned} & 10427- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11n (HT Greenfield, 150 Mbps , 64-QAM) | X | 4.54 | 67.34 | 16.38 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.02 | 67.56 | 16.74 |  | 150.0 |  |
|  |  | Z | 4.99 | 66.89 | 16.30 |  | 150.0 |  |
| $\begin{aligned} & 10430- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, $5 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} \mathrm{3.1)}$ | X | 2.54 | 67.86 | 12.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.20 | 77.46 | 20.26 |  | 150.0 |  |
|  |  | Z | 4.04 | 72.15 | 17.87 |  | 150.0 |  |
| $\begin{aligned} & 10431- \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1) | X | 3.04 | 66.93 | 14.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.88 | 68.36 | 16.49 |  | 150.0 |  |
|  |  | Z | 3.75 | 66.95 | 15.66 |  | 150.0 |  |
| $\begin{aligned} & 10432- \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1) | X | 3.52 | 67.40 | 15.50 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.19 | 67.98 | 16.66 |  | 150.0 |  |
|  |  | Z | 4.09 | 66.85 | 15.96 |  | 150.0 |  |
| $\begin{aligned} & 10433- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1) | X | 3.82 | 67.39 | 15.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.43 | 67.78 | 16.72 |  | 150.0 |  |
|  |  | Z | 4.36 | 66.81 | 16.12 |  | 150.0 |  |
| 10434- <br> AAA | W-CDMA (BS Test Model 1,64 DPCH) | X | 1.61 | 62.74 | 9.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.68 | 78.98 | 20.05 |  | 150.0 |  |
|  |  | Z | 3.98 | 72.24 | 17.17 |  | 150.0 |  |
| 10435-AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.04 | 73.03 | 15.81 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 122.83 | 28.83 |  | 80.0 |  |
|  |  | Z | 2.85 | 79.40 | 18.23 |  | 80.0 |  |
| $\begin{aligned} & 10447- \\ & \text { AAB } \end{aligned}$ | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44\%) | X | 1.63 | 62.08 | 8.98 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.10 | 68.15 | 14.99 |  | 150.0 |  |
|  |  | Z | 2.89 | 66.18 | 13.94 |  | 150.0 |  |
| 10448-$\mathrm{AAB}$ | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | X | 2.97 | 66.84 | 14.33 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.76 | 68.19 | 16.40 |  | 150.0 |  |
|  |  | Z | 3.63 | 66.75 | 15.54 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10449- \\ \text { AAB } \\ \hline \end{array}$ | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1. Cliping 44\%) | X | 3.43 | 67.31 | 15.47 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.05 | 67.84 | 16.58 |  | 150.0 |  |
|  |  | Z | 3.95 | 66.68 | 15.86 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10450- \\ \text { AAB } \\ \hline \end{array}$ | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 3.70 | 67.17 | 15.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 67.58 | 16.60 |  | 150.0 |  |
|  |  | Z | 4.17 | 66.58 | 15.96 |  | 150.0 |  |
| 10451- <br> AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44\%) | X | 1.22 | 60.20 | 6.79 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.78 | 67.25 | 13.76 |  | 150.0 |  |
|  |  | Z | 2.61 | 65.48 | 12.83 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10456- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, 64$-QAM, 99pc duty cycle) | X | 5.60 | 67.64 | 16.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.26 | 68.94 | 17.34 |  | 150.0 |  |
|  |  | Z | 6.00 | 67.69 | 16.64 |  | 150.0 |  |
| $\begin{aligned} & \hline 10457- \\ & \text { AAA } \\ & \hline \end{aligned}$ | UMTS-FDD (DC-HSDPA) | X | 3.27 | 66.46 | 15.58 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.68 | 66.34 | 16.37 |  | 150.0 |  |
|  |  | Z | 3.59 | 65.30 | 15.71 |  | 150.0 |  |
| 10458-AAA | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev. B, } 2 \\ & \text { carriers) } \end{aligned}$ | X | 1.12 | 60.00 | 5.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.56 | 71.73 | 16.05 |  | 150.0 |  |
|  |  | Z | 3.03 | 68.42 | 14.58 |  | 150.0 |  |
| 10459-AAA | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev. B, } 3 \\ & \text { carriers) } \end{aligned}$ | X | 2.37 | 61.19 | 9.10 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 70.51 | 17.92 |  | 150.0 |  |
|  |  | Z | 4.63 | 68.94 | 17.35 |  | 150.0 |  |


| $\begin{aligned} & \text { 10460- } \\ & \text { AAA } \end{aligned}$ | UMTS-FDD (WCDMA, AMR) | X | 0.77 | 69.97 | 14.37 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 1.81 | 83.33 | 22.94 |  | 150.0 |  |
|  |  | Z | 0.70 | 66.15 | 13.99 |  | 150.0 |  |
| 10461-AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.10 | 74.88 | 17.91 | 3.29 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 130.63 | 32.41 |  | 80.0 |  |
|  |  | Z | 2.28 | 78.08 | 18.84 |  | 80.0 |  |
| $10462-$AAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 5.93 | 230.19 | 29.26 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.59 | 60.00 | 5.55 |  | 80.0 |  |
|  |  | Z | 0.64 | 60.00 | 7.06 |  | 80.0 |  |
| $10463-$$\mathrm{AAA}$ | LTE-TDD (SC-FDMA, 1RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.96 | 233.23 | 22.29 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 23.26 | 230.85 | 21.52 |  | 80.0 |  |
|  |  | Z | 0.66 | 60.00 | 6.36 |  | 80.0 |  |
| $\begin{aligned} & 10464- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.60 | 67.04 | 13.62 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 124.51 | 29.50 |  | 80.0 |  |
|  |  | Z | 1.46 | 72.00 | 15.83 |  | 80.0 |  |
| $\begin{aligned} & 10465- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.88 | 228.32 | 21.10 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.24 | 55.14 | 2.95 |  | 80.0 |  |
|  |  | Z | 0.64 | 60.00 | 7.00 |  | 80.0 |  |
| 10466-AAA | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.90 | 230.59 | 11.80 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 24.92 | 227.37 | 29.84 |  | 80.0 |  |
|  |  | Z | 0.66 | 60.00 | 6.32 |  | 80.0 |  |
| 10467-$\mathrm{AAC}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 68.17 | 14.23 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 125.25 | 29.82 |  | 80.0 |  |
|  |  | Z | 1.58 | 73.06 | 16.29 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10468- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.75 | 228.62 | 22.92 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.24 | 55.19 | 3.02 |  | 80.0 |  |
|  |  | Z | 0.64 | 60.00 | 7.02 |  | 80.0 |  |
| $10469$$\mathrm{AAC}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.89 | 230.67 | 12.36 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 24.62 | 227.52 | 30.16 |  | 80.0 |  |
|  |  | Z | 0.66 | 60.00 | 6.32 |  | 80.0 |  |
| $\begin{aligned} & 10470- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 68.21 | 14.25 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 125.26 | 29.81 |  | 80.0 |  |
|  |  | Z | 1.58 | 73.08 | 16.29 |  | 80.0 |  |
| 10471- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.71 | 228.68 | 22.79 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.24 | 55.16 | 2.98 |  | 80.0 |  |
|  |  | Z | 0.64 | 60.00 | 7.01 |  | 80.0 |  |
| 10472- <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.83 | 230.72 | 12.16 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 24.39 | 227.78 | 30.29 |  | 80.0 |  |
|  |  | Z | 0.66 | 60.00 | 6.30 |  | 80.0 |  |
| 10473-AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 68.12 | 14.21 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 125.20 | 29.78 |  | 80.0 |  |
|  |  | Z | 1.57 | 73.01 | 16.25 |  | 80.0 |  |
| $10474-$ <br> AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.67 | 228.73 | 22.56 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.59 | 60.00 | 5.48 |  | 80.0 |  |
|  |  | Z | 0.64 | 60.00 | 7.01 |  | 80.0 |  |
| $\begin{array}{\|c\|} \hline 10475- \\ \hline \end{array}$ <br> AAC | LTE-TDD (SC-FDMA, 1 RB, $15 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.82 | 230.67 | 11.80 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 24.34 | 227.67 | 30.21 |  | 80.0 |  |
|  |  | Z | 0.66 | 60.00 | 6.30 |  | 80.0 |  |


| $\begin{aligned} & 10477- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 6.74 | 228.54 | 21.21 | 3.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.23 | 55.08 | 2.89 |  | 80.0 |  |
|  |  | Z | 0.64 | 60.00 | 6.98 |  | 80.0 |  |
| $\begin{aligned} & 10478- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.84 | 230.57 | 11.22 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 24.37 | 227.68 | 30.04 |  | 80.0 |  |
|  |  | Z | 0.66 | 60.00 | 6.29 |  | 80.0 |  |
| 10479-AAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.02 | 84.98 | 21.47 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 125.48 | 31.72 |  | 80.0 |  |
|  |  | Z | 5.02 | 83.00 | 20.76 |  | 80.0 |  |
| $\begin{aligned} & 10480- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.47 | 60.00 | 6.63 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.92 | 67.54 | 11.86 |  | 80.0 |  |
|  |  | Z | 1.73 | 65.44 | 11.67 |  | 80.0 |  |
| $\begin{aligned} & 10481- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.22 | 55.04 | 3.12 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 1.09 | 61.90 | 8.89 |  | 80.0 |  |
|  |  | Z | 1.31 | 62.31 | 9.77 |  | 80.0 |  |
| $\begin{aligned} & \text { 10482- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 53.67 | 208.87 | 10.65 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.05 | 62.14 | 9.95 |  | 80.0 |  |
|  |  | Z | 0.98 | 60.56 | 9.26 |  | 80.0 |  |
| $\begin{aligned} & \text { 10483- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 64.01 | 327.64 | 15.81 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 1.10 | 60.00 | 7.60 |  | 80.0 |  |
|  |  | Z | 1.21 | 60.00 | 8.23 |  | 80.0 |  |
| $\begin{aligned} & 10484- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 72.15 | 316.72 | 7.23 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.13 | 60.00 | 7.59 |  | 80.0 |  |
|  |  | Z | 1.24 | 60.00 | 8.22 |  | 80.0 |  |
| 10485AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK, UL Subframe=2,3,4,7,8,9) | X | 0.75 | 60.00 | 6.88 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.48 | 72.41 | 16.54 |  | 80.0 |  |
|  |  | Z | 1.64 | 65.93 | 13.71 |  | 80.0 |  |
| 10486- <br> AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.01 | 60.00 | 5.53 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.68 | 63.79 | 11.57 |  | 80.0 |  |
|  |  | Z | 1.58 | 62.22 | 10.94 |  | 80.0 |  |
| $\begin{aligned} & 10487- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.04 | 60.00 | 5.50 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.66 | 63.28 | 11.27 |  | 80.0 |  |
|  |  | Z | 1.59 | 61.98 | 10.79 |  | 80.0 |  |
| $\begin{aligned} & 10488- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.44 | 64.72 | 13.06 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.82 | 72.60 | 18.56 |  | 80.0 |  |
|  |  | Z | 2.27 | 68.12 | 16.38 |  | 80.0 |  |
| $\begin{aligned} & 10489- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.47 | 61.87 | 10.73 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.82 | 68.91 | 16.54 |  | 80.0 |  |
|  |  | Z | 2.48 | 66.05 | 15.16 |  | 80.0 |  |
| $\begin{aligned} & 10490- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.47 | 61.55 | 10.50 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.86 | 68.61 | 16.37 |  | 80.0 |  |
|  |  | Z | 2.55 | 65.97 | 15.11 |  | 80.0 |  |
| $\begin{aligned} & 10491- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.98 | 66.25 | 14.91 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.98 | 70.44 | 18.02 |  | 80.0 |  |
|  |  | Z | 2.64 | 67.54 | 16.51 |  | 80.0 |  |
| $\begin{aligned} & 10492- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.19 | 64.63 | 13.64 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.11 | 67.88 | 16.76 |  | 80.0 |  |
|  |  | Z | 2.90 | 65.95 | 15.77 |  | 80.0 |  |


| 10493- <br> AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.21 | 64.43 | 13.47 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.16 | 67.71 | 16.66 |  | 80.0 |  |
|  |  | Z | 2.96 | 65.87 | 15.72 |  | 80.0 |  |
| 10494- <br> AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.11 | 67.23 | 15.74 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.21 | 71.79 | 18.57 |  | 80.0 |  |
|  |  | Z | 2.78 | 68.52 | 16.88 |  | 80.0 |  |
| 10495- <br> AAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.35 | 65.50 | 14.66 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.14 | 68.07 | 17.04 |  | 80.0 |  |
|  |  | Z | 2.93 | 66.16 | 16.02 |  | 80.0 |  |
| 10496- <br> AAC | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.42 | 65.39 | 14.61 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.21 | 67.85 | 16.95 |  | 80.0 |  |
|  |  | Z | 3.02 | 66.06 | 16.01 |  | 80.0 |  |
| $\begin{aligned} & 10497- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.50 | 220.48 | 26.76 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.82 | 60.00 | 6.90 |  | 80.0 |  |
|  |  | Z | 0.88 | 60.00 | 7.23 |  | 80.0 |  |
| $\begin{aligned} & 10498- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}$, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 0.00 | 60.00 | 0.00 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.06 | 60.00 | 5.49 |  | 80.0 |  |
|  |  | Z | 1.08 | 60.00 | 6.01 |  | 80.0 |  |
| 10499- <br> AAA | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 0.00 | 60.00 | 0.00 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.10 | 60.00 | 5.30 |  | 80.0 |  |
|  |  | Z | 1.11 | 60.00 | 5.84 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.83 | 60.00 | 8.23 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.68 | 72.91 | 17.52 |  | 80.0 |  |
|  |  | Z | 1.91 | 67.05 | 14.90 |  | 80.0 |  |
| $\begin{aligned} & 10501- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.03 | 60.00 | 6.96 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.26 | 66.74 | 13.90 |  | 80.0 |  |
|  |  | Z | 1.97 | 64.14 | 12.76 |  | 80.0 |  |
| $\begin{aligned} & 10502- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.05 | 60.00 | 6.86 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.24 | 66.31 | 13.60 |  | 80.0 |  |
|  |  | Z | 1.99 | 63.95 | 12.58 |  | 80.0 |  |
| $\begin{aligned} & 10503- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.42 | 64.51 | 12.94 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.78 | 72.32 | 18.42 |  | 80.0 |  |
|  |  | Z | 2.24 | 67.93 | 16.27 |  | 80.0 |  |
| 10504- <br> AAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.45 | 61.75 | 10.65 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.79 | 68.76 | 16.45 |  | 80.0 |  |
|  |  | Z | 2.46 | 65.95 | 15.09 |  | 80.0 |  |
| $\begin{aligned} & 10505- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.46 | 61.45 | 10.42 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.84 | 68.47 | 16.29 |  | 80.0 |  |
|  |  | Z | 2.53 | 65.87 | 15.05 |  | 80.0 |  |
| $\begin{aligned} & 10506- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.09 | 67.08 | 15.65 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.18 | 71.61 | 18.48 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAC } \end{aligned}$ |  | Z | 2.76 | 68.39 | 16.81 |  | 80.0 |  |
|  | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.34 | 65.41 | 14.60 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.12 | 67.99 | 16.99 |  | 80.0 |  |
|  |  | Z | 2.92 | 66.10 | 15.98 |  | 80.0 |  |


| $\begin{aligned} & 10508- \\ & A A C \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.40 | 65.29 | 14.54 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.20 | 67.76 | 16.90 |  | 80.0 |  |
|  |  | Z | 3.01 | 65.99 | 15.96 |  | 80.0 |  |
| 10509-$A A C$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.58 | 67.03 | 16.09 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.55 | 70.28 | 17.97 |  | 80.0 |  |
|  |  | Z | 3.24 | 67.94 | 16.71 |  | 80.0 |  |
| $\begin{aligned} & 10510- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.84 | 65.59 | 15.48 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.55 | 67.42 | 17.00 |  | 80.0 |  |
|  |  | Z | 3.41 | 66.05 | 16.23 |  | 80.0 |  |
| $\begin{aligned} & 10511- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.92 | 65.56 | 15.46 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.62 | 67.28 | 16.95 |  | 80.0 |  |
|  |  | Z | 3.49 | 65.96 | 16.22 |  | 80.0 |  |
| $\begin{array}{\|l} \hline 10512- \\ \text { AAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.57 | 67.43 | 16.22 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.65 | 71.51 | 18.37 |  | 80.0 |  |
|  |  | Z | 3.23 | 68.73 | 16.92 |  | 80.0 |  |
| 10513-$A A C$ | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.79 | 65.51 | 15.59 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.45 | 67.50 | 17.07 |  | 80.0 |  |
|  |  | Z | 3.30 | 66.08 | 16.26 |  | 80.0 |  |
| $\begin{aligned} & 10514- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 2.87 | 65.41 | 15.56 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.50 | 67.18 | 16.96 |  | 80.0 |  |
|  |  | Z | 3.36 | 65.86 | 16.21 |  | 80.0 |  |
| 10515- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 0.84 | 63.77 | 14.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.02 | 65.86 | 16.61 |  | 150.0 |  |
|  |  | Z | 0.85 | 62.40 | 13.77 |  | 150.0 |  |
| 10516-$A A A$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.62 | 73.89 | 17.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.44 | 111.45 | 33.24 |  | 150.0 |  |
|  |  | Z | 0.45 | 67.70 | 14.48 |  | 150.0 |  |
| 10517- <br> AAA | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.68 | 65.50 | 14.61 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.96 | 70.28 | 18.66 |  | 150.0 |  |
|  |  | Z | 0.68 | 63.72 | 13.93 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10518- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 3.70 | 67.39 | 15.82 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 67.62 | 16.61 |  | 150.0 |  |
|  |  | Z | 4.17 | 66.58 | 15.96 |  | 150.0 |  |
| $10519$ <br> AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 3.79 | 67.51 | 15.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.38 | 67.73 | 16.67 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.74 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10520- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 3.65 | 67.31 | 15.75 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.25 | 67.68 | 16.61 |  | 150.0 |  |
|  |  | Z | 4.16 | 66.65 | 15.95 |  | 150.0 |  |
| $\begin{aligned} & 10521- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 3.59 | 67.16 | 15.66 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 67.62 | 16.58 |  | 150.0 |  |
|  |  | Z | 4.10 | 66.58 | 15.92 |  | 150.0 |  |
| $\begin{aligned} & \hline 10522- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 3.61 | 67.21 | 15.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.20 | 67.65 | 16.61 |  | 150.0 |  |
|  |  | Z | 4.13 | 66.67 | 15.99 |  | 150.0 |  |


| $\begin{aligned} & \text { 10523- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 3.58 | 67.41 | 15.78 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.19 | 67.90 | 16.68 |  | 150.0 |  |
|  |  | Z | 4.09 | 66.77 | 15.97 |  | 150.0 |  |
| $\begin{aligned} & 10524- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 3.55 | 67.17 | 15.73 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.18 | 67.74 | 16.69 |  | 150.0 |  |
|  |  | Z | 4.09 | 66.69 | 16.02 |  | 150.0 |  |
| $\begin{aligned} & 10525- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 99pc duty cycle) | X | 3.68 | 66.62 | 15.57 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.25 | 66.93 | 16.35 |  | 150.0 |  |
|  |  | Z | 4.15 | 65.82 | 15.66 |  | 150.0 |  |
| 10526- <br> AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99 pc duty cycle) | X | 3.72 | 66.70 | 15.62 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 67.14 | 16.44 |  | 150.0 |  |
|  |  | Z | 4.25 | 66.06 | 15.76 |  | 150.0 |  |
| 10527- <br> AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99 pc duty cycle) | X | 3.68 | 66.74 | 15.58 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.29 | 67.16 | 16.40 |  | 150.0 |  |
|  |  | Z | 4.18 | 66.03 | 15.70 |  | 150.0 |  |
| 10528- <br> AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) | X | 3.67 | 66.65 | 15.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.30 | 67.15 | 16.42 |  | 150.0 |  |
|  |  | Z | 4.20 | 66.04 | 15.73 |  | 150.0 |  |
| 10529- <br> AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 3.67 | 66.65 | 15.55 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.30 | 67.15 | 16.42 |  | 150.0 |  |
|  |  | Z | 4.20 | 66.04 | 15.73 |  | 150.0 |  |
| $\begin{aligned} & 10531- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, 99 pc duty cycle) | X | 3.64 | 66.66 | 15.53 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.25 | 67.14 | 16.38 |  | 150.0 |  |
|  |  | Z | 4.15 | 66.02 | 15.69 |  | 150.0 |  |
| $\begin{aligned} & \hline 10532- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | X | 3.57 | 66.55 | 15.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.15 | 67.03 | 16.34 |  | 150.0 |  |
|  |  | Z | 4.04 | 65.89 | 15.62 |  | 150.0 |  |
| $\begin{aligned} & 10533- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | X | 3.68 | 66.88 | 15.62 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.30 | 67.28 | 16.44 |  | 150.0 |  |
|  |  | Z | 4.20 | 66.13 | 15.73 |  | 150.0 |  |
| $\begin{aligned} & 10534- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCSO, 99pc duty cycle) | X | 4.34 | 66.44 | 15.93 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.85 | 66.86 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.79 | 66.06 | 15.87 |  | 150.0 |  |
| 10535- $\mathrm{AAB}$ | IEEE 802.11 ac Wifi ( 40 MHz , MCS1, 99pc duty cycle) | X | 4.34 | 66.46 | 15.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.87 | 66.95 | 16.44 |  | 150.0 |  |
|  |  | Z | 4.82 | 66.17 | 15.93 |  | 150.0 |  |
| $\begin{aligned} & 10536- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | X | 4.25 | 66.45 | 15.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.78 | 66.98 | 16.43 |  | 150.0 |  |
|  |  | Z | 4.71 | 66.14 | 15.89 |  | 150.0 |  |
| $\begin{aligned} & 10537- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle) | X | 4.35 | 66.61 | 16.01 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 67.05 | 16.47 |  | 150.0 |  |
|  |  | Z | 4.80 | 66.24 | 15.94 |  | 150.0 |  |
| $\begin{aligned} & 10538- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle) | X | 4.37 | 66.44 | 15.94 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.89 | 66.89 | 16.42 |  | 150.0 |  |
|  |  | Z | 4.84 | 66.13 | 15.93 |  | 150.0 |  |
| $\begin{aligned} & 10540- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | X | 4.31 | 66.35 | 15.93 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.83 | 66.86 | 16.43 |  | 150.0 |  |
|  |  | Z | 4.77 | 66.08 | 15.92 |  | 150.0 |  |


| $\begin{aligned} & 10541 \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | X | 4.33 | 66.41 | 15.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.83 | 66.83 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.77 | 66.02 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & 10542- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( 40 MHz , MCS8, 99pc duty cycle) | X | 4.45 | 66.54 | 16.01 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.97 | 66.88 | 16.43 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.12 | 15.94 |  | 150.0 |  |
| $\begin{aligned} & 10543- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 40 MHz , MCS9, 99pc duty cycle) | X | 4.48 | 66.49 | 16.02 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.04 | 66.97 | 16.50 |  | 150.0 |  |
|  |  | Z | 5.01 | 66.28 | 16.06 |  | 150.0 |  |
| 10544- <br> AAB | IEEE 802.11ac WiFi ( 80 MHz , MCSO, 99 pc duty cycle) | X | 4.77 | 66.20 | 15.88 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.21 | 66.81 | 16.32 |  | 150.0 |  |
|  |  | Z | 5.15 | 66.11 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & 10545- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle) | X | 4.82 | 66.41 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 67.24 | 16.50 |  | 150.0 |  |
|  |  | Z | 5.34 | 66.63 | 16.10 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10546- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | X | 4.77 | 66.27 | 15.89 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.24 | 66.91 | 16.35 |  | 150.0 |  |
|  |  | Z | 5.18 | 66.22 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10547- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS} 3$, 99 pc duty cycle) | X | 4.83 | 66.38 | 15.95 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.36 | 67.18 | 16.48 |  | 150.0 |  |
|  |  | Z | 5.31 | 66.51 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10548- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | X | 4.82 | 66.54 | 16.01 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.39 | 67.48 | 16.61 |  | 150.0 |  |
|  |  | Z | 5.39 | 66.96 | 16.24 |  | 150.0 |  |
| $\begin{aligned} & 10550- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle) | X | 4.79 | 66.46 | 16.00 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.34 | 67.29 | 16.55 |  | 150.0 |  |
|  |  | Z | 5.30 | 66.62 | 16.12 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10551- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS7, 99pc duty cycle) | X | 4.75 | 66.25 | 15.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.21 | 66.84 | 16.29 |  | 150.0 |  |
|  |  | Z | 5.16 | 66.14 | 15.84 |  | 150.0 |  |
| $\begin{aligned} & 10552- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS8, 99 pc duty cycle) | X | 4.78 | 66.50 | 15.97 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.22 | 66.98 | 16.36 |  | 150.0 |  |
|  |  | Z | 5.16 | 66.23 | 15.88 |  | 150.0 |  |
| $\begin{aligned} & 10553- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 4.79 | 66.33 | 15.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 66.86 | 16.32 |  | 150.0 |  |
|  |  | Z | 5.20 | 66.16 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & 10554- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCSO, 99 pc duty cycle) | X | 5.25 | 66.42 | 15.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.65 | 67.07 | 16.36 |  | 150.0 |  |
|  |  | Z | 5.60 | 66.46 | 15.97 |  | 150.0 |  |
| $\begin{aligned} & 10555- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS1, 99 pc duty cycle) | X | 5.31 | 66.63 | 16.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.71 | 67.24 | 16.43 |  | 150.0 |  |
|  |  | Z | 5.68 | 66.67 | 16.06 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10556- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11 ac WiFi ( 160 MHz , MCS2, 99 pc duty cycle) | X | 5.32 | 66.65 | 16.05 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.77 | 67.42 | 16.51 |  | 150.0 |  |
|  |  | Z | 5.74 | 66.86 | 16.15 |  | 150.0 |  |
| 10557- <br> AAC | IEEE 802.11ac WiFi (160MHz, MCS3, 99pc duty cycle) | X | 5.28 | 66.55 | 16.01 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.72 | 67.25 | 16.45 |  | 150.0 |  |
|  |  | Z | 5.67 | 66.64 | 16.06 |  | 150.0 |  |


| $\begin{aligned} & 10558- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 4$, 99 pc duty cycle) | X | 5.24 | 66.46 | 15.98 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.69 | 67.20 | 16.44 |  | 150.0 |  |
|  |  | Z | 5.65 | 66.61 | 16.06 |  | 150.0 |  |
| $\begin{aligned} & \text { 10560- } \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS6, 99pc duty cycle) | X | 5.28 | 66.44 | 16.00 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.72 | 67.18 | 16.47 |  | 150.0 |  |
|  |  | Z | 5.68 | 66.60 | 16.09 |  | 150.0 |  |
| $\begin{aligned} & \hline 10561- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 7$, 99pc duty cycle) | X | 5.21 | 66.38 | 15.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.66 | 67.17 | 16.49 |  | 150.0 |  |
|  |  | Z | 5.63 | 66.59 | 16.12 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 8$, 99pc duty cycle) | X | 5.30 | 66.67 | 16.13 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.70 | 67.29 | 16.55 |  | 150.0 |  |
|  |  | Z | 5.66 | 66.70 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & 10563- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 99pc duty cycle) | X | 5.57 | 67.31 | 16.43 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.83 | 67.40 | 16.57 |  | 150.0 |  |
|  |  | Z | 5.78 | 66.77 | 16.18 |  | 150.0 |  |
| 10564-$\mathrm{AAA}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 9 Mbps, 99 pc duty cycle) | X | 3.98 | 67.19 | 15.91 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 67.45 | 16.63 |  | 150.0 |  |
|  |  | Z | 4.49 | 66.59 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10565- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps, 99 pc duty cycle) | X | 4.14 | 67.73 | 16.32 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.73 | 67.88 | 16.97 |  | 150.0 |  |
|  |  | Z | 4.67 | 67.02 | 16.44 |  | 150.0 |  |
| $\begin{aligned} & 10566- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps, $99 p \mathrm{duty}$ cycle) | X | 3.97 | 67.32 | 16.02 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 67.66 | 16.76 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.79 | 16.21 |  | 150.0 |  |
| $10567 .$ <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps, 99pc duty cycle) | X | 4.06 | 67.96 | 16.56 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.62 | 68.16 | 17.21 |  | 150.0 |  |
|  |  | Z | 4.55 | 67.23 | 16.63 |  | 150.0 |  |
| $\begin{aligned} & 10568- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps, 99pc duty cycle) | X | 3.80 | 66.64 | 15.45 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.41 | 67.18 | 16.36 |  | 150.0 |  |
|  |  | Z | 4.38 | 66.42 | 15.88 |  | 150.0 |  |
| $\begin{aligned} & 10569- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps, 99 pc duty cycle) | X | 4.07 | 68.35 | 16.82 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 68.53 | 17.43 |  | 150.0 |  |
|  |  | Z | 4.55 | 67.52 | 16.81 |  | 150.0 |  |
| $\begin{aligned} & \hline 10570- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 54 Mbps, 99 pc duty cycle) | X | 3.99 | 67.81 | 16.52 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.60 | 68.17 | 17.24 |  | 150.0 |  |
|  |  | Z | 4.53 | 67.25 | 16.66 |  | 150.0 |  |
| $\begin{aligned} & \text { 10571- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 0.93 | 63.68 | 14.15 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.11 | 65.62 | 16.53 |  | 130.0 |  |
|  |  | Z | 0.97 | 62.81 | 14.25 |  | 130.0 |  |
| 10572-$\mathrm{AAA}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | X | 0.94 | 64.27 | 14.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.13 | 66.40 | 17.03 |  | 130.0 |  |
|  |  | Z | 0.97 | 63.27 | 14.57 |  | 130.0 |  |
| $\begin{aligned} & 10573- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | X | 1.10 | 79.41 | 19.97 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 29.09 | 140.84 | 40.18 |  | 130.0 |  |
|  |  | Z | 0.81 | 73.52 | 17.65 |  | 130.0 |  |
| $\begin{aligned} & 10574- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | X | 1.00 | 70.10 | 17.80 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.40 | 75.63 | 21.83 |  | 130.0 |  |
|  |  | Z | 0.96 | 67.63 | 16.92 |  | 130.0 |  |


| $\begin{aligned} & 10575- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 3.74 | 66.83 | 15.70 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.30 | 67.12 | 16.57 |  | 130.0 |  |
| $\begin{aligned} & 10576- \\ & \text { AAA } \\ & \hline \end{aligned}$ |  | Z | 4.26 | 66.31 | 16.08 |  | 130.0 |  |
|  | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 3.78 | 67.20 | 15.91 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 67.41 | 16.71 |  | 130.0 |  |
|  |  | Z | 4.29 | 66.55 | 16.18 |  | 130.0 |  |
| $\begin{aligned} & 10577- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $12 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 3.89 | 67.42 | 16.06 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.48 | 67.61 | 16.83 |  | 130.0 |  |
|  |  | Z | 4.44 | 66.77 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10578- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 90 pc duty cycle) | X | 3.83 | 67.60 | 16.23 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.40 | 67.82 | 17.00 |  | 130.0 |  |
|  |  | Z | 4.35 | 66.92 | 16.45 |  | 130.0 |  |
| $\begin{aligned} & 10579- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 24 Mbps , 90 pc duty cycle) | X | 3.51 | 66.09 | 15.01 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.12 | 66.74 | 16.08 |  | 130.0 |  |
|  |  | Z | 4.09 | 65.97 | 15.60 |  | 130.0 |  |
| $\begin{aligned} & 10580- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $36 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 3.49 | 65.97 | 14.89 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.12 | 66.69 | 16.03 |  | 130.0 |  |
|  |  | Z | 4.11 | 65.99 | 15.59 |  | 130.0 |  |
| $\begin{aligned} & 10581- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $48 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 3.74 | 67.63 | 16.20 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.33 | 67.99 | 17.02 |  | 130.0 |  |
|  |  | Z | 4.26 | 67.01 | 16.43 |  | 130.0 |  |
| $\begin{aligned} & \text { 10582- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 3.37 | 65.61 | 14.64 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.03 | 66.45 | 15.82 |  | 130.0 |  |
|  |  | Z | 4.01 | 65.72 | 15.36 |  | 130.0 |  |
| $\begin{aligned} & 10583- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90 pc duty cycle) | X | 3.74 | 66.83 | 15.70 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.30 | 67.12 | 16.57 |  | 130.0 |  |
|  |  | Z | 4.26 | 66.31 | 16.08 |  | 130.0 |  |
| $\begin{aligned} & 10584- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90 pc duty cycle) | X | 3.78 | 67.20 | 15.91 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 67.41 | 16.71 |  | 130.0 |  |
|  |  | Z | 4.29 | 66.55 | 16.18 |  | 130.0 |  |
| $\begin{aligned} & 10585- \\ & \text { AAB } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | X | 3.89 | 67.42 | 16.06 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 67.61 | 16.83 |  | 130.0 |  |
|  |  | Z | 4.44 | 66.77 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10586- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 3.83 | 67.60 | 16.23 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 67.82 | 17.00 |  | 130.0 |  |
|  |  | Z | 4.35 | 66.92 | 16.45 |  | 130.0 |  |
| $\begin{aligned} & 10587- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90 pc duty cycle) | X | 3.51 | 66.09 | 15.01 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.12 | 66.74 | 16.08 |  | 130.0 |  |
|  |  | Z | 4.09 | 65.97 | 15.60 |  | 130.0 |  |
| $\begin{aligned} & 10588- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 3.49 | 65.97 | 14.89 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.12 | 66.69 | 16.03 |  | 130.0 |  |
|  |  | Z | 4.11 | 65.99 | 15.59 |  | 130.0 |  |
| $\begin{aligned} & \text { 10589- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90 pc duty cycle) | X | 3.74 | 67.63 | 16.20 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.33 | 67.99 | 17.02 |  | 130.0 |  |
|  |  | Z | 4.26 | 67.01 | 16.43 |  | 130.0 |  |
| $\begin{aligned} & 10590- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90 pc duty cycle) | X | 3.37 | 65.61 | 14.64 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.03 | 66.45 | 15.82 |  | 130.0 |  |
|  |  | Z | 4.01 | 65.72 | 15.36 |  | 130.0 |  |


| $\begin{aligned} & \hline 10591- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20 MHz , MCSO, 90 pc duty cycle) | X | 3.91 | 67.05 | 15.98 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.46 | 67.24 | 16.72 |  | 130.0 |  |
|  |  | Z | 4.42 | 66.45 | 16.24 |  | 130.0 |  |
| $\begin{aligned} & \hline 10592- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90 pc duty cycle) | X | 3.96 | 67.20 | 16.07 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 67.49 | 16.83 |  | 130.0 |  |
|  |  | Z | 4.52 | 66.71 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & \text { 10593- } \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 3.89 | 67.09 | 15.91 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.48 | 67.36 | 16.68 |  | 130.0 |  |
|  |  | Z | 4.44 | 66.57 | 16.20 |  | 130.0 |  |
| $\begin{aligned} & 10594- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS3, 90pc duty cycle) | X | 3.93 | 67.20 | 16.06 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.53 | 67.56 | 16.87 |  | 130.0 |  |
|  |  | Z | 4.50 | 66.76 | 16.38 |  | 130.0 |  |
| $\begin{aligned} & 10595- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 3.88 | 67.15 | 15.95 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 67.54 | 16.78 |  | 130.0 |  |
|  |  | Z | 4.46 | 66.73 | 16.29 |  | 130.0 |  |
| $\begin{aligned} & 10596- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20 MHz , MCS5, 90pc duty cycle) | X | 3.78 | 66.88 | 15.82 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.41 | 67.44 | 16.74 |  | 130.0 |  |
|  |  | Z | 4.38 | 66.66 | 16.26 |  | 130.0 |  |
| $\begin{aligned} & 10597- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20 MHz , MCS6, 90pc duty cycle) | X | 3.79 | 66.92 | 15.72 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.37 | 67.31 | 16.57 |  | 130.0 |  |
|  |  | Z | 4.34 | 66.51 | 16.09 |  | 130.0 |  |
| $\begin{aligned} & 10598- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 3.85 | 67.45 | 16.19 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.40 | 67.66 | 16.93 |  | 130.0 |  |
|  |  | Z | 4.34 | 66.79 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & \text { 10599- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCSO, 90pc duty cycle) | X | 4.79 | 67.73 | 16.77 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.21 | 67.73 | 17.04 |  | 130.0 |  |
|  |  | Z | 5.16 | 67.02 | 16.62 |  | 130.0 |  |
| $\begin{aligned} & 10600- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | X | 4.68 | 67.39 | 16.57 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.21 | 67.78 | 17.04 |  | 130.0 |  |
|  |  | Z | 5.26 | 67.42 | 16.79 |  | 130.0 |  |
| $\begin{aligned} & 10601- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS2, 90pc duty cycle) | X | 4.64 | 67.32 | 16.56 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.18 | 67.81 | 17.08 |  | 130.0 |  |
|  |  | Z | 5.18 | 67.25 | 16.73 |  | 130.0 |  |
| $\begin{aligned} & 10602- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | X | 4.63 | 67.06 | 16.35 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.19 | 67.55 | 16.86 |  | 130.0 |  |
|  |  | Z | 5.23 | 67.15 | 16.59 |  | 130.0 |  |
| $\begin{aligned} & 10603- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS4, 90pc duty cycle) | X | 4.68 | 67.32 | 16.65 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.23 | 67.74 | 17.10 |  | 130.0 |  |
|  |  | Z | 5.27 | 67.35 | 16.84 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40MHz, MCS5, 90pc duty cycle) | X | 4.64 | 67.04 | 16.46 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.12 | 67.34 | 16.87 |  | 130.0 |  |
|  |  | Z | 5.13 | 66.84 | 16.55 |  | 130.0 |  |
| $\begin{aligned} & 10605- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS6, 90pc duty cycle) | X | 4.61 | 67.01 | 16.45 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.17 | 67.54 | 16.97 |  | 130.0 |  |
|  |  | Z | 5.21 | 67.15 | 16.70 |  | 130.0 |  |
| $\begin{aligned} & 10606- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS7, 90pc duty cycle) | X | 4.52 | 66.73 | 16.13 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.04 | 67.22 | 16.65 |  | 130.0 |  |
|  |  | Z | 5.04 | 66.71 | 16.33 |  | 130.0 |  |

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| $\begin{aligned} & 10607- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 90 pc duty cycle) | X | 3.77 | 66.40 | 15.66 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.33 | 66.69 | 16.43 |  | 130.0 |  |
|  |  | Z | 4.27 | 65.78 | 15.88 |  | 130.0 |  |
| $\begin{aligned} & 10608- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 20 MHz , MCS1, 90 pc duty cycle) | X | 3.82 | 66.54 | 15.73 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.44 | 66.96 | 16.55 |  | 130.0 |  |
|  |  | Z | 4.38 | 66.06 | 16.01 |  | 130.0 |  |
| $\begin{aligned} & 10609- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 20 MHz , MCS2, 90 pc duty cycle) | X | 3.73 | 66.35 | 15.52 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 66.78 | 16.36 |  | 130.0 |  |
|  |  | Z | 4.28 | 65.87 | 15.81 |  | 130.0 |  |
| $\begin{aligned} & 10610- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS3, 90 pc duty cycle) | X | 3.78 | 66.52 | 15.70 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 66.99 | 16.56 |  | 130.0 |  |
|  |  | Z | 4.34 | 66.07 | 16.00 |  | 130.0 |  |
| $\begin{aligned} & 10611- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | X | 3.70 | 66.30 | 15.52 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.30 | 66.73 | 16.37 |  | 130.0 |  |
|  |  | Z | 4.25 | 65.83 | 15.82 |  | 130.0 |  |
| 10612-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS5, 90 pc duty cycle) | X | 3.61 | 66.09 | 15.37 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.27 | 66.79 | 16.38 |  | 130.0 |  |
|  |  | Z | 4.22 | 65.92 | 15.84 |  | 130.0 |  |
| $\begin{aligned} & 10613- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, 90 pc duty cycle) | X | 3.64 | 66.03 | 15.27 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.27 | 66.59 | 16.20 |  | 130.0 |  |
|  |  | Z | 4.22 | 65.72 | 15.67 |  | 130.0 |  |
| $\begin{aligned} & 10614- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 90 pc duty cycle) | X | 3.70 | 66.56 | 15.73 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.27 | 66.95 | 16.54 |  | 130.0 |  |
|  |  | Z | 4.20 | 66.00 | 15.96 |  | 130.0 |  |
| $\begin{aligned} & 10615- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 90 pc duty cycle) | X | 3.64 | 65.99 | 15.16 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.28 | 66.52 | 16.09 |  | 130.0 |  |
|  |  | Z | 4.23 | 65.64 | 15.56 |  | 130.0 |  |
| $\begin{aligned} & 10616- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCSO, 90 pc duty cycle) | X | 4.45 | 66.34 | 16.08 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.95 | 66.71 | 16.53 |  | 130.0 |  |
|  |  | Z | 4.93 | 66.07 | 16.13 |  | 130.0 |  |
| 10617- <br> AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 90 pc duty cycle) | X | 4.43 | 66.27 | 16.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 66.78 | 16.54 |  | 130.0 |  |
|  |  | Z | 4.96 | 66.18 | 16.16 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10618- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 90 pc duty cycle) | X | 4.37 | 66.39 | 16.11 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.90 | 66.88 | 16.61 |  | 130.0 |  |
|  |  | Z | 4.86 | 66.19 | 16.18 |  | 130.0 |  |
| $\begin{aligned} & 10619- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi (40MHz, MCS3, 90 pc duty cycle) | X | 4.42 | 66.32 | 16.00 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 66.79 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.93 | 66.18 | 16.10 |  | 130.0 |  |
| $\begin{aligned} & 10620- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 40 MHz , MCS4, 90 pc duty cycle) | X | 4.43 | 66.13 | 15.93 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.96 | 66.62 | 16.45 |  | 130.0 |  |
|  |  | Z | 4.96 | 66.05 | 16.09 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10621- \\ \mathrm{AAB} \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS5}$, 90 pc duty cycle) | X | 4.50 | 66.48 | 16.27 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.00 | 66.84 | 16.69 |  | 130.0 |  |
|  |  | Z | 4.97 | 66.18 | 16.29 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10622- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 90 pc duty cycle) | X | 4.46 | 66.43 | 16.25 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.98 | 66.91 | 16.73 |  | 130.0 |  |
|  |  | Z | 4.96 | 66.27 | 16.33 |  | 130.0 |  |


| $\begin{array}{\|l\|} \hline 10623- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 90 pc duty cycle) | X | 4.39 | 66.10 | 15.89 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.89 | 66.49 | 16.36 |  | 130.0 |  |
|  |  | Z | 4.86 | 65.84 | 15.96 |  | 130.0 |  |
| $\begin{aligned} & 10624- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle) | X | 4.54 | 66.35 | 16.10 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.06 | 66.70 | 16.53 |  | 130.0 |  |
|  |  | Z | 5.05 | 66.11 | 16.17 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90 pc duty cycle) | X | 4.65 | 66.63 | 16.32 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.15 | 66.88 | 16.69 |  | 130.0 |  |
|  |  | Z | 5.16 | 66.34 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi (80MHz, MCS0, 90 pc duty cycle) | X | 4.87 | 66.09 | 16.03 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.31 | 66.64 | 16.44 |  | 130.0 |  |
|  |  | Z | 5.28 | 66.07 | 16.09 |  | 130.0 |  |
| $\begin{aligned} & 10627- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 4.96 | 66.39 | 16.17 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.52 | 67.25 | 16.73 |  | 130.0 |  |
|  |  | Z | 5.53 | 66.80 | 16.43 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 90 pc duty cycle) | X | 4.83 | 65.96 | 15.85 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.28 | 66.56 | 16.30 |  | 130.0 |  |
|  |  | Z | 5.27 | 66.03 | 15.96 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle) | X | 4.89 | 66.11 | 15.93 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.45 | 66.99 | 16.52 |  | 130.0 |  |
|  |  | Z | 5.45 | 66.49 | 16.20 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, 90 pc duty cycle) | X | 4.94 | 66.47 | 16.13 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.52 | 67.40 | 16.73 |  | 130.0 |  |
|  |  | Z | 5.58 | 67.09 | 16.50 |  | 130.0 |  |
| $\begin{aligned} & 10631 \text { - } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 5.04 | 67.01 | 16.63 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.56 | 67.66 | 17.07 |  | 130.0 |  |
|  |  | Z | 5.56 | 67.16 | 16.74 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 5.02 | 66.85 | 16.55 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.59 | 67.70 | 17.10 |  | 130.0 |  |
|  |  | Z | 5.59 | 67.18 | 16.77 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 ac WiFi $(80 \mathrm{MHz}, \mathrm{MCS} 7$, 90 pc duty cycle) | X | 4.86 | 66.17 | 16.01 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 66.64 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.27 | 66.07 | 16.03 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 4.95 | 66.64 | 16.30 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 66.92 | 16.58 |  | 130.0 |  |
|  |  | Z | 5.32 | 66.32 | 16.21 |  | 130.0 |  |
| $\begin{array}{\|l} \hline 10635- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 4.70 | 65.44 | 15.34 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.17 | 66.01 | 15.82 |  | 130.0 |  |
|  |  | Z | 5.16 | 65.50 | 15.50 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10636- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCSO}$, 90 pc duty cycle) | X | 5.37 | 66.35 | 16.11 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.75 | 66.94 | 16.50 |  | 130.0 |  |
|  |  | Z | 5.74 | 66.45 | 16.20 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10637- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11 ac WiFi ( 160 MHz , MCS1, 90 pc duty cycle) 90 pc duty cycle) | X | 5.47 | 66.68 | 16.28 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.84 | 67.17 | 16.61 |  | 130.0 |  |
|  |  | Z | 5.85 | 66.75 | 16.34 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & A A C \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS2, 90 pc duty cycle) | X | 5.45 | 66.60 | 16.21 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.91 | 67.37 | 16.68 |  | 130.0 |  |
|  |  | Z | 5.90 | 66.89 | 16.39 |  | 130.0 |  |


| $\begin{aligned} & 10639- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS3, 90pc duty cycle) | $X$ | 5.40 | 66.48 | 16.20 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 5.83 | 67.15 | 16.61 |  | 130.0 |  |
| $\begin{aligned} & 10640- \\ & \mathrm{AAC} \\ & \hline \end{aligned}$ |  | Z | 5.82 | 66.67 | 16.32 |  | 130.0 |  |
|  | IEEE 802.11ac WiFi ( 160 MHz , MCS4, 90 pc duty cycle) | X | 5.32 | 66.22 | 15.99 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.75 | 66.89 | 16.42 |  | 130.0 |  |
|  |  | Z | 5.75 | 66.45 | 16.15 |  | 130.0 |  |
| $\begin{aligned} & 10641- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 5$, 90 pc duty cycle) | X | 5.45 | 66.45 | 16.13 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.88 | 67.07 | 16.54 |  | 130.0 |  |
|  |  | Z | 5.90 | 66.70 | 16.30 |  | 130.0 |  |
| $\begin{aligned} & 10642- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS6, 90 pc duty cycle) | X | 5.46 | 66.60 | 16.39 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.90 | 67.28 | 16.81 |  | 130.0 |  |
|  |  | Z | 5.89 | 66.80 | 16.53 |  | 130.0 |  |
| $\begin{aligned} & 10643- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 7$, 90 pc duty cycle) | X | 5.28 | 66.13 | 16.00 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.73 | 66.91 | 16.51 |  | 130.0 |  |
|  |  | Z | 5.74 | 66.48 | 16.24 |  | 130.0 |  |
| $\begin{aligned} & 10644- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 90 pc duty cycle) | X | 5.42 | 66.58 | 16.26 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.78 | 67.08 | 16.62 |  | 130.0 |  |
|  |  | Z | 5.78 | 66.62 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10645- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS9, 90 pc duty cycle) | X | 5.81 | 67.58 | 16.73 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.91 | 67.16 | 16.62 |  | 130.0 |  |
|  |  | Z | 5.93 | 66.77 | 16.38 |  | 130.0 |  |
| $\begin{aligned} & 10646- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,7$ ) | X | 2.64 | 72.38 | 24.11 | 9.30 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.60 | 84.41 | 29.31 |  | 60.0 |  |
|  |  | Z | 4.84 | 83.41 | 28.63 |  | 60.0 |  |
| $\begin{aligned} & 10647- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe=2,7) | X | 2.46 | 71.01 | 23.55 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 81.81 | 28.38 |  | 60.0 |  |
|  |  | Z | 4.35 | 81.42 | 27.96 |  | 60.0 |  |
| $\begin{aligned} & \text { 10648- } \\ & \text { AAA } \end{aligned}$ | CDMA2000 (1x Advanced) | X | 2.44 | 155.88 | 0.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 0.35 | 60.28 | 6.28 |  | 150.0 |  |
|  |  | $Z$ | 0.35 | 60.00 | 5.54 |  | 150.0 |  |
| $\begin{aligned} & 10652- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1. Clipping 44\%) | X | 2.08 | 63.49 | 12.30 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 3.15 | 67.39 | 16.19 |  | 80.0 |  |
|  |  | Z | 2.91 | 65.29 | 15.14 |  | 80.0 |  |
| $\begin{aligned} & 10653- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 10 MHz , E-TM 3.1, Clipping 44\%) | X | 3.02 | 65.17 | 14.89 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.64 | 66.22 | 16.46 |  | 80.0 |  |
|  |  | Z | 3.52 | 64.96 | 15.78 |  | 80.0 |  |
| $\begin{aligned} & 10654- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | $X$ | 3.20 | 64.95 | 15.39 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.67 | 65.70 | 16.49 |  | 80.0 |  |
|  |  | Z | 3.57 | 64.61 | 15.88 |  | 80.0 |  |
| $\begin{aligned} & 10655- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 3.35 | 64.77 | 15.59 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.76 | 65.50 | 16.51 |  | 80.0 |  |
|  |  | Z | 3.66 | 64.52 | 15.94 |  | 80.0 |  |
| $\begin{aligned} & 10658- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform (200Hz, 10\%) | X | 2.01 | 62.76 | 7.94 | 10.00 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.58 | 65.57 | 9.73 |  | 50.0 |  |
|  |  | Z | 3.05 | 67.26 | 11.01 |  | 50.0 |  |
| $\begin{aligned} & 10659- \\ & \text { AAA } \\ & \hline \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | X | 0.84 | 60.00 | 5.36 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 1.33 | 63.54 | 7.82 |  | 60.0 |  |
|  |  | Z | 1.53 | 64.53 | 8.66 |  | 60.0 |  |


| $10660-$ <br> AAA | Pulse Waveform (200Hz, 40\%) | X | 0.39 | 60.00 | 3.98 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.54 | 61.57 | 5.88 |  | 80.0 |  |
|  |  | Z | 0.45 | 60.00 | 5.04 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform (200Hz, $60 \%)$ | X | 17.64 | 60.43 | 1.44 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.23 | 60.00 | 4.28 |  | 100.0 |  |
|  |  | Z | 0.25 | 60.00 | 3.48 |  | 100.0 |  |
| $10662-$ <br> AAA | Pulse Waveform (200Hz, 80\%) | X | 0.00 | 84.91 | 40.93 | 0.97 | 120.0 | $\pm 9.6 \%$ |
|  |  | Y | 49.30 | 1078.61 | 357.44 |  | 120.0 |  |
|  |  | Z | 0.03 | 139.18 | 4.12 |  | 120.0 |  |

[^7]Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzerland



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

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## client PC Test

## Certificate No: EX3-7410 Jul 18

## CALIBRATION CERTIFICATE

Object
EX3DV4 - SN:7410

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

Calibration date:
July 20, 2018

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

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$.

Calibration Equipment used (M\&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
| :--- | :--- | :--- | :--- |
| Power meter NRP | SN: 104778 | 04-Apr-18 (No. 217-02672/02673) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-18 (No. 217-02672) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-18 (No. 217-02673) | Apr-19 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 04-Apr-18 (No. 217-02682) | Apr-19 |
| Reference Probe ES3DV2 | SN: 3013 | 30-Dec-17 (No. ES3-3013_Dec17) | Dec-18 |
| DAE4 | 21-Dec-17 (No. DAE4-660_Dec17) | Dec-18 |  |
|  |  |  |  |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C | SN: US3642U01700 | $04-A u g-99$ (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-17) | In house check: Oct-18 |

Calibrated by: $\quad$ Michael Wober:

Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzerland


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## Glossary:

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

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

## Calibration is Performed According to the Following Standards:

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 handheld 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 "

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $9=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORM $x, y, z$ are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- $N O R M(f) x, y, z=N O R M x, y, z^{*}$ frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- Ax,y,z; Bx,y,z;Cx,y,z;Dx,y,z;VRx,y,z:A,B,C,D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. $V R$ is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $f>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no uncertainty required).


# Probe EX3DV4 

## SN:7410

Manufactured: November 24, 2015<br>Calibrated:

(Note: non-compatible with DASY2 system!)

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

## Basic Calibration Parameters

|  | Sensor $\mathbf{X}$ | Sensor $\mathbf{Y}$ | Sensor $\mathbf{Z}$ | Unc (k=2) |
| :--- | :---: | :---: | :---: | :---: |
| Norm $\left(\mu \mathrm{V} /(\mathrm{V} / \mathrm{m})^{2}\right)^{\mathrm{A}}$ | 0.41 | 0.47 | 0.43 | $\pm 10.1 \%$ |
| $\mathrm{DCP}(\mathrm{mV})^{\mathrm{B}}$ | 93.6 | 99.2 | 96.3 |  |

## Modulation Calibration Parameters

| UID | Communication System Name |  | $\mathbf{A}$ <br> $\mathbf{d B}$ | $\mathbf{B}$ <br> $\mathbf{d B} \sqrt{ } \mathbf{~ V}$ | $\mathbf{C}$ | $\mathbf{D}$ <br> $\mathbf{d B}$ | $\mathbf{V R}$ <br> $\mathbf{m V}$ | $\mathbf{U n c}$ <br> $(\mathbf{k}=\mathbf{2})$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.0 | 0.0 | 1.0 | 0.00 | 142.1 | $\pm 2.5 \%$ |
|  |  | Y | 0.0 | 0.0 | 1.0 |  | 157.1 |  |
|  | Z | 0.0 | 0.0 | 1.0 |  | 143.0 |  |  |

Note: For details on UID parameters see Appendix.

## Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{a}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s .} \mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s} . \mathbf{V}^{-\mathbf{1}}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 32.22 | 246.3 | 37.01 | 4.015 | 0.380 | 5.018 | 0.000 | 0.327 | $\mathbf{1 . 0 0 6}$ |
| Y | 34.20 | 252.5 | 34.94 | 7.011 | 0.000 | 5.034 | 0.846 | 0.193 | 1.003 |
| Z | 38.58 | 298.4 | 37.77 | 5.097 | 0.373 | 5.059 | 0.000 | 0.338 | 1.011 |

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $\mathrm{k}=2$, which for a normal distribution corresponds to a coverage probability of approximately $95 \%$.

[^8]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7410

Calibration Parameter Determined in Head Tissue Simulating Media

| $\mathrm{f}(\mathrm{MHz})^{\text {c }}$ | $\begin{gathered} \text { Relative } \\ \text { Permittivity } \\ \hline \end{gathered}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF $Z$ | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{\text {G }} \\ (\mathrm{mm}) \end{gathered}$ | $\begin{gathered} \text { Unc } \\ (\mathrm{k}=2) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 10.13 | 10.13 | 10.13 | 0.37 | 0.98 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 9.81 | 9.81 | 9.81 | 0.47 | 0.80 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 8.40 | 8.40 | 8.40 | 0.60 | 0.80 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 8.16 | 8.16 | 8.16 | 0.56 | 0.80 | $\pm 12.0$ \% |
| 2300 | 39.5 | 1.67 | 7.78 | 7.78 | 7.78 | 0.32 | 0.85 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 7.50 | 7.50 | 7.50 | 0.34 | 0.84 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 7.24 | 7.24 | 7.24 | 0.32 | 0.89 | $\pm 12.0 \%$ |

${ }^{\text {c }}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else is is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{\text {G }}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

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

## Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathbf{f ( M H z ) ^ { \mathbf { c } }}$ | Relative <br> Permittivity $^{\mathbf{F}}$ | Conductivity <br> $(\mathbf{S} / \mathbf{m})^{\mathbf{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha $^{\mathbf{G}}$ | Depth <br> $(\mathbf{m m})$ | Unc <br> $(\mathbf{k}=\mathbf{2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 9.87 | 9.87 | 9.87 | 0.33 | 1.02 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 9.63 | 9.63 | 9.63 | 0.42 | 0.86 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 8.06 | 8.06 | 8.06 | 0.35 | 0.85 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 7.78 | 7.78 | 7.78 | 0.39 | 0.80 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 7.64 | 7.64 | 7.64 | 0.35 | 0.85 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 7.45 | 7.45 | 7.45 | 0.32 | 0.86 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 7.34 | 7.34 | 7.34 | 0.31 | 0.94 | $\pm 12.0 \%$ |

[^9]
## Frequency Response of E-Field

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

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

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



Uncertainty of Axial Isotropy Assessment: $\mathbf{\pm} \mathbf{0 . 5 \%}$ ( $\mathbf{k}=\mathbf{2}$ )

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


Uncertainty of Linearity Assessment: $\pm \mathbf{0 . 6 \%}(\mathbf{k}=\mathbf{2})$

## Conversion Factor Assessment



Deviation from Isotropy in Liquid
Error $(\phi, \vartheta), \mathbf{f}=\mathbf{9 0 0} \mathbf{~ M H z}$



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

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle ( ${ }^{\circ}$ ) | 1.8 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

## Appendix: Modulation Calibration Parameters

| UID | Communication System Name |  | $\begin{gathered} \mathrm{A} \\ \mathrm{~dB} \end{gathered}$ | $\begin{gathered} B \\ d B \cup \mu V \end{gathered}$ | C | $\begin{gathered} \hline \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \mathrm{VR} \\ & \mathrm{mV} \end{aligned}$ | $\begin{aligned} & \text { Max } \\ & \text { Unc } \\ & (k=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 142.1 | $\pm 2.5$ \% |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 157.1 |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 143.0 |  |
| $\begin{aligned} & 10010- \\ & \text { CAA } \end{aligned}$ | SAR Validation (Square, $100 \mathrm{~ms}, 10 \mathrm{~ms}$ ) | X | 1.62 | 62.34 | 7.74 | 10.00 | 20.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.47 | 62.51 | 7.58 |  | 20.0 |  |
|  |  | Z | 1.74 | 63.23 | 8.42 |  | 20.0 |  |
| $\begin{aligned} & 10011- \\ & \mathrm{CAB} \end{aligned}$ | UMTS-FDD (WCDMA) | X | 0.82 | 65.36 | 13.43 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.01 | 68.19 | 15.53 |  | 150.0 |  |
|  |  | Z | 0.83 | 64.89 | 13.22 |  | 150.0 |  |
| $\begin{aligned} & 10012- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | X | 1.03 | 62.67 | 14.19 | 0.41 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.12 | 63.85 | 15.21 |  | 150.0 |  |
|  |  | Z | 1.03 | 62.50 | 14.16 |  | 150.0 |  |
| $\begin{aligned} & 10013- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps) | X | 4.54 | 66.46 | 16.76 | 1.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 66.78 | 17.00 |  | 150.0 |  |
|  |  | Z | 4.66 | 66.40 | 16.88 |  | 150.0 |  |
| $\begin{aligned} & 10021- \\ & \text { DAC } \end{aligned}$ | GSM-FDD (TDMA, GMSK) | X | 13.15 | 84.51 | 17.52 | 9.39 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 105.54 | 22.55 |  | 50.0 |  |
|  |  | Z | 100.00 | 109.08 | 24.59 |  | 50.0 |  |
| $\begin{aligned} & 10023- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0) | X | 7.05 | 77.63 | 15.35 | 9.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 104.89 | 22.31 |  | 50.0 |  |
|  |  | Z | 100.00 | 108.55 | 24.42 |  | 50.0 |  |
| $\begin{aligned} & 10024- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1) | X | 100.00 | 103.12 | 20.53 | 6.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 106.39 | 21.86 |  | 60.0 |  |
|  |  | Z | 100.00 | 108.56 | 23.07 |  | 60.0 |  |
| $\begin{aligned} & 10025- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0) | X | 3.34 | 64.62 | 22.65 | 12.57 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 5.12 | 80.55 | 32.48 |  | 50.0 |  |
|  |  | Z | 3.40 | 65.03 | 23.22 |  | 50.0 |  |
| $\begin{aligned} & 10026- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1) | X | 5.08 | 79.74 | 27.91 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 6.12 | 86.23 | 31.42 |  | 60.0 |  |
|  |  | Z | 5.62 | 82.16 | 29.24 |  | 60.0 |  |
| $\begin{aligned} & 10027- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | X | 100.00 | 101.64 | 19.06 | 4.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 109.60 | 22.50 |  | 80.0 |  |
|  |  | Z | 100.00 | 108.56 | 22.18 |  | 80.0 |  |
| $\begin{aligned} & 10028- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | X | 100.00 | 99.62 | 17.55 | 3.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 115.32 | 24.21 |  | 100.0 |  |
|  |  | Z | 100.00 | 107.61 | 21.03 |  | 100.0 |  |
| $\begin{aligned} & 10029- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | X | 3.55 | 72.28 | 23.51 | 7.80 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.97 | 75.71 | 25.59 |  | 80.0 |  |
|  |  | Z | 3.84 | 73.87 | 24.49 |  | 80.0 |  |
| $\begin{aligned} & 10030- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH1) | X | 2.93 | 72.58 | 11.67 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 104.73 | 20.69 |  | 70.0 |  |
|  |  | Z | 100.00 | 105.98 | 21.40 |  | 70.0 |  |
| $\begin{aligned} & 10031- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH3) | X | 0.19 | 60.00 | 3.86 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 108.46 | 20.17 |  | 100.0 |  |
|  |  | Z | 0.20 | 60.00 | 4.39 |  | 100.0 |  |


| $\begin{aligned} & 10032- \\ & \text { CAA } \end{aligned}$ | IEEE 802.15.1 Bluetooth (GFSK, DH5) | X | 8.28 | 60.36 | 1.45 | 1.17 | 100.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 125.60 | 25.79 |  | 100.0 |  |
|  |  | Z | 9.15 | 64.10 | 3.12 |  | 100.0 |  |
| $\begin{aligned} & \text { 10033- } \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | X | 3.18 | 74.95 | 16.76 | 5.30 | 70.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 16.17 | 99.83 | 25.75 |  | 70.0 |  |
|  |  | Z | 6.70 | 87.29 | 22.45 |  | 70.0 |  |
| $\begin{aligned} & 10034- \\ & \text { CAA } \end{aligned}$ | $\begin{aligned} & \text { IEEE 802.15.1 Bluetooth (PI/4-DQPSK, } \\ & \text { DH3) } \end{aligned}$ | X | 1.10 | 65.34 | 10.90 | 1.88 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 2.67 | 76.50 | 16.58 |  | 100.0 |  |
|  |  | Z | 1.54 | 69.44 | 13.90 |  | 100.0 |  |
| $\begin{aligned} & 10035- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (P//4-DQPSK, DH5) | X | 0.87 | 63.89 | 9.87 | 1.17 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.73 | 72.02 | 14.58 |  | 100.0 |  |
|  |  | Z | 1.13 | 66.49 | 12.17 |  | 100.0 |  |
| 10036-$\mathrm{CAA}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | X | 3.74 | 77.33 | 17.73 | 5.30 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 34.06 | 110.90 | 28.74 |  | 70.0 |  |
|  |  | Z | 9.80 | 93.25 | 24.40 |  | 70.0 |  |
| $\begin{aligned} & 10037- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | X | 1.04 | 64.82 | 10.64 | 1.88 | 100.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 2.27 | 74.65 | 15.89 |  | 100.0 |  |
|  |  | Z | 1.43 | 68.68 | 13.56 |  | 100.0 |  |
| $\begin{aligned} & 10038- \\ & \text { CAA } \\ & \hline \end{aligned}$ | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | X | 0.88 | 64.05 | 10.08 | 1.17 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 1.75 | 72.43 | 14.90 |  | 100.0 |  |
|  |  | Z | 1.13 | 66.71 | 12.40 |  | 100.0 |  |
| $\begin{aligned} & 10039- \\ & \mathrm{CAB} \end{aligned}$ | CDMA2000 (1xRTT, RC1) | X | 0.74 | 62,99 | 8.94 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.38 | 69.75 | 13.20 |  | 150.0 |  |
|  |  | Z | 0.98 | 64.89 | 10.73 |  | 150.0 |  |
| $\begin{aligned} & 10042- \\ & \text { CAB } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { IS-54 / IS-136 FDD (TDMA/FDM, P//4- } \\ & \text { DQPSK, Halfrate) } \end{aligned}$ | X | 2.54 | 68.84 | 11.04 | 7.78 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 102.42 | 20.46 |  | 50.0 |  |
|  |  | $Z$ | 100.00 | 104.71 | 21.76 |  | 50.0 |  |
| $\begin{aligned} & 10044- \\ & \text { CAA } \end{aligned}$ | IS-91/EIA/TIA-553 FDD (FDMA, FM) | X | 0.06 | 120.88 | 5.44 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.00 | 104.37 | 4.38 |  | 150.0 |  |
|  |  | Z | 0.08 | 121.43 | 6.73 |  | 150.0 |  |
| $\begin{aligned} & 10048- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | X | 4.91 | 69.00 | 13.47 | 13.80 | 25.0 | $\pm 9.6$ \% |
|  |  | Y | 7.93 | 75.14 | 15.14 |  | 25.0 |  |
|  |  | Z | 10.77 | 79.26 | 17.66 |  | 25.0 |  |
| $\begin{aligned} & 10049- \\ & \text { CAA } \\ & \hline \end{aligned}$ | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | X | 4.71 | 71.69 | 13.37 | 10.79 | 40.0 | $\pm 9.6$ \% |
|  |  | Y | 12.12 | 82.16 | 16.51 |  | 40.0 |  |
|  |  | Z | 15.08 | 85.95 | 18.75 |  | 40.0 |  |
| $\begin{aligned} & 10056- \\ & \text { CAA } \\ & \hline \end{aligned}$ | UMTS-TDD (TD-SCDMA, 1.28 Mcps ) | X | 9.20 | 83.60 | 20.05 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 119.47 | 30.42 |  | 50.0 |  |
|  |  | Z | 26.92 | 101.32 | 26.50 |  | 50.0 |  |
| $\begin{aligned} & 10058- \\ & \text { DAC } \end{aligned}$ | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | X | 2.97 | 69.27 | 21.35 | 6.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 3.27 | 71.77 | 22.91 |  | 100.0 |  |
|  |  | Z | 3.17 | 70.45 | 22.11 |  | 100.0 |  |
| $\begin{aligned} & 10059 \text { - } \\ & \text { CAB } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | X | 1.02 | 63.20 | 14.50 | 0.61 | 110.0 | $\pm 9.6$ \% |
|  |  | Y | 1.12 | 64.64 | 15.70 |  | 110.0 |  |
|  |  | Z | 1.03 | 63.16 | 14.59 |  | 110.0 |  |
| $\begin{aligned} & 10060- \\ & \mathrm{CAB} \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | X | 1.55 | 78.45 | 19.20 | 1.30 | 110.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 11.63 | 111.29 | 30.45 |  | 110.0 |  |
|  |  | Z | 2.11 | 82.91 | 21.03 |  | 110.0 |  |


| $\begin{aligned} & 10061- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | X | 1.39 | 70.50 | 17.86 | 2.04 | 110.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 1.94 | 76.74 | 21.24 |  | 110.0 |  |
|  |  | Z | 1.58 | 72.59 | 19.16 |  | 110.0 |  |
| $\begin{aligned} & 10062- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | X | 4.34 | 66.44 | 16.20 | 0.49 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.45 | 66.80 | 16.45 |  | 100.0 |  |
|  |  | Z | 4.46 | 66.35 | 16.27 |  | 100.0 |  |
| $\begin{aligned} & 10063- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | X | 4.35 | 66.52 | 16.28 | 0.72 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.46 | 66.88 | 16.54 |  | 100.0 |  |
|  |  | Z | 4.47 | 66.44 | 16.36 |  | 100.0 |  |
| $\begin{aligned} & 10064- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 12 Mbps) | X | 4.58 | 66.71 | 16.48 | 0.86 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.69 | 67.07 | 16.73 |  | 100.0 |  |
|  |  | Z | 4.73 | 66.68 | 16.59 |  | 100.0 |  |
| $\begin{aligned} & 10065- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 18 Mbps) | X | 4.45 | 66.52 | 16.53 | 1.21 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 66.89 | 16.79 |  | 100.0 |  |
|  |  | Z | 4.60 | 66.53 | 16.67 |  | 100.0 |  |
| $\begin{aligned} & 10066- \\ & \text { CAC } \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 24 Mbps) | X | 4.45 | 66.48 | 16.65 | 1.46 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.56 | 66.86 | 16.93 |  | 100.0 |  |
|  |  | Z | 4.61 | 66.54 | 16.84 |  | 100.0 |  |
| $\begin{aligned} & 10067- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 36 Mbps) | X | 4.73 | 66.77 | 17.13 | 2.04 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 67.12 | 17.40 |  | 100.0 |  |
|  |  | Z | 4.90 | 66.81 | 17.33 |  | 100.0 |  |
| $\begin{aligned} & 10068- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | X | 4.76 | 66.66 | 17.29 | 2.55 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.86 | 67.00 | 17.55 |  | 100.0 |  |
|  |  | Z | 4.92 | 66.73 | 17.50 |  | 100.0 |  |
| $\begin{aligned} & 10069- \\ & \mathrm{CAC} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps) | X | 4.81 | 66.68 | 17.46 | 2.67 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.92 | 67.01 | 17.74 |  | 100.0 |  |
|  |  | Z | 5.00 | 66.78 | 17.71 |  | 100.0 |  |
| $\begin{aligned} & 10071- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | X | 4.62 | 66.50 | 17.03 | 1.99 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.72 | 66.82 | 17.28 |  | 100.0 |  |
|  |  | Z | 4.75 | 66.47 | 17.18 |  | 100.0 |  |
| $\begin{aligned} & 10072- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | X | 4.56 | 66.67 | 17.18 | 2.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.66 | 67.03 | 17.45 |  | 100.0 |  |
|  |  | Z | 4.70 | 66.70 | 17.36 |  | 100.0 |  |
| $\begin{aligned} & 10073- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | X | 4.61 | 66.83 | 17.49 | 2.83 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 67.17 | 17.77 |  | 100.0 |  |
|  |  | Z | 4.75 | 66.85 | 17.68 |  | 100.0 |  |
| $\begin{array}{\|l\|} \hline 10074- \\ \mathrm{CAB} \\ \hline \end{array}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | X | 4.62 | 66.77 | 17.64 | 3.30 | 100.0 | $\pm 9.6$ \% |
|  |  | Y | 4.70 | 67.09 | 17.92 |  | 100.0 |  |
|  |  | Z | 4.74 | 66.75 | 17.83 |  | 100.0 |  |
| $\begin{aligned} & 10075- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | X | 4.63 | 66.75 | 17.86 | 3.82 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.71 | 67.06 | 18.15 |  | 90.0 |  |
|  |  | Z | 4.76 | 66.76 | 18.09 |  | 90.0 |  |
| $\begin{aligned} & 10076- \\ & \text { CAB } \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | X | 4.68 | 66.63 | 18.04 | 4.15 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.74 | 66.91 | 18.31 |  | 90.0 |  |
|  |  | Z | 4.79 | 66.61 | 18.24 |  | 90.0 |  |
| $\begin{aligned} & 10077- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | X | 4.71 | 66.72 | 18.15 | 4.30 | 90.0 | $\pm 9.6$ \% |
|  |  | Y | 4.77 | 66.99 | 18.42 |  | 90.0 |  |
|  |  | Z | 4.82 | 66.69 | 18.35 |  | 90.0 |  |


| $\begin{aligned} & 10081- \\ & \text { CAB } \end{aligned}$ | CDMA2000 (1xRTT, RC3) | X | 0.41 | 60.41 | 6.86 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.64 | 64.39 | 10.26 |  | 150.0 |  |
|  |  | Z | 0.51 | 61.51 | 8.28 |  | 150.0 |  |
| 10082CAB | IS-54 / IS-136 FDD (TDMA/FDM, Pl/4DQPSK, Fullrate) | X | 6.37 | 60.67 | 1.90 | 4.77 | 80.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 0.58 | 60.00 | 3.05 |  | 80.0 |  |
|  |  | Z | 0.60 | 60.00 | 3.10 |  | 80.0 |  |
| $\begin{aligned} & 10090- \\ & \text { DAC } \end{aligned}$ | GPRS-FDD (TDMA, GMSK, TN 0-4) | X | 100.00 | 103.19 | 20.57 | 6.56 | 60.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 106.40 | 21.88 |  | 60.0 |  |
|  |  | Z | 100.00 | 108.67 | 23.14 |  | 60.0 |  |
| $\begin{aligned} & 10097- \\ & \text { CAB } \end{aligned}$ | UMTS-FDD (HSDPA) | X | 1.61 | 66.98 | 14.45 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.83 | 68.94 | 15.87 |  | 150.0 |  |
|  |  | Z | 1.61 | 66.33 | 14.36 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10098- \\ \mathrm{CAB} \\ \hline \end{array}$ | UMTS-FDD (HSUPA, Subtest 2) | X | 1.57 | 66.91 | 14.41 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 1.80 | 68.88 | 15.85 |  | 150.0 |  |
|  |  | Z | 1.57 | 66.26 | 14.32 |  | 150.0 |  |
| 10099DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | X | 5.11 | 79.85 | 27.95 | 9.56 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 6.18 | 86.42 | 31.49 |  | 60.0 |  |
|  |  | Z | 5.66 | 82.29 | 29.29 |  | 60.0 |  |
| $\begin{aligned} & 10100- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 20 MHz, QPSK) | X | 2.72 | 68.86 | 15.96 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.98 | 70.42 | 16.85 |  | 150.0 |  |
|  |  | Z | 2.77 | 68.66 | 15.78 |  | 150.0 |  |
| $\begin{aligned} & 10101- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 20 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 2.94 | 66.71 | 15.42 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $\gamma$ | 3.09 | 67.54 | 15.94 |  | 150.0 |  |
|  |  | Z | 3.00 | 66.60 | 15.35 |  | 150.0 |  |
| $\begin{aligned} & 10102- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 20 \\ & \mathrm{MHz}, 64-\mathrm{QAM}) \end{aligned}$ | X | 3.05 | 66.78 | 15.55 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.19 | 67.54 | 16.04 |  | 150.0 |  |
|  |  | Z | 3.11 | 66.65 | 15.49 |  | 150.0 |  |
| $\begin{aligned} & 10103- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, QPSK) | X | 4.63 | 72.33 | 19.10 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.31 | 74.95 | 20.40 |  | 65.0 |  |
|  |  | Z | 5.01 | 73.33 | 19.72 |  | 65.0 |  |
| $\begin{aligned} & 10104- \\ & \text { CAF } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 16$-QAM) | X | 4.71 | 70.15 | 18.78 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.12 | 71.87 | 19.74 |  | 65.0 |  |
|  |  | Z | 4.99 | 70.84 | 19.32 |  | 65.0 |  |
| $\begin{aligned} & 10105- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 20 \\ & \mathrm{MHz}, 64-\mathrm{QAM}) \\ & \hline \end{aligned}$ | X | 4.62 | 69.52 | 18.79 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.98 | 71.08 | 19.67 |  | 65.0 |  |
|  |  | Z | 4.89 | 70.18 | 19.31 |  | 65.0 |  |
| $\begin{aligned} & \text { 10108- } \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK) | X | 2.32 | 68.23 | 15.74 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.56 | 69.77 | 16.68 |  | 150.0 |  |
|  |  | Z | 2.39 | 67.99 | 15.57 |  | 150.0 |  |
| $\begin{aligned} & 10109- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 10 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 2.57 | 66.62 | 15.17 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.73 | 67.56 | 15.82 |  | 150.0 |  |
|  |  | Z | 2.64 | 66.42 | 15.13 |  | 150.0 |  |
| $\begin{aligned} & 10110- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 1.82 | 67.31 | 15.00 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.06 | 69.08 | 16.19 |  | 150.0 |  |
|  |  | Z | 1.89 | 67.03 | 14.94 |  | 150.0 |  |
| $\begin{aligned} & 10111- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \mathrm{RB}, 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.27 | 67.56 | 15.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.50 | 68.95 | 16.11 |  | 150.0 |  |
|  |  | Z | 2.32 | 67.14 | 15.12 |  | 150.0 |  |


| 10112- $\mathrm{CAF}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 64-\mathrm{QAM}) \end{aligned}$ | X | 2.70 | 66.75 | 15.29 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.86 | 67.62 | 15.89 |  | 150.0 |  |
|  |  | Z | 2.77 | 66.52 | 15.24 |  | 150.0 |  |
| $\begin{aligned} & 10113- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 5 MHz , 64-QAM) | X | 2.41 | 67.80 | 15.29 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.64 | 69.12 | 16.24 |  | 150.0 |  |
|  |  | Z | 2.47 | 67.38 | 15.32 |  | 150.0 |  |
| 10114CAC | IEEE 802.1 n (HT Greenfield, 13.5 Mbps, BPSK) | X | 4.85 | 66.91 | 16.28 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.92 | 67.20 | 16.42 |  | 150.0 |  |
|  |  | Z | 4.93 | 66.80 | 16.23 |  | 150.0 |  |
| $\begin{aligned} & 10115- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 81 Mbps , 16-QAM) | X | 5.08 | 66.97 | 16.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.16 | 67.24 | 16.44 |  | 150.0 |  |
|  |  | Z | 5.19 | 66.91 | 16.30 |  | 150.0 |  |
| $\begin{aligned} & 10116- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 135 Mbps , 64-QAM) | X | 4.91 | 67.06 | 16.28 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.00 | 67.37 | 16.44 |  | 150.0 |  |
|  |  | Z | 5.02 | 67.01 | 16.26 |  | 150.0 |  |
| 10117CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps , BPSK) | X | 4.82 | 66.80 | 16.24 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 67.14 | 16.41 |  | 150.0 |  |
|  |  | Z | 4.92 | 66.75 | 16.22 |  | 150.0 |  |
| 10118-CAC | IEEE 802.11n (HT Mixed, 81 Mbps, 16QAM) | X | 5.15 | 67.18 | 16.42 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.23 | 67.42 | 16.54 |  | 150.0 |  |
|  |  | Z | 5.28 | 67.15 | 16.43 |  | 150.0 |  |
| 10119-CAC | IEEE 802.11n (HT Mixed, 135 Mbps , 64QAM) | X | 4.92 | 67.09 | 16.30 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.00 | 67.37 | 16.45 |  | 150.0 |  |
|  |  | Z | 5.02 | 67.00 | 16.27 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10140- \\ \text { CAE } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 3.06 | 66.79 | 15.45 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.21 | 67.57 | 15.95 |  | 150.0 |  |
|  |  | Z | 3.13 | 66.66 | 15.40 |  | 150.0 |  |
| 10141CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, 15 MHz, $64-Q A M$ ) | X | 3.19 | 67.01 | 15.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.34 | 67.73 | 16.14 |  | 150.0 |  |
|  |  | Z | 3.26 | 66.83 | 15.61 |  | 150.0 |  |
| 10142-$\mathrm{CAE}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 3 MHz , QPSK) | X | 1.53 | 66.71 | 13.85 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.82 | 69.13 | 15.54 |  | 150.0 |  |
|  |  | Z | 1.62 | 66.60 | 14.09 |  | 150.0 |  |
| $\begin{aligned} & 10143- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM) | X | 1.93 | 66.97 | 13.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.31 | 69.49 | 15.29 |  | 150.0 |  |
|  |  | Z | 2.06 | 67.05 | 14.07 |  | 150.0 |  |
| 10144-CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 1.68 | 64.38 | 11.67 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.94 | 66.13 | 13.09 |  | 150.0 |  |
|  |  | Z | 1.85 | 64.82 | 12.42 |  | 150.0 |  |
| $\begin{aligned} & 10145- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, QPSK) | X | 0.61 | 60.00 | 6.25 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.75 | 61.41 | 7.98 |  | 150.0 |  |
|  |  | Z | 0.75 | 60.75 | 7.63 |  | 150.0 |  |
| $\begin{aligned} & 10146- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \mathrm{MHz}, 16-\mathrm{QAM}) \end{aligned}$ | X | 0.82 | 60.00 | 5.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.92 | 60.25 | 6.35 |  | 150.0 |  |
|  |  | Z | 1.12 | 61.59 | 7.98 |  | 150.0 |  |
| $\begin{aligned} & 10147- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \text { MHz, } 64-Q A M) \end{aligned}$ | X | 0.84 | 60.00 | 5.89 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.96 | 60.55 | 6.61 |  | 150.0 |  |
|  |  | Z | 1.20 | 62.21 | 8.43 |  | 150.0 |  |


| 10149CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | $X$ | 2.58 | 66.69 | 15.22 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.74 | 67.63 | 15.87 |  | 150.0 |  |
| 10150- <br> CAE |  | Z | 2.65 | 66.49 | 15.18 |  | 150.0 |  |
|  | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | X | 2.71 | 66.82 | 15.33 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.87 | 67.69 | 15.94 |  | 150.0 |  |
|  |  | Z | 2.78 | 66.58 | 15.28 |  | 150.0 |  |
| $\begin{aligned} & 10151- \\ & \text { CAF } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK) | X | 4.58 | 74.10 | 19.83 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.45 | 77.40 | 21.46 |  | 65.0 |  |
|  |  | Z | 5.00 | 75.19 | 20.56 |  | 65.0 |  |
| $\begin{aligned} & 10152- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.21 | 69.89 | 18.16 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.65 | 71.84 | 19.30 |  | 65.0 |  |
|  |  | Z | 4.51 | 70.68 | 18.85 |  | 65.0 |  |
| $\begin{aligned} & 10153- \\ & \text { CAF } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM) | X | 4.55 | 71.06 | 19.09 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.01 | 72.96 | 20.18 |  | 65.0 |  |
|  |  | Z | 4.85 | 71.76 | 19.74 |  | 65.0 |  |
| $\begin{aligned} & 10154- \\ & \text { CAF } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | X | 1.85 | 67.65 | 15.22 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.10 | 69.48 | 16.44 |  | 150.0 |  |
|  |  | Z | 1.92 | 67.37 | 15.16 |  | 150.0 |  |
| $\begin{aligned} & 10155- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM) | X | 2.27 | 67.61 | 15.14 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.50 | 69.00 | 16.15 |  | 150.0 |  |
|  |  | Z | 2.33 | 67.17 | 15.15 |  | 150.0 |  |
| $\begin{aligned} & 10156- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK) | X | 1.31 | 65.90 | 12.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.64 | 68.88 | 14.94 |  | 150.0 |  |
|  |  | Z | 1.43 | 66.11 | 13.38 |  | 150.0 |  |
| $\begin{aligned} & 10157- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 5 MHz , 16-QAM) | X | 1.43 | 63.96 | 10.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 1.74 | 66.31 | 12.74 |  | 150.0 |  |
|  |  | Z | 1.63 | 64.73 | 11.94 |  | 150.0 |  |
| $\begin{aligned} & 10158- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | X | 2.42 | 67.89 | 15.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.65 | 69.22 | 16.31 |  | 150.0 |  |
|  |  | Z | 2.48 | 67.46 | 15.37 |  | 150.0 |  |
| $\begin{aligned} & 10159- \\ & \text { CAF } \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 1.49 | 64.13 | 11.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 1.82 | 66.66 | 12.95 |  | 150.0 |  |
|  |  | Z | 1.70 | 65.00 | 12.13 |  | 150.0 |  |
| $\begin{aligned} & 10160- \\ & \text { CAE } \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , QPSK) | X | 2.41 | 67.89 | 15.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.60 | 69.05 | 16.44 |  | 150.0 |  |
|  |  | Z | 2.48 | 67.64 | 15.56 |  | 150.0 |  |
| 10161CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 16-QAM) | X | 2.59 | 66.74 | 15.14 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.76 | 67.68 | 15.82 |  | 150.0 |  |
|  |  | Z | 2.66 | 66.50 | 15.14 |  | 150.0 |  |
| 10162. CAE | LTE-FDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM) | X | 2.70 | 67.00 | 15.31 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.87 | 67.91 | 15.97 |  | 150.0 |  |
|  |  | Z | 2.77 | 66.73 | 15.29 |  | 150.0 |  |
| $\begin{aligned} & 10166- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | X | 2.91 | 67.87 | 18.41 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 3.09 | 68.81 | 18.75 |  | 150.0 |  |
|  |  | Z | 3.17 | 68.75 | 19.02 |  | 150.0 |  |
| $\begin{aligned} & 10167- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \mathrm{RB}, 1.4 \mathrm{MHz} \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.24 | 69.92 | 18.52 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.65 | 71.74 | 19.22 |  | 150.0 |  |
|  |  | Z | 3.63 | 71.08 | 19.26 |  | 150.0 |  |


| $\begin{aligned} & 10168- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.66 | 72.66 | 20.22 | 3.01 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.14 | 74.51 | 20.83 |  | 150.0 |  |
|  |  | Z | 4.11 | 73.91 | 20.95 |  | 150.0 |  |
| $\begin{aligned} & \text { 10169- } \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.32 | 65.83 | 17.44 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.49 | 67.28 | 18.07 |  | 150.0 |  |
|  |  | Z | 2.46 | 66.70 | 18.14 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10170- \\ \text { CAE } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.74 | 70.01 | 19.35 | 3.01 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.21 | 72.95 | 20.48 |  | 150.0 |  |
|  |  | Z | 3.00 | 71.51 | 20.32 |  | 150.0 |  |
| 10171AAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.31 | 66.53 | 16.58 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.63 | 68.93 | 17.60 |  | 150.0 |  |
|  |  | Z | 2.50 | 67.67 | 17.42 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10172- \\ \mathrm{CAF} \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz}, \\ & \text { QPSK) } \end{aligned}$ | X | 2.90 | 74.23 | 22.35 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.68 | 79.90 | 24.98 |  | 65.0 |  |
|  |  | Z | 3.91 | 80.19 | 25.56 |  | 65.0 |  |
| $\begin{aligned} & 10173- \\ & \text { CAF } \\ & \hline \end{aligned}$ | ```LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)``` | X | 3.92 | 78.79 | 22.40 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.85 | 89.50 | 26.38 |  | 65.0 |  |
|  |  | Z | 6.70 | 89.11 | 27.06 |  | 65.0 |  |
| $\begin{aligned} & 10174- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 20 \mathrm{MHz} \text {, } \\ & 64-Q A M) \end{aligned}$ | X | 2.90 | 73.28 | 19.67 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.51 | 84.77 | 24.11 |  | 65.0 |  |
|  |  | Z | 4.93 | 82.66 | 24.17 |  | 65.0 |  |
| $\begin{aligned} & 10175- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 2.30 | 65.58 | 17.20 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.47 | 67.02 | 17.83 |  | 150.0 |  |
|  |  | Z | 2.44 | 66.43 | 17.89 |  | 150.0 |  |
| $\begin{aligned} & 10176- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & 16 \text {-QAM) } \end{aligned}$ | X | 2.74 | 70.03 | 19.36 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.21 | 72.97 | 20.49 |  | 150.0 |  |
|  |  | Z | 3.00 | 71.53 | 20.33 |  | 150.0 |  |
| 10177-$\mathrm{CAH}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 5 \mathrm{MHz}_{\text {, }} \\ & \text { QPSK) } \end{aligned}$ | X | 2.31 | 65.68 | 17.27 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.48 | 67.13 | 17.91 |  | 150.0 |  |
|  |  | Z | 2.45 | 66.56 | 17.98 |  | 150.0 |  |
| $\begin{aligned} & 10178- \\ & \mathrm{CAF} \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , $16-$ QAM) | X | 2.73 | 69.91 | 19.28 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.19 | 72.83 | 20.41 |  | 150.0 |  |
|  |  | Z | 2.98 | 71.36 | 20.23 |  | 150.0 |  |
| $\begin{aligned} & 10179- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 64-OAM) } \end{aligned}$ | X | 2.50 | 68.14 | 17.82 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.89 | 70.84 | 18.91 |  | 150.0 |  |
|  |  | Z | 2.72 | 69.48 | 18.74 |  | 150.0 |  |
| $\begin{aligned} & 10180- \\ & \text { CAF } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 64QAM) | X | 2.31 | 66.50 | 16.56 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.63 | 68.90 | 17.57 |  | 150.0 |  |
|  |  | Z | 2.50 | 67.63 | 17.39 |  | 150.0 |  |
| 10181-CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.31 | 65.67 | 17.27 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.48 | 67.11 | 17.90 |  | 150.0 |  |
|  |  | Z | 2.45 | 66.54 | 17.97 |  | 150.0 |  |
| $\begin{aligned} & 10182- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.73 | 69.88 | 19.27 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.19 | 72.81 | 20.40 |  | 150.0 |  |
|  |  | Z | 2.98 | 71.34 | 20.21 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10183- \\ \text { AAD } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 15 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.31 | 66.48 | 16.55 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.63 | 68.87 | 17.56 |  | 150.0 |  |
|  |  | Z | 2.49 | 67.61 | 17.37 |  | 150.0 |  |

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| 10184CAE | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 2.32 | 65.70 | 17.29 | 3.01 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 2.49 | 67.15 | 17.92 |  | 150.0 |  |
| 10185- <br> CAE |  | Z | 2.46 | 66.58 | 17.99 |  | 150.0 |  |
|  | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, $16-$ QAM) | X | 2.74 | 69.95 | 19.31 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 3.20 | 72.88 | 20.43 |  | 150.0 |  |
|  |  | Z | 2.99 | 71.41 | 20.26 |  | 150.0 |  |
| $\begin{aligned} & 10186- \\ & \text { AAE } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 3 MHz , $64-$ QAM) | X | 2.32 | 66.53 | 16.58 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.64 | 68.94 | 17.60 |  | 150.0 |  |
|  |  | Z | 2.51 | 67.67 | 17.41 |  | 150.0 |  |
| $\begin{aligned} & 10187- \\ & \mathrm{CAF} \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | X | 2.33 | 65.78 | 17.37 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.50 | 67.22 | 18.00 |  | 150.0 |  |
|  |  | Z | 2.47 | 66.64 | 18.07 |  | 150.0 |  |
| $\begin{aligned} & 10188- \\ & \text { CAF } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-FDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.80 | 70.47 | 19.65 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 3.29 | 73.46 | 20.79 |  | 150.0 |  |
|  |  | Z | 3.07 | 72.01 | 20.64 |  | 150.0 |  |
| $\begin{aligned} & 10189- \\ & \text { AAF } \end{aligned}$ | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz , 64-QAM) | X | 2.35 | 66.85 | 16.82 | 3.01 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.69 | 69.31 | 17.86 |  | 150.0 |  |
|  |  | Z | 2.55 | 68.03 | 17.68 |  | 150.0 |  |
| $\begin{aligned} & 10193- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 6.5 Mbps , BPSK) | X | 4.23 | 66.54 | 15.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.33 | 66.90 | 16.14 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.32 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & 10194- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 39 Mbps , 16-QAM) | X | 4.36 | 66.75 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 67.12 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.58 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10195- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Greenfield, 65 Mbps , 64-QAM) | X | 4.39 | 66.76 | 16.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 67.13 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.50 | 66.61 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10196- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 6.5 Mbps , BPSK) | X | 4.21 | 66.52 | 15.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.32 | 66.89 | 16.12 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.33 | 15.87 |  | 150.0 |  |
| $\begin{aligned} & 10197- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 39 Mbps , 16QAM) | X | 4.37 | 66.75 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.48 | 67.12 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.48 | 66.59 | 16.02 |  | 150.0 |  |
| $\begin{aligned} & 10198- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 65 Mbps, 64QAM) | X | 4.38 | 66.75 | 16.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 67.13 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.50 | 66.62 | 16.04 |  | 150.0 |  |
| $\begin{aligned} & 10219 \cdots \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | X | 4.16 | 66.56 | 15.85 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.27 | 66.93 | 16.10 |  | 150.0 |  |
|  |  | $Z$ | 4.26 | 66.35 | 15.83 |  | 150.0 |  |
| $\begin{aligned} & 10220- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 43.3 Mbps , 16 QAM) | X | 4.36 | 66.72 | 16.03 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.47 | 67.08 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.47 | 66.56 | 16.01 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10221- \\ \text { CAC } \\ \hline \end{array}$ | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64QAM) | X | 4.40 | 66.71 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.51 | 67.07 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.56 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10222- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 15 Mbps , BPSK) | X | 4.80 | 66.80 | 16.23 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.88 | 67.12 | 16.39 |  | 150.0 |  |
|  |  | Z | 4.89 | 66.72 | 16.20 |  | 150.0 |  |


| $\begin{aligned} & 10223- \\ & \text { CAC } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 90 Mbps , 16QAM) | X | 5.04 | 66.95 | 16.32 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.14 | 67.29 | 16.49 |  | 150.0 |  |
|  |  | Z | 5.18 | 66.99 | 16.36 |  | 150.0 |  |
| $\begin{aligned} & 10224- \\ & \text { CAC } \end{aligned}$ | IEEE 802.11n (HT Mixed, 150 Mbps , 64QAM) | X | 4.84 | 66.92 | 16.22 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.92 | 67.24 | 16.38 |  | 150.0 |  |
|  |  | Z | 4.93 | 66.82 | 16.18 |  | 150.0 |  |
| $\begin{aligned} & 10225- \\ & \mathrm{CAB} \\ & \hline \end{aligned}$ | UMTS-FDD (HSPA+) | X | 2.46 | 65.56 | 14.20 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.62 | 66.44 | 14.96 |  | 150.0 |  |
|  |  | Z | 2.55 | 65.41 | 14.45 |  | 150.0 |  |
| $\begin{aligned} & \text { 10226- } \\ & \text { CAA } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.12 | 79.74 | 22.87 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.38 | 90.96 | 26.97 |  | 65.0 |  |
|  |  | Z | 7.19 | 90.56 | 27.66 |  | 65.0 |  |
| $\begin{aligned} & \hline 10227- \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.10 | 78.95 | 21.90 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 7.43 | 89.71 | 25.78 |  | 65.0 |  |
|  |  | Z | 7.75 | 90.70 | 26.99 |  | 65.0 |  |
| $\begin{aligned} & 10228- \\ & \text { CAA } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 1.4 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.12 | 75.94 | 23.15 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.06 | 82.01 | 25.85 |  | 65.0 |  |
|  |  | Z | 4.25 | 82.24 | 26.47 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10229- \\ \text { CAC } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , 16QAM) | X | 3.94 | 78.88 | 22.44 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.91 | 89.62 | 26.42 |  | 65.0 |  |
|  |  | Z | 6.76 | 89.24 | 27.11 |  | 65.0 |  |
| $\begin{aligned} & 10230- \\ & \text { CAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64QAM) | X | 3.89 | 78.03 | 21.47 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.86 | 88.27 | 25.23 |  | 65.0 |  |
|  |  | Z | 7.16 | 89.19 | 26.40 |  | 65.0 |  |
| $\begin{aligned} & 10231- \\ & \text { CAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 3.03 | 75.32 | 22.81 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.92 | 81.25 | 25.48 |  | 65.0 |  |
|  |  | Z | 4.10 | 81.44 | 26.07 |  | 65.0 |  |
| $\begin{aligned} & 10232- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16 QAM) | X | 3.94 | 78.86 | 22.44 | 6.02 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 6.89 | 89.60 | 26.42 |  | 65.0 |  |
|  |  | Z | 6.74 | 89.21 | 27.10 |  | 65.0 |  |
| $\begin{aligned} & 10233- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64QAM) | X | 3.88 | 77.99 | 21.46 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.83 | 88.22 | 25.21 |  | 65.0 |  |
|  |  | Z | 7.13 | 89.13 | 26.38 |  | 65.0 |  |
| $\begin{aligned} & 10234- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK) | X | 2.96 | 74.84 | 22.48 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.82 | 80.66 | 25.12 |  | 65.0 |  |
|  |  | Z | 4.00 | 80.82 | 25.70 |  | 65.0 |  |
| $\begin{aligned} & 10235- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz}_{1} \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.94 | 78.87 | 22.44 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.90 | 89.63 | 26.43 |  | 65.0 |  |
|  |  | Z | 6.75 | 89.23 | 27.11 |  | 65.0 |  |
| $\begin{aligned} & 10236 \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.92 | 78.11 | 21.50 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.93 | 88.43 | 25.27 |  | 65.0 |  |
|  |  | Z | 7.23 | 89.34 | 26.44 |  | 65.0 |  |
| $\begin{aligned} & 10237- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | X | 3.03 | 75.32 | 22.81 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.92 | 81,27 | 25.49 |  | 65.0 |  |
|  |  | Z | 4.10 | 81.45 | 26.08 |  | 65.0 |  |
| $\begin{aligned} & 10238- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \text { RB, } 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.93 | 78.83 | 22.43 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.87 | 89.57 | 26.41 |  | 65.0 |  |
|  |  | Z | 6.72 | 89.17 | 27.08 |  | 65.0 |  |


| $\begin{aligned} & \text { 10239- } \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 1 \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.87 | 77.95 | 21.45 | 6.02 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 6.80 | 88.17 | 25.20 |  | 65.0 |  |
|  |  | Z | 7.10 | 89.08 | 26.37 |  | 65.0 |  |
| $\begin{aligned} & 10240- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | X | 3.02 | 75.30 | 22.81 | 6.02 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.91 | 81.25 | 25.48 |  | 65.0 |  |
|  |  | Z | 4.09 | 81.42 | 26.07 |  | 65.0 |  |
| $\begin{aligned} & 10241- \\ & \mathrm{CAA} \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 5.47 | 76.60 | 23.52 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 6.28 | 79.70 | 24.95 |  | 65.0 |  |
|  |  | Z | 6.08 | 77.98 | 24.56 |  | 65.0 |  |
| $\begin{aligned} & 10242- \\ & \text { CAA } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz}, \\ & \text { 64-QAM) } \end{aligned}$ | X | 5.17 | 75.55 | 22.99 | 6.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.96 | 78.71 | 24.47 |  | 65.0 |  |
|  |  | Z | 5.82 | 77.10 | 24.09 |  | 65.0 |  |
| $\begin{aligned} & 10243- \\ & \text { CAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 1.4 \mathrm{MHz} \text {, } \\ & \text { QPSK) } \end{aligned}$ | X | 4.47 | 72.66 | 22.57 | 6.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.85 | 74.66 | 23.64 |  | 65.0 |  |
|  |  | Z | 4.89 | 73.70 | 23.43 |  | 65.0 |  |
| $\begin{aligned} & 10244- \\ & \text { CAC } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.59 | 65.60 | 11.95 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.16 | 68.30 | 13.59 |  | 65.0 |  |
|  |  | Z | 3.94 | 71.58 | 16.14 |  | 65.0 |  |
| $\begin{array}{\|l} \hline 10245- \\ \text { CAC } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.56 | 65.23 | 11.69 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.08 | 67.71 | 13.25 |  | 65.0 |  |
|  |  | Z | 3.80 | 70.75 | 15.70 |  | 65.0 |  |
| $\begin{aligned} & \hline 10246- \\ & \text { CAC } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 2.30 | 67.33 | 13.29 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.40 | 73.14 | 16.55 |  | 65.0 |  |
|  |  | Z | 3.20 | 71.92 | 16.41 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10247- \\ \text { CAE } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 2.93 | 67.28 | 14.07 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.57 | 70.51 | 16.14 |  | 65.0 |  |
|  |  | Z | 3.50 | 69.72 | 16.15 |  | 65.0 |  |
| 10248-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 5 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 2.93 | 66.83 | 13.84 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 3.51 | 69.74 | 15.76 |  | 65.0 |  |
|  |  | Z | 3.49 | 69.17 | 15.87 |  | 65.0 |  |
| $\begin{aligned} & 10249- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 3.40 | 72.89 | 17.31 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.05 | 79.62 | 20.60 |  | 65.0 |  |
|  |  | Z | 4.35 | 76.73 | 19.72 |  | 65.0 |  |
| $\begin{aligned} & 10250- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 10 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.07 | 71.77 | 18.68 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 74.35 | 20.17 |  | 65.0 |  |
|  |  | Z | 4.43 | 72.91 | 19.73 |  | 65.0 |  |
| 10251-$\mathrm{CAE}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 10 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 3.86 | 69.66 | 17.25 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.37 | 71.98 | 18.68 |  | 65.0 |  |
|  |  | Z | 4.24 | 70.85 | 18.35 |  | 65.0 |  |
| $\begin{aligned} & 10252- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , QPSK) | X | 4.28 | 75.56 | 20.13 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.50 | 80.28 | 22.41 |  | 65.0 |  |
|  |  | Z | 4.84 | 77.34 | 21.32 |  | 65.0 |  |
| $\begin{aligned} & 10253- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 4.17 | 69.62 | 17.88 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.59 | 71.50 | 19.03 |  | 65.0 |  |
|  |  | Z | 4.46 | 70.34 | 18.61 |  | 65.0 |  |
| $\begin{aligned} & 10254- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 50 \% \mathrm{RB}, 15 \mathrm{MHz} \text {, } \\ & \text { 64-QAM) } \end{aligned}$ | X | 4.46 | 70.60 | 18.66 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.90 | 72.45 | 19.77 |  | 65.0 |  |
|  |  | Z | 4.75 | 71.28 | 19.37 |  | 65.0 |  |


| $\begin{aligned} & 10255- \\ & \text { CAE } \end{aligned}$ | $\text { LTE-TDD (SC-FDMA, } 50 \% \text { RB, } 15 \mathrm{MHz} \text {, }$ QPSK) | X | 4.40 | 73.51 | 19.69 | 3.98 | 65.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.16 | 76.59 | 21.27 |  | 65.0 |  |
|  |  | Z | 4.77 | 74.49 | 20.43 |  | 65.0 |  |
| $\begin{aligned} & \text { 10256- } \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 16-\mathrm{QAM}$ ) | X | 1.88 | 62.21 | 8.80 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.16 | 63.72 | 9.95 |  | 65.0 |  |
|  |  | Z | 2.68 | 66.18 | 12.27 |  | 65.0 |  |
| $\begin{aligned} & 10257- \\ & \text { CAA } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 1.87 | 61.92 | 8.53 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 2.13 | 63.28 | 9.61 |  | 65.0 |  |
|  |  | Z | 2.60 | 65.47 | 11.78 |  | 65.0 |  |
| $\begin{aligned} & 10258- \\ & \text { CAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 1.4 MHz, QPSK) | X | 1.63 | 62.98 | 9.76 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 2.11 | 66.24 | 12.11 |  | 65.0 |  |
|  |  | Z | 2.20 | 66.42 | 12.68 |  | 65.0 |  |
| $\begin{aligned} & 10259- \\ & \text { CAC } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 3 \mathrm{MHz} \text {, } \\ & \text { 16-QAM) } \end{aligned}$ | X | 3.37 | 69.09 | 15.81 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.03 | 72.21 | 17.73 |  | 65.0 |  |
|  |  | Z | 3.88 | 71.08 | 17.53 |  | 65.0 |  |
| $\begin{aligned} & 10260- \\ & \text { CAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 3.41 | 68.89 | 15.70 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.05 | 71.86 | 17.55 |  | 65.0 |  |
|  |  | Z | 3.92 | 70.83 | 17.40 |  | 65.0 |  |
| $\begin{aligned} & 10261- \\ & \text { CAC } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | X | 3.65 | 73.54 | 18.24 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.99 | 79.08 | 21.01 |  | 65.0 |  |
|  |  | Z | 4.36 | 76.25 | 20.08 |  | 65.0 |  |
| $\begin{aligned} & \hline 10262- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , | X | 4.05 | 71.68 | 18.62 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.63 | 74.27 | 20.11 |  | 65.0 |  |
|  |  | Z | 4.42 | 72.84 | 19.67 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10263- \\ \text { CAE } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | X | 3.85 | 69.65 | 17.25 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.36 | 71.96 | 18.67 |  | 65.0 |  |
|  |  | Z | 4.23 | 70.83 | 18.35 |  | 65.0 |  |
| $\begin{aligned} & 10264- \\ & \text { CAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | X | 4.23 | 75.35 | 20.01 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.43 | 80.04 | 22.29 |  | 65.0 |  |
|  |  | Z | 4.79 | 77.13 | 21.21 |  | 65.0 |  |
| $\begin{array}{\|l\|} \hline 10265- \\ \text { CAE } \\ \hline \end{array}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 16 \text {-QAM) } \end{aligned}$ | X | 4.21 | 69.90 | 18.16 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 4.65 | 71.84 | 19.30 |  | 65.0 |  |
|  |  | Z | 4.51 | 70.68 | 18.86 |  | 65.0 |  |
| $\begin{aligned} & 10266- \\ & \text { CAE } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 10 \\ & \mathrm{MHz}, 64 \text {-QAM) } \end{aligned}$ | X | 4.55 | 71.05 | 19.08 | 3.98 | 65.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.00 | 72.95 | 20.16 |  | 65.0 |  |
|  |  | Z | 4.85 | 71.75 | 19.72 |  | 65.0 |  |
| $\begin{aligned} & 10267- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, QPSK) | X | 4.57 | 74.06 | 19.81 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.43 | 77.35 | 21.43 |  | 65.0 |  |
|  |  | Z | 4.99 | 75.14 | 20.54 |  | 65.0 |  |
| $\begin{aligned} & 10268- \\ & \text { CAE } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 15 \\ & \text { MHz. 16-QAM) } \end{aligned}$ | X | 4.89 | 70.28 | 18.92 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.29 | 71.90 | 19.82 |  | 65.0 |  |
|  |  | Z | 5.16 | 70.86 | 19.41 |  | 65.0 |  |
| $\begin{aligned} & 10269- \\ & \text { CAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 $\mathrm{MHz}, 64-\mathrm{QAM}$ ) | X | 4.93 | 70.03 | 18.82 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.31 | 71.54 | 19.69 |  | 65.0 |  |
|  |  | Z | 5.18 | 70.53 | 19.29 |  | 65.0 |  |
| $\begin{aligned} & 10270- \\ & \mathrm{CAE} \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK) | X | 4.82 | 72.26 | 19.25 | 3.98 | 65.0 | $\pm 9.6$ \% |
|  |  | Y | 5.40 | 74.50 | 20.39 |  | 65.0 |  |
|  |  | Z | 5.12 | 72.93 | 19.74 |  | 65.0 |  |


| $\begin{aligned} & 10274- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | X | 2.30 | 66.08 | 14.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 2.48 | 67.13 | 15.07 |  | 150.0 |  |
|  |  | Z | 2.37 | 65.78 | 14.35 |  | 150.0 |  |
| $\begin{aligned} & 10275- \\ & \text { CAB } \\ & \hline \end{aligned}$ | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | X | 1.33 | 66.42 | 14.09 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.55 | 68.66 | 15.67 |  | 150.0 |  |
|  |  | Z | 1.35 | 65.99 | 13.99 |  | 150.0 |  |
| $\begin{aligned} & 10277- \\ & \text { CAA } \\ & \hline \end{aligned}$ | PHS (QPSK) | X | 1.44 | 58.96 | 4.35 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.29 | 58.94 | 4.16 |  | 50.0 |  |
|  |  | Z | 1.60 | 59.77 | 5.29 |  | 50.0 |  |
| $\begin{aligned} & 10278- \\ & \text { CAA } \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.5) | X | 2.42 | 63.55 | 9.32 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.50 | 65.00 | 10.23 |  | 50.0 |  |
|  |  | Z | 3.00 | 66.61 | 11.73 |  | 50.0 |  |
| $\begin{aligned} & 10279- \\ & \text { CAA } \end{aligned}$ | PHS (QPSK, BW 884MHz, Rolloff 0.38) | X | 2.47 | 63.72 | 9.48 | 9.03 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.58 | 65.28 | 10.45 |  | 50.0 |  |
|  |  | Z | 3.09 | 66.89 | 11.94 |  | 50.0 |  |
| $\begin{array}{\|l} \hline 10290- \\ \text { AAB } \\ \hline \end{array}$ | CDMA2000, RC1, SO55, Full Rate | X | 0.64 | 61.56 | 7.87 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.98 | 65.79 | 11.09 |  | 150.0 |  |
|  |  | Z | 0.84 | 63.19 | 9.57 |  | 150.0 |  |
| $\begin{aligned} & 10291- \\ & A A B \end{aligned}$ | CDMA2000, RC3, SO55, Full Rate | X | 0.41 | 60.33 | 6.79 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.62 | 64.18 | 10.12 |  | 150.0 |  |
|  |  | Z | 0.50 | 61.40 | 8.20 |  | 150.0 |  |
| $\begin{aligned} & 10292- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO32, Full Rate | X | 0.46 | 61.89 | 7.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.01 | 70.37 | 13.40 |  | 150.0 |  |
|  |  | Z | 0.57 | 63.19 | 9.51 |  | 150.0 |  |
| $\begin{aligned} & 10293- \\ & \text { AAB } \\ & \hline \end{aligned}$ | CDMA2000, RC3, SO3, Full Rate | X | 0.64 | 65.03 | 10.07 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 89.66 | 20.54 |  | 150.0 |  |
|  |  | Z | 0.76 | 66.38 | 11.57 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10295- \\ \mathrm{AAB} \\ \hline \end{array}$ | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | X | 14.73 | 88.54 | 22.30 | 9.03 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 21.95 | 97.75 | 26.07 |  | 50.0 |  |
|  |  | Z | 14.97 | 91.80 | 24.79 |  | 50.0 |  |
| $\begin{array}{\|l\|} \hline 10297- \\ \text { AAD } \\ \hline \end{array}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | X | 2.34 | 68.34 | 15.82 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.58 | 69.89 | 16.76 |  | 150.0 |  |
|  |  | Z | 2.40 | 68.08 | 15.64 |  | 150.0 |  |
| 10298-$\mathrm{AAD}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK) | X | 0.86 | 62.29 | 9.16 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.16 | 65.45 | 11.69 |  | 150.0 |  |
|  |  | Z | 1.05 | 63.56 | 10.60 |  | 150.0 |  |
| $\begin{aligned} & 10299- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \%$ RB, 3 MHz , 16-QAM) | X | 1.14 | 61.76 | 8.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.41 | 63.51 | 9.50 |  | 150.0 |  |
|  |  | Z | 1.73 | 65.72 | 11.49 |  | 150.0 |  |
| $\begin{aligned} & 10300- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | X | 0.97 | 60.07 | 6.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.14 | 61.11 | 7.49 |  | 150.0 |  |
|  |  | Z | 1.33 | 62.21 | 8.89 |  | 150.0 |  |
| $\begin{aligned} & 10301- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5ms, 10 MHz, QPSK, PUSC) | X | 4.13 | 64.55 | 16.56 | 4.17 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.26 | 65.00 | 16.97 |  | 50.0 |  |
|  |  | Z | 4.39 | 64.86 | 16.90 |  | 50.0 |  |
| $\begin{aligned} & 10302- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 5ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | X | 4.66 | 65.38 | 17.39 | 4.96 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.76 | 65.70 | 17.72 |  | 50.0 |  |
|  |  | Z | 4.88 | 65.46 | 17.59 |  | 50.0 |  |


| 10303- <br> AAA | IEEE 802.16 e WiMAX ( $31: 15,5 \mathrm{~ms}$, 10MHz, 64QAM, PUSC) | X | 4.45 | 65.36 | 17.40 | 4.96 | 50.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.51 | 65.30 | 17.48 |  | 50.0 |  |
|  |  | Z | 4.62 | 65.06 | 17.37 |  | 50.0 |  |
| $\begin{aligned} & 10304- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16 e WiMAX ( $29: 18,5 \mathrm{~ms}$, 10MHz, 64QAM, PUSC) | X | 4.25 | 64.98 | 16.73 | 4.17 | 50.0 | $\pm 9.6$ \% |
|  |  | Y | 4.36 | 65.33 | 17.07 |  | 50.0 |  |
|  |  | Z | 4.45 | 64.98 | 16.90 |  | 50.0 |  |
| $\begin{aligned} & \text { 10305- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.16 e WIMAX ( $31: 15,10 \mathrm{~ms}$, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 15 symbols) | X | 3.81 | 66.28 | 17.81 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 3.76 | 65.91 | 18.03 |  | 35.0 |  |
|  |  | Z | 4.04 | 66.66 | 18.48 |  | 35.0 |  |
| $\begin{aligned} & 10306- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WIMAX ( $29: 18,10 \mathrm{~ms}$, $10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 18 symbols) | X | 4.18 | 65.73 | 17.92 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.17 | 65.55 | 18.11 |  | 35.0 |  |
|  |  | Z | 4.39 | 65.94 | 18.38 |  | 35.0 |  |
| $\begin{aligned} & 10307- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10ms, 10 MHz , QPSK, PUSC, 18 symbols) | X | 4.05 | 65.69 | 17.78 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.04 | 65.48 | 17.96 |  | 35.0 |  |
|  |  | Z | 4.27 | 65.96 | 18.27 |  | 35.0 |  |
| $\begin{aligned} & 10308- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, PUSC) | X | 4.03 | 65.87 | 17.91 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.01 | 65.64 | 18.09 |  | 35.0 |  |
|  |  | Z | 4.25 | 66.15 | 18.40 |  | 35.0 |  |
| $\begin{aligned} & 10309- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10 ms , $10 \mathrm{MHz}, 16 \mathrm{QAM}$, AMC $2 \times 3,18$ symbols) | X | 4.18 | 65.77 | 18.00 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.19 | 65.61 | 18.20 |  | 35.0 |  |
|  |  | Z | 4.42 | 66.06 | 18.49 |  | 35.0 |  |
| $\begin{aligned} & 10310- \\ & \text { AAA } \end{aligned}$ | IEEE 802.16e WiMAX (29:18, 10 ms , 10 MHz , QPSK, AMC $2 \times 3,18$ symbols) | X | 4.13 | 65.78 | 17.90 | 6.02 | 35.0 | $\pm 9.6$ \% |
|  |  | Y | 4.12 | 65.57 | 18.08 |  | 35.0 |  |
|  |  | Z | 4.34 | 65.98 | 18.35 |  | 35.0 |  |
| $\begin{aligned} & 10311- \\ & \text { AAD } \end{aligned}$ | LTE-FDD (SC-FDMA, 100\% RB, 15 MHz, QPSK) | X | 2.69 | 67.62 | 15.56 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.94 | 69.08 | 16.39 |  | 150.0 |  |
|  |  | Z | 2.75 | 67.40 | 15.38 |  | 150.0 |  |
| 10313- <br> AAA | iDEN 1:3 | X | 1.80 | 67.21 | 13.40 | 6.99 | 70.0 | $\pm 9.6$ \% |
|  |  | Y | 2.78 | 73.35 | 16.36 |  | 70.0 |  |
|  |  | Z | 2.09 | 69.09 | 14.51 |  | 70.0 |  |
| 10314- <br> AAA | iDEN 1:6 | X | 3.26 | 75.39 | 19.57 | 10.00 | 30.0 | $\pm 9.6$ \% |
|  |  | Y | 5.56 | 85.97 | 24.05 |  | 30.0 |  |
|  |  | Z | 4.04 | 79.23 | 21.39 |  | 30.0 |  |
| $\begin{aligned} & 10315- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96 pc duty cycle) | X | 0.96 | 62.72 | 14.16 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 1.05 | 63.94 | 15.22 |  | 150.0 |  |
|  |  | Z | 0.96 | 62.45 | 14.04 |  | 150.0 |  |
| $\begin{aligned} & 10316- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, 6 Mbps, 96 pc duty cycle) | X | 4.24 | 66.42 | 15.96 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.35 | 66.80 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.36 | 66.32 | 16.01 |  | 150.0 |  |
| $10317$ <br> AAC | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96 pc duty cycle) | X | 4.24 | 66.42 | 15.96 | 0.17 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.35 | 66.80 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.36 | 66.32 | 16.01 |  | 150.0 |  |
| $\begin{aligned} & 10400- \\ & \text { AAD } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99 pc duty cycle) | X | 4.31 | 66.71 | 15.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.43 | 67.11 | 16.24 |  | 150.0 |  |
|  |  | Z | 4.43 | 66.60 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & 10401- \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle) | X | 4.98 | 66.52 | 16.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.08 | 66.87 | 16.24 |  | 150.0 |  |
|  |  | Z | 5.16 | 66.70 | 16.18 |  | 150.0 |  |


| $\begin{aligned} & 10402- \\ & \text { AAD } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle) | X | 5.36 | 67.14 | 16.28 | 0.00 | 150.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.44 | 67.45 | 16.42 |  | 150.0 |  |
|  |  | Z | 5.45 | 67.07 | 16.25 |  | 150.0 |  |
| $\begin{aligned} & 10403- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. 0) | X | 0.64 | 61.56 | 7.87 | 0.00 | 115.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.98 | 65.79 | 11.09 |  | 115.0 |  |
|  |  | Z | 0.84 | 63.19 | 9.57 |  | 115.0 |  |
| $\begin{aligned} & 10404- \\ & \text { AAB } \end{aligned}$ | CDMA2000 (1xEV-DO, Rev. A) | X | 0.64 | 61.56 | 7.87 | 0.00 | 115.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.98 | 65.79 | 11.09 |  | 115.0 |  |
|  |  | Z | 0.84 | 63.19 | 9.57 |  | 115.0 |  |
| $\begin{aligned} & 10406- \\ & \text { AAB } \end{aligned}$ | CDMA2000, RC3, SO32, SCH0, Full Rate | X | 100.00 | 119.53 | 28.08 | 0.00 | 100.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 100.00 | 115.68 | 26.57 |  | 100.0 |  |
|  |  | Z | 100.00 | 126.19 | 31.47 |  | 100.0 |  |
| $\begin{aligned} & 10410- \\ & \text { AAE } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | X | 2.86 | 79.80 | 18.70 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 25.09 | 107.33 | 26.44 |  | 80.0 |  |
|  |  | Z | 100.00 | 133.23 | 34.42 |  | 80.0 |  |
| $\begin{aligned} & 10415- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | X | 0.92 | 62.32 | 13.80 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.00 | 63.42 | 14.80 |  | 150.0 |  |
|  |  | Z | 0.91 | 61.96 | 13.60 |  | 150.0 |  |
| $\begin{aligned} & 10416- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (ERPOFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.22 | 66.50 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.32 | 66.87 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.33 | 15.95 |  | 150.0 |  |
| $\begin{aligned} & 10417- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 6 Mbps, 99pc duty cycle) | X | 4.22 | 66.50 | 15.96 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.32 | 66.87 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.32 | 66.33 | 15.95 |  | 150.0 |  |
| $\begin{aligned} & 10418- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps , 99pc duty cycle, Long preambule) | X | 4.21 | 66.71 | 16.02 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.32 | 67.09 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.51 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & 10419- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 6 Mbps , 99 pc duty cycle, Short preambule) | X | 4.23 | 66.64 | 16.01 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.34 | 67.01 | 16.25 |  | 150.0 |  |
|  |  | Z | 4.33 | 66.45 | 15.98 |  | 150.0 |  |
| $\begin{aligned} & 10422- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | X | 4.33 | 66.62 | 16.03 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.44 | 66.98 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.44 | 66.45 | 16.00 |  | 150.0 |  |
| $\begin{aligned} & 10423- \\ & A A B \end{aligned}$ | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | X | 4.45 | 66.86 | 16.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.56 | 67.23 | 16.34 |  | 150.0 |  |
|  |  | Z | 4.57 | 66.72 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10424- \\ & \text { AAB } \end{aligned}$ | IEEE 802.1 nn (HT Greenfield, 72.2 Mbps, 64-QAM) | X | 4.38 | 66.81 | 16.08 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.50 | 67.18 | 16.32 |  | 150.0 |  |
|  |  | Z | 4.50 | 66.66 | 16.07 |  | 150.0 |  |
| $\begin{aligned} & 10425- \\ & A A B \end{aligned}$ | IEEE 802.11n (HT Greenfield, 15 Mbps , BPSK) | X | 5.03 | 67.03 | 16.34 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.11 | 67.32 | 16.49 |  | 150.0 |  |
|  |  | $Z$ | 5.14 | 66.98 | 16.33 |  | 150.0 |  |
| $\begin{aligned} & 10426-1 \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Greenfield, 90 Mbps , 16-QAM) | X | 5.06 | 67.16 | 16.40 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.13 | 67.40 | 16.52 |  | 150.0 |  |
|  |  | Z | 5.17 | 67.10 | 16.39 |  | 150.0 |  |

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| 10427- <br> AAB | IEEE 802.11n (HT Greenfield, 150 Mbps , 64-QAM) | X | 5.01 | 66.91 | 16.27 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.09 | 67.19 | 16.41 |  | 150.0 |  |
|  |  | Z | 5.13 | 66.90 | 16.28 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10430- \\ \text { AAC } \\ \hline \end{array}$ | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) | X | 4.07 | 72.07 | 17.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.24 | 72.56 | 18.40 |  | 150.0 |  |
|  |  | Z | 4.04 | 71.02 | 17.78 |  | 150.0 |  |
| 10431- <br> AAC | LTE-FDD (OFDMA, $10 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | X | 3.79 | 66.99 | 15.69 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.94 | 67.49 | 16.09 |  | 150.0 |  |
|  |  | Z | 3.92 | 66.79 | 15.76 |  | 150.0 |  |
| 10432- <br> AAC | LTE-FDD (OFDMA, $15 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | X | 4.13 | 66.89 | 15.96 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.26 | 67.30 | 16.25 |  | 150.0 |  |
|  |  | Z | 4.25 | 66.71 | 15.96 |  | 150.0 |  |
| $10433$ <br> AAC | LTE-FDD (OFDMA, $20 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | X | 4.40 | 66.85 | 16.11 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.51 | 67.22 | 16.34 |  | 150.0 |  |
|  |  | Z | 4.51 | 66.70 | 16.09 |  | 150.0 |  |
| 10434- <br> AAA | W-CDMA (BS Test Model 1,64 DPCH) | X | 4.05 | 72.38 | 17.35 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.37 | 73.48 | 18.19 |  | 150.0 |  |
|  |  | Z | 4.07 | 71.60 | 17.46 |  | 150.0 |  |
| 10435- <br> AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.72 | 79.05 | 18.38 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 21.44 | 105.07 | 25.81 |  | 80.0 |  |
|  |  | Z | 100.00 | 132.91 | 34.27 |  | 80.0 |  |
| 10447" <br> AAC | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44\%) | X | 2.96 | 66.34 | 14.12 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.18 | 67.31 | 14.92 |  | 150.0 |  |
|  |  | Z | 3.13 | 66.39 | 14.53 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10448- \\ \text { AAC } \\ \hline \end{array}$ | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | X | 3.67 | 66.79 | 15.57 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.81 | 67.30 | 15.97 |  | 150.0 |  |
|  |  | Z | 3.78 | 66.58 | 15.62 |  | 150.0 |  |
| 10449-$\mathrm{AAC}$ | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1, Cliping 44\%) | X | 3.98 | 66.71 | 15.86 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.10 | 67.14 | 16.16 |  | 150.0 |  |
|  |  | Z | 4.09 | 66.52 | 15.85 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10450- \\ \text { AAC } \\ \hline \end{array}$ | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1. Clipping 44\%) | X | 4.21 | 66.62 | 15.96 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.32 | 67.01 | 16.21 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.46 | 15.93 |  | 150.0 |  |
| $\begin{aligned} & 10451- \\ & \text { AAA } \end{aligned}$ | W-CDMA (BS Test Model 1, 64 DPCH , Clipping 44\%) | X | 2.70 | 65.75 | 13.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 2.96 | 67.00 | 14.12 |  | 150.0 |  |
|  |  | Z | 2.94 | 66.14 | 13.79 |  | 150.0 |  |
| $\begin{aligned} & 10456- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, 64$-QAM, 99pc duty cycle) | X | 5.99 | 67.61 | 16.55 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 6.02 | 67.80 | 16.61 |  | 150.0 |  |
|  |  | Z | 6.11 | 67.72 | 16.61 |  | 150.0 |  |
| $\begin{aligned} & 10457- \\ & \text { AAA } \\ & \hline \end{aligned}$ | UMTS-FDD (DC-HSDPA) | X | 3.61 | 65.32 | 15.70 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.69 | 65.64 | 15.94 |  | 150.0 |  |
|  |  | Z | 3.65 | 65.04 | 15.66 |  | 150.0 |  |
| $\begin{aligned} & 10458- \\ & \text { AAA } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev. B, } 2 \\ & \text { carriers) } \end{aligned}$ | X | 3.19 | 69.07 | 15.08 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 3.69 | 71.30 | 16.62 |  | 150.0 |  |
|  |  | Z | 3.53 | 69.92 | 16.16 |  | 150.0 |  |
| 10459-AAA | $\begin{aligned} & \text { CDMA2000 (1xEV-DO, Rev. B, } 3 \\ & \text { carriers) } \end{aligned}$ | X | 4.69 | 69.03 | 17.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.79 | 69.11 | 17.75 |  | 150.0 |  |
|  |  | Z | 4.84 | 68.73 | 17.83 |  | 150.0 |  |


| $10460-$ $\mathrm{AAA}$ | UMTS-FDD (WCDMA, AMR) | X | 0.72 | 66.02 | 14.12 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 0.91 | 69.57 | 16.66 |  | 150.0 |  |
|  |  | Z | 0.71 | 65.26 | 13.72 |  | 150.0 |  |
| $\begin{aligned} & 10461- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.93 | 75.92 | 18.31 | 3.29 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 6.83 | 93.43 | 24.06 |  | 80.0 |  |
|  |  | Z | 100.00 | 137.66 | 36.58 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10462- \\ \text { AAA } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.63 | 60.00 | 7.27 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.63 | 60.00 | 7.19 |  | 80.0 |  |
|  |  | Z | 1.15 | 65.31 | 10.99 |  | 80.0 |  |
| $\begin{aligned} & 10463- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 60.00 | 6.55 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.66 | 60.00 | 6.45 |  | 80.0 |  |
|  |  | Z | 0.67 | 60.00 | 7.76 |  | 80.0 |  |
| $10464-$ <br> AAB | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.38 | 71.32 | 15.83 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.54 | 86.66 | 21.20 |  | 80.0 |  |
|  |  | Z | 100.00 | 134.26 | 34.80 |  | 80.0 |  |
| $\begin{aligned} & 10465- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, $3 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.63 | 60.00 | 7.20 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.63 | 60.00 | 7.11 |  | 80.0 |  |
|  |  | Z | 0.94 | 63.37 | 10.05 |  | 80.0 |  |
| $\begin{aligned} & 10466- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 60.00 | 6.50 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.66 | 60.00 | 6.41 |  | 80.0 |  |
|  |  | Z | 0.68 | 60.00 | 7.70 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10467- \\ \text { AAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.47 | 72.19 | 16.22 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 88.83 | 21.91 |  | 80.0 |  |
|  |  | Z | 100.00 | 134.76 | 35.02 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10468- \\ \text { AAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 16 QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.63 | 60.00 | 7.22 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.63 | 60.00 | 7.14 |  | 80.0 |  |
|  |  | Z | 0.99 | 63.90 | 10.32 |  | 80.0 |  |
| $\begin{aligned} & \hline 10469- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 60.00 | 6.51 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.66 | 60.00 | 6.41 |  | 80.0 |  |
|  |  | Z | 0.68 | 60.00 | 7.70 |  | 80.0 |  |
| $\begin{aligned} & 10470- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.46 | 72.21 | 16.22 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 88.98 | 21.94 |  | 80.0 |  |
|  |  | Z | 100.00 | 134.82 | 35.03 |  | 80.0 |  |
| $\begin{array}{\|l\|} \hline 10471- \\ \text { AAD } \\ \hline \end{array}$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.63 | 60.00 | 7.21 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.63 | 60.00 | 7.12 |  | 80.0 |  |
|  |  | Z | 0.98 | 63.79 | 10.26 |  | 80.0 |  |
| 10472-$A A D$ | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 60.00 | 6.49 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.66 | 60.00 | 6.39 |  | 80.0 |  |
|  |  | Z | 0.67 | 60.00 | 7.68 |  | 80.0 |  |
| 10473-$A A D$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.46 | 72.15 | 16.20 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 5.31 | 88.87 | 21.90 |  | 80.0 |  |
|  |  | Z | 100.00 | 134.77 | 35.01 |  | 80.0 |  |
| $\begin{aligned} & 10474- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.63 | 60.00 | 7.20 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.63 | 60.00 | 7.12 |  | 80.0 |  |
|  |  | Z | 0.97 | 63.74 | 10.23 |  | 80.0 |  |
| $\begin{aligned} & 10475 . \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 60.00 | 6.49 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 0.66 | 60.00 | 6.39 |  | 80.0 |  |
|  |  | Z | 0.67 | 60.00 | 7.69 |  | 80.0 |  |


| 10477- <br> AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 16QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.63 | 60.00 | 7.17 | 3.23 | 80.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 0.63 | 60.00 | 7.08 |  | 80.0 |  |
|  |  | Z | 0.93 | 63.31 | 10.01 |  | 80.0 |  |
| 10478- <br> AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , 64QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.65 | 60.00 | 6.47 | 3.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.66 | 60.00 | 6.37 |  | 80.0 |  |
|  |  | Z | 0.67 | 60.00 | 7.67 |  | 80.0 |  |
| 10479- <br> AAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 4.26 | 80.69 | 20.19 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 7.01 | 87.70 | 22.71 |  | 80.0 |  |
|  |  | Z | 21.27 | 105.57 | 28.88 |  | 80.0 |  |
| 10480AAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.88 | 66.39 | 12,32 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.13 | 71.95 | 14.74 |  | 80.0 |  |
|  |  | Z | 13.52 | 90.52 | 21.87 |  | 80.0 |  |
| $10481-$ AAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.43 | 63.16 | 10.40 | 3.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.06 | 66.80 | 12.23 |  | 80.0 |  |
|  |  | Z | 6.11 | 79.62 | 18.02 |  | 80.0 |  |
| 10482- <br> AAB | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.06 | 61.11 | 9.78 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.73 | 66.89 | 13.39 |  | 80.0 |  |
|  |  | Z | 1.53 | 64.78 | 12.61 |  | 80.0 |  |
| 10483- <br> AAB | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 16-QAM, UL Subframe=2,3,4,7,8,9) | X | 1.23 | 60.00 | 8.50 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.57 | 62.45 | 10.22 |  | 80.0 |  |
|  |  | Z | 2.78 | 68.98 | 14.19 |  | 80.0 |  |
| 10484- <br> AAB | LTE-TDD (SC-FDMA, $50 \%$ RB, 3 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.26 | 60.00 | 8.49 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.54 | 61.98 | 9.97 |  | 80.0 |  |
|  |  | Z | 2.53 | 67.57 | 13.58 |  | 80.0 |  |
| 10485- <br> AAD | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.66 | 65.74 | 13.74 | 2.23 | 80.0 | $\pm 9.6$ \% |
| . |  | Y | 2.52 | 71.78 | 17.06 |  | 80.0 |  |
|  |  | Z | 2.10 | 68.47 | 15.70 |  | 80.0 |  |
| 10486- <br> AAD | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.66 | 62.56 | 11.27 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.26 | 66.58 | 13.85 |  | 80.0 |  |
|  |  | Z | 2.12 | 65.12 | 13.38 |  | 80.0 |  |
| $\begin{aligned} & 10487- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 5 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.67 | 62.33 | 11.12 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.24 | 66.10 | 13.59 |  | 80.0 |  |
|  |  | Z | 2.14 | 64.83 | 13.21 |  | 80.0 |  |
| 10488- <br> AAD | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK, UL Subframe=2,3,4,7,8,9) | X | 2.26 | 67.65 | 16.13 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.82 | 71.24 | 18.12 |  | 80.0 |  |
|  |  | Z | 2.57 | 69.00 | 17.08 |  | 80.0 |  |
| 10489- <br> AAD | LTE-TDD (SC-FDMA, $50 \%$ RB, 10 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.49 | 65.85 | 15.07 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.90 | 68.21 | 16.54 |  | 80.0 |  |
|  |  | Z | 2.74 | 66.70 | 15.91 |  | 80.0 |  |
| $\begin{aligned} & 10490- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.57 | 65.79 | 15.03 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 2.97 | 68.04 | 16.46 |  | 80.0 |  |
|  |  | Z | 2.83 | 66.63 | 15.88 |  | 80.0 |  |
| $10491-$ <br> AAD | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | $X$ | 2.64 | 67.24 | 16.30 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.09 | 69.79 | 17.74 |  | 80.0 |  |
|  |  | Z | 2.92 | 68.21 | 16.96 |  | 80.0 |  |
| 10492- <br> AAD | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | $X$ | 2.93 | 65.80 | 15.66 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.24 | 67.45 | 16.69 |  | 80.0 |  |
|  |  | Z | 3.14 | 66.35 | 16.22 |  | 80.0 |  |


| $\begin{aligned} & 10493- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.99 | 65.74 | 15.62 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.29 | 67.32 | 16.63 |  | 80.0 |  |
|  |  | Z | 3.21 | 66.28 | 16.18 |  | 80.0 |  |
| $\begin{aligned} & \text { 10494- } \\ & \text { AAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.77 | 68.16 | 16.65 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 3.31 | 71.10 | 18.21 |  | 80.0 |  |
|  |  | Z | 3.09 | 69.31 | 17.33 |  | 80.0 |  |
| $\begin{aligned} & 10495- \\ & \text { AAE } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16 -QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.95 | 66.01 | 15.89 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.25 | 67.67 | 16.91 |  | 80.0 |  |
|  |  | Z | 3.16 | 66.59 | 16.41 |  | 80.0 |  |
| $\begin{aligned} & 10496- \\ & \text { AAE } \end{aligned}$ | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.04 | 65.92 | 15.89 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.34 | 67.48 | 16.84 |  | 80.0 |  |
|  |  | Z | 3.25 | 66.45 | 16.38 |  | 80.0 |  |
| $\begin{aligned} & 10497- \\ & \text { AAA } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 0.90 | 60.00 | 7.56 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 0.94 | 60.22 | 8.59 |  | 80.0 |  |
|  |  | Z | 0.98 | 60.00 | 8.77 |  | 80.0 |  |
| $\begin{aligned} & 10498- \\ & \text { AAA } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 1.09 | 60.00 | 6.33 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 1.09 | 60.00 | 7.12 |  | 80.0 |  |
|  |  | Z | 1.16 | 60.00 | 7.58 |  | 80.0 |  |
| $\begin{aligned} & \text { 10499- } \\ & \text { AAA } \end{aligned}$ | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \text { RB, } 1.4 \\ & \text { MHz, } 64-Q A M, ~ U L \\ & \text { Subframe }=2,3,4,7,8,9 \text { ) } \end{aligned}$ | X | 1.11 | 60.00 | 6.17 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 1.11 | 60.00 | 6.94 |  | 80.0 |  |
|  |  | Z | 1.17 | 60.00 | 7.42 |  | 80.0 |  |
| $\begin{aligned} & 10500- \\ & A A B \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 1.91 | 66.68 | 14.78 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.64 | 71.54 | 17.49 |  | 80.0 |  |
|  |  | Z | 2.29 | 68.68 | 16.26 |  | 80.0 |  |
| $\begin{aligned} & 10501- \\ & \text { AAB } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.02 | 64.23 | 12.91 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 2.60 | 67.75 | 15.11 |  | 80.0 |  |
|  |  | Z | 2.42 | 66.09 | 14.51 |  | 80.0 |  |
| $\begin{aligned} & 10502- \\ & \text { AAB } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.05 | 64.07 | 12.75 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.63 | 67.51 | 14.92 |  | 80.0 |  |
|  |  | Z | 2.46 | 65.95 | 14.37 |  | 80.0 |  |
| $\begin{aligned} & 10503- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.23 | 67.47 | 16.03 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.79 | 71.03 | 18.01 |  | 80.0 |  |
|  |  | Z | 2.54 | 68.82 | 16.98 |  | 80.0 |  |
| $\begin{aligned} & 10504- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.48 | 65.75 | 15.00 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.88 | 68.10 | 16.48 |  | 80.0 |  |
|  |  | Z | 2.73 | 66.60 | 15.85 |  | 80.0 |  |
| $\begin{aligned} & 10505- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.55 | 65.70 | 14.97 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 2.95 | 67.94 | 16.40 |  | 80.0 |  |
|  |  | Z | 2.81 | 66.54 | 15.82 |  | 80.0 |  |
| $\begin{aligned} & 10506- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.76 | 68.04 | 16.58 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.29 | 70.96 | 18.14 |  | 80.0 |  |
|  |  | Z | 3.07 | 69.18 | 17.26 |  | 80.0 |  |
| $\begin{aligned} & 10507- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | X | 2.93 | 65.95 | 15.85 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.24 | 67.61 | 16.87 |  | 80.0 |  |
|  |  | Z | 3.14 | 66.53 | 16.37 |  | 80.0 |  |


| $\begin{aligned} & \text { 10508- } \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 $\mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.03 | 65.86 | 15.84 | 2.23 | 80.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 3.33 | 67.40 | 16.79 |  | 80.0 |  |
|  |  | Z | 3.24 | 66.38 | 16.33 |  | 80.0 |  |
| $\begin{aligned} & \text { 10509- } \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.24 | 67.72 | 16.53 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.69 | 69.96 | 17.72 |  | 80.0 |  |
|  |  | Z | 3.51 | 68.56 | 17.03 |  | 80.0 |  |
| $\begin{aligned} & 10510- \\ & \text { AAD } \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, 16-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.43 | 65.97 | 16.12 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.71 | 67.32 | 16.91 |  | 80.0 |  |
|  |  | Z | 3.64 | 66.47 | 16.52 |  | 80.0 |  |
| $10511-$ <br> AAD | LTE-TDD (SC-FDMA, 100\% RB, 15 MHz, 64-QAM, UL <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.52 | 65.89 | 16.12 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.78 | 67.15 | 16.86 |  | 80.0 |  |
|  |  | Z | 3.71 | 66.32 | 16.49 |  | 80.0 |  |
| $\begin{aligned} & 10512- \\ & \text { AAE } \\ & \hline \end{aligned}$ | LTE-TDD (SC-FDMA, 100\% RB, 20 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | X | 3.22 | 68.47 | 16.72 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.79 | 71.22 | 18.12 |  | 80.0 |  |
|  |  | Z | 3.54 | 69.57 | 17.32 |  | 80.0 |  |
| 10513- <br> AAE | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | X | 3.32 | 66.00 | 16.15 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.60 | 67.43 | 16.98 |  | 80.0 |  |
|  |  | Z | 3.52 | 66.56 | 16.56 |  | 80.0 |  |
| 10514- <br> AAE | LTE-TDD (SC-FDMA, 100\% RB, 20 $\mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ <br> Subframe $=2,3,4,7,8,9$ ) | X | 3.39 | 65.79 | 16.10 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.64 | 67.11 | 16.88 |  | 80.0 |  |
|  |  | Z | 3.57 | 66.28 | 16.49 |  | 80.0 |  |
| 10515- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | X | 0.88 | 62.44 | 13.81 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.96 | 63.62 | 14.88 |  | 150.0 |  |
|  |  | Z | 0.87 | 62.07 | 13.59 |  | 150.0 |  |
| 10516- <br> AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | X | 0.45 | 66.98 | 14.48 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.65 | 72.72 | 18.47 |  | 150.0 |  |
|  |  | Z | 0.42 | 65.95 | 13.66 |  | 150.0 |  |
| $\begin{aligned} & \text { 10517- } \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | X | 0.70 | 63.68 | 13.97 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 0.81 | 65.65 | 15.62 |  | 150.0 |  |
|  |  | Z | 0.69 | 63.23 | 13.65 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10518- \\ A A B \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | X | 4.21 | 66.61 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.32 | 66.98 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.42 | 15.93 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10519- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | X | 4.34 | 66.77 | 16.04 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.46 | 67.14 | 16.28 |  | 150.0 |  |
|  |  | Z | 4.46 | 66.61 | 16.03 |  | 150.0 |  |
| $\begin{aligned} & 10520- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | X | 4.20 | 66.68 | 15.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.32 | 67.07 | 16.20 |  | 150.0 |  |
|  |  | Z | 4.31 | 66.53 | 15.94 |  | 150.0 |  |
| $\begin{aligned} & 10521- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | X | 4.13 | 66.63 | 15.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.25 | 67.04 | 16.18 |  | 150.0 |  |
|  |  | Z | 4.24 | 66.49 | 15.91 |  | 150.0 |  |
| $\begin{aligned} & 10522- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | X | 4.17 | 66.72 | 15.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.29 | 67.14 | 16.26 |  | 150.0 |  |
|  |  | Z | 4.30 | 66.63 | 16.02 |  | 150.0 |  |


| $\begin{aligned} & 10523- \\ & A A B \end{aligned}$ | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | X | 4.12 | 66.80 | 15.96 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.24 | 67.19 | 16.22 |  | 150.0 |  |
|  |  | Z | 4.21 | 66.57 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10524- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | X | 4.13 | 66.73 | 16.01 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.25 | 67.13 | 16.27 |  | 150.0 |  |
|  |  | Z | 4.25 | 66.57 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & 10525- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCSO, 99pc duty cycle) | X | 4.18 | 65.86 | 15.65 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.29 | 66.26 | 15.91 |  | 150.0 |  |
|  |  | Z | 4.27 | 65.65 | 15.61 |  | 150.0 |  |
| $\begin{aligned} & \text { 10526- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 99 pc duty cycle) | X | 4.28 | 66.10 | 15.76 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.41 | 66.52 | 16.01 |  | 150.0 |  |
|  |  | Z | 4.40 | 65.94 | 15.73 |  | 150.0 |  |
| $\begin{aligned} & 10527 \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) | X | 4.22 | 66.07 | 15.69 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.34 | 66.49 | 15.96 |  | 150.0 |  |
|  |  | Z | 4.33 | 65.90 | 15.66 |  | 150.0 |  |
| 10528-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS3, 99 pc duty cycle) | X | 4.23 | 66.08 | 15.73 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.36 | 66.51 | 15.99 |  | 150.0 |  |
|  |  | Z | 4.34 | 65.91 | 15.70 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10529- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | X | 4.23 | 66.08 | 15.73 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.36 | 66.51 | 15.99 |  | 150.0 |  |
|  |  | Z | 4.34 | 65.91 | 15.70 |  | 150.0 |  |
| $\begin{aligned} & 10531 \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle) | X | 4.19 | 66.07 | 15.68 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.32 | 66.52 | 15.96 |  | 150.0 |  |
|  |  | Z | 4.31 | 65.94 | 15.68 |  | 150.0 |  |
| 10532-$\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | X | 4.08 | 65.93 | 15.61 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.20 | 66.39 | 15.90 |  | 150.0 |  |
|  |  | Z | 4.19 | 65.79 | 15.60 |  | 150.0 |  |
| $\begin{aligned} & 10533- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | X | 4.23 | 66.16 | 15.73 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.36 | 66.60 | 16.00 |  | 150.0 |  |
|  |  | Z | 4.35 | 65.98 | 15.69 |  | 150.0 |  |
| $\begin{aligned} & 10534- \\ & A A B \end{aligned}$ | IEEE 802,11ac WiFi (40MHz, MCSO, 99pc duty cycle) | X | 4.82 | 66.10 | 15.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 66.46 | 16.04 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.02 | 15.83 |  | 150.0 |  |
| $\begin{aligned} & 10535- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | X | 4.85 | 66.20 | 15.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.94 | 66.56 | 16.09 |  | 150.0 |  |
|  |  | Z | 4.97 | 66.17 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10536- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 99 pc duty cycle) | X | 4.74 | 66.19 | 15.87 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.84 | 66.58 | 16.08 |  | 150.0 |  |
|  |  | Z | 4.85 | 66.14 | 15.86 |  | 150.0 |  |
| $\begin{aligned} & 10537- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS3}$, 99 pc duty cycle) | X | 4.82 | 66.26 | 15.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.91 | 66.59 | 16.08 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.13 | 15.86 |  | 150.0 |  |
| $\begin{aligned} & 10538- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle) | X | 4.87 | 66.17 | 15.91 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.97 | 66.52 | 16.09 |  | 150.0 |  |
|  |  | Z | 4.98 | 66.12 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10540- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 99 pc duty cycle) | X | 4.80 | 66.12 | 15.90 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.90 | 66.49 | 16.09 |  | 150.0 |  |
|  |  | Z | 4.91 | 66.07 | 15.89 |  | 150.0 |  |


| $\begin{aligned} & 10541- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7. 99pc duty cycle) | X | 4.79 | 66.06 | 15.85 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.89 | 66.43 | 16.04 |  | 150.0 |  |
|  |  | Z | 4.89 | 65.96 | 15.82 |  | 150.0 |  |
| $\begin{aligned} & 10542- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle) | X | 4.94 | 66.17 | 15.92 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.04 | 66.51 | 16.10 |  | 150.0 |  |
|  |  | Z | 5.05 | 66.09 | 15.90 |  | 150.0 |  |
| $\begin{aligned} & 10543- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | X | 5.03 | 66.31 | 16.03 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.11 | 66.60 | 16.17 |  | 150.0 |  |
|  |  | Z | 5.12 | 66.17 | 15.97 |  | 150.0 |  |
| 10544AAB | IEEE 802.11 ac WiFi ( 80 MHz , MCSO, 99pc duty cycle) | X | 5.18 | 66.16 | 15.86 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.26 | 66.52 | 16.02 |  | 150.0 |  |
|  |  | Z | 5.26 | 66.12 | 15.84 |  | 150.0 |  |
| 10545-$\mathrm{AAB}$ | IEEE 802.11ac WiFi ( 80 MHz , MCS1, 99pc duty cycle) | X | 5.36 | 66.65 | 16.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.42 | 66.93 | 16.19 |  | 150.0 |  |
|  |  | Z | 5.45 | 66.61 | 16.04 |  | 150.0 |  |
| 10546-$\mathrm{AAB}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS} 2$, 99 pc duty cycle) | X | 5.20 | 66.27 | 15.88 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.29 | 66.63 | 16.05 |  | 150.0 |  |
|  |  | Z | 5.29 | 66.25 | 15.87 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 105474 \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle) | X | 5.31 | 66.50 | 15.99 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.37 | 66.75 | 16.11 |  | 150.0 |  |
|  |  | Z | 5.38 | 66.37 | 15.93 |  | 150.0 |  |
| $\begin{array}{\|l} \hline 10548- \\ A A B \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS4, $99 p \mathrm{~d}$ duty cycle) | X | 5.41 | 66.98 | 16.21 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.49 | 67.30 | 16.36 |  | 150.0 |  |
|  |  | Z | 5.57 | 67.13 | 16.28 |  | 150.0 |  |
| $\begin{aligned} & \hline 10550- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS} 6$, 99 pc duty cycle) | X | 5.30 | 66.60 | 16.06 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.35 | 66.83 | 16.16 |  | 150.0 |  |
|  |  | Z | 5.37 | 66.46 | 15.99 |  | 150.0 |  |
| $\begin{aligned} & 10551- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS7, $99 p \mathrm{duty}$ cycle) | X | 5.19 | 66.21 | 15.83 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.28 | 66.60 | 16.01 |  | 150.0 |  |
|  |  | Z | 5.30 | 66.24 | 15.84 |  | 150.0 |  |
| $\begin{aligned} & 10552- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS} 8$, 99 pc duty cycle) | X | 5.18 | 66.29 | 15.86 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.27 | 66.65 | 16.04 |  | 150.0 |  |
|  |  | Z | 5.26 | 66.20 | 15.82 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10553- \\ \text { AAB } \\ \hline \end{array}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 99pc duty cycle) | X | 5.23 | 66.22 | 15.86 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.32 | 66.58 | 16.03 |  | 150.0 |  |
|  |  | Z | 5.32 | 66.18 | 15.85 |  | 150.0 |  |
| $10554-$$A A C$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 0$, 99 pc duty cycle) | X | 5.62 | 66.51 | 15.95 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.68 | 66.84 | 16.09 |  | 150.0 |  |
|  |  | Z | 5.69 | 66.48 | 15.94 |  | 150.0 |  |
| 10555-$\mathrm{AAC}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS1, 99 pc duty cycle) | X | 5.69 | 66.71 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.76 | 67.04 | 16.18 |  | 150.0 |  |
|  |  | Z | 5.79 | 66.75 | 16.05 |  | 150.0 |  |
| $\begin{aligned} & 10556- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 2$, 99pc duty cycle) | X | 5.75 | 66.88 | 16.11 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.80 | 67.16 | 16.23 |  | 150.0 |  |
|  |  | Z | 5.83 | 66.85 | 16.10 |  | 150.0 |  |
| $\begin{aligned} & 10557- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 99pc duty cycle) | X | 5.69 | 66.70 | 16.04 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.76 | 67.04 | 16.19 |  | 150.0 |  |
|  |  | Z | 5.77 | 66.69 | 16.03 |  | 150.0 |  |


| 10558AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 99 pc duty cycle) | X | 5.67 | 66.68 | 16.05 | 0.00 | 150.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.76 | 67.07 | 16.22 |  | 150.0 |  |
|  |  | Z | 5.80 | 66.79 | 16.10 |  | 150.0 |  |
| $\begin{array}{\|l\|} \hline 10560- \\ \text { AAC } \\ \hline \end{array}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS6, 99pc duty cycle) | X | 5.71 | 66.66 | 16.07 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.79 | 67.02 | 16.23 |  | 150.0 |  |
|  |  | Z | 5.81 | 66.69 | 16.09 |  | 150.0 |  |
| $\begin{aligned} & 10561- \\ & \text { AAC } \end{aligned}$ | IEEE 802.11 ac WiFi ( 160 MHz , MCS7, 99 pc duty cycle) | X | 5.65 | 66.65 | 16.10 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.72 | 67.00 | 16.25 |  | 150.0 |  |
|  |  | Z | 5.75 | 66.69 | 16.12 |  | 150.0 |  |
| $\begin{aligned} & 10562- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 99pc duty cycle) | X | 5.68 | 66.77 | 16.16 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.77 | 67.15 | 16.33 |  | 150.0 |  |
|  |  | Z | 5.80 | 66.87 | 16.21 |  | 150.0 |  |
| $\begin{aligned} & 10563- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 99 pc duty cycle) | X | 5.80 | 66.82 | 16.15 | 0.00 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 5.88 | 67.15 | 16.29 |  | 150.0 |  |
|  |  | Z | 5.91 | 66.85 | 16.17 |  | 150.0 |  |
| $\begin{aligned} & 10564- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 9 Mbps , 99 pc duty cycle) | X | 4.52 | 66.62 | 16.09 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.63 | 66.97 | 16.32 |  | 150.0 |  |
|  |  | $Z$ | 4.63 | 66.48 | 16.09 |  | 150.0 |  |
| $\begin{aligned} & 10565- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps , 99 pc duty cycle) | X | 4.71 | 67.05 | 16.42 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.82 | 67.38 | 16.63 |  | 150.0 |  |
|  |  | Z | 4.83 | 66.91 | 16.42 |  | 150.0 |  |
| $\begin{aligned} & \text { 10566- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $18 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.54 | 66.82 | 16.20 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.65 | 67.19 | 16.43 |  | 150.0 |  |
|  |  | Z | 4.66 | 66.71 | 16.22 |  | 150.0 |  |
| $\begin{aligned} & 10567- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11g WiFi 2.4 GHz (DSSSOFDM, $24 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | X | 4.58 | 67.25 | 16.61 | 0.46 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.69 | 67.60 | 16.82 |  | 150.0 |  |
|  |  | Z | 4.69 | 67.12 | 16.60 |  | 150.0 |  |
| $\begin{aligned} & \text { 10568- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 99 pc duty cycle) | X | 4.42 | 66.46 | 15.88 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.88 | 16.15 |  | 150.0 |  |
|  |  | Z | 4.56 | 66.45 | 15.95 |  | 150.0 |  |
| $\begin{aligned} & 10569- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps , 99 pc duty cycle) | X | 4.58 | 67.53 | 16.78 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | Y | 4.68 | 67.86 | 16.97 |  | 150.0 |  |
|  |  | Z | 4.68 | 67.31 | 16.72 |  | 150.0 |  |
| $\begin{aligned} & 10570- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSS. OFDM, 54 Mbps , 99pc duty cycle) | X | 4.57 | 67.27 | 16.64 | 0.46 | 150.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.68 | 67.61 | 16.85 |  | 150.0 |  |
|  |  | Z | 4.69 | 67.12 | 16.62 |  | 150.0 |  |
| $\begin{aligned} & 10571- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | X | 0.99 | 62.81 | 14.23 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.09 | 64.12 | 15.35 |  | 130.0 |  |
|  |  | Z | 1.00 | 62.69 | 14.25 |  | 130.0 |  |
| $\begin{aligned} & 10572- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90 pc duty cycle) | X | 1.00 | 63.25 | 14.53 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.10 | 64.66 | 15.71 |  | 130.0 |  |
|  |  | Z | 1.00 | 63.12 | 14.54 |  | 130.0 |  |
| $\begin{aligned} & 10573- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90 pc duty cycle) | X | 0.77 | 71.94 | 17.18 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.53 | 83.79 | 23.08 |  | 130.0 |  |
|  |  | Z | 0.78 | 71.84 | 17.05 |  | 130.0 |  |
| $\begin{aligned} & 10574- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 11 Mbps, 90 pc duty cycle) | X | 0.97 | 67.27 | 16.73 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 1.16 | 70.12 | 18.67 |  | 130.0 |  |
|  |  | Z | 0.98 | 67.08 | 16.66 |  | 130.0 |  |


| $\begin{aligned} & 10575- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $6 \mathrm{Mbps}, 90$ pc duty cycle) | X | 4.29 | 66.33 | 16.06 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.40 | 66.70 | 16.31 |  | 130.0 |  |
|  |  | Z | 4.41 | 66.24 | 16.12 |  | 130.0 |  |
| $\begin{aligned} & \text { 10576- } \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $9 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.32 | 66.56 | 16.16 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.43 | 66.92 | 16.41 |  | 130.0 |  |
|  |  | Z | 4.43 | 66.43 | 16.20 |  | 130.0 |  |
| 10577- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 12 Mbps , 90 pc duty cycle) | X | 4.47 | 66.78 | 16.31 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.58 | 67.14 | 16.55 |  | 130.0 |  |
|  |  | Z | 4.60 | 66.69 | 16.36 |  | 130.0 |  |
| 10578- <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 18 Mbps , 90 pc duty cycle) | X | 4.38 | 66.93 | 16.42 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.49 | 67.29 | 16.66 |  | 130.0 |  |
|  |  | Z | 4.50 | 66.83 | 16.46 |  | 130.0 |  |
| 10579-$A A A$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $24 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.12 | 66.01 | 15.59 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.24 | 66.44 | 15.89 |  | 130.0 |  |
|  |  | Z | 4.26 | 65.99 | 15.69 |  | 130.0 |  |
| $10580-$ <br> AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 36 Mbps , 90 pc duty cycle) | X | 4.14 | 66.03 | 15.59 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.27 | 66.48 | 15.90 |  | 130.0 |  |
|  |  | Z | 4.30 | 66.06 | 15.72 |  | 130.0 |  |
| $\begin{aligned} & 10581- \\ & \text { AAA } \\ & \hline \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, 48 Mbps , 90 pc duty cycle) | X | 4.29 | 67.01 | 16.39 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.41 | 67.39 | 16.65 |  | 130.0 |  |
|  |  | Z | 4.41 | 66.87 | 16.41 |  | 130.0 |  |
| $\begin{aligned} & 10582- \\ & \text { AAA } \end{aligned}$ | IEEE 802.11 g WiFi 2.4 GHz (DSSSOFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | X | 4.04 | 65.76 | 15.35 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.17 | 66.20 | 15.67 |  | 130.0 |  |
|  |  | Z | 4.19 | 65.76 | 15.46 |  | 130.0 |  |
| $\begin{aligned} & 10583- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | X | 4.29 | 66.33 | 16.06 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.40 | 66.70 | 16.31 |  | 130.0 |  |
|  |  | Z | 4.41 | 66.24 | 16.12 |  | 130.0 |  |
| $\begin{aligned} & 10584- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | X | 4.32 | 66.56 | 16.16 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.43 | 66.92 | 16.41 |  | 130.0 |  |
|  |  | Z | 4.43 | 66.43 | 16.20 |  | 130.0 |  |
| $\begin{aligned} & 10585- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90 pc duty cycle) | $X$ | 4.47 | 66.78 | 16.31 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 4.58 | 67.14 | 16.55 |  | 130.0 |  |
|  |  | Z | 4.60 | 66.69 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10586- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | X | 4.38 | 66.93 | 16.42 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.49 | 67.29 | 16.66 |  | 130.0 |  |
|  |  | $Z$ | 4.50 | 66.83 | 16.46 |  | 130.0 |  |
| $\begin{aligned} & 10587- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90 pc duty cycle) | X | 4.12 | 66.01 | 15.59 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.24 | 66.44 | 15.89 |  | 130.0 |  |
|  |  | Z | 4.26 | 65.99 | 15.69 |  | 130.0 |  |
| $\begin{aligned} & 10588- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | X | 4.14 | 66.03 | 15.59 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.27 | 66.48 | 15.90 |  | 130.0 |  |
|  |  | Z | 4.30 | 66.06 | 15.72 |  | 130.0 |  |
| $\begin{aligned} & 10589- \\ & A A B \\ & \hline \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90 pc duty cycle) | X | 4.29 | 67.01 | 16.39 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.41 | 67.39 | 16.65 |  | 130.0 |  |
|  |  | Z | 4.41 | 66.87 | 16.41 |  | 130.0 |  |
| $\begin{aligned} & 10590- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | X | 4.04 | 65.76 | 15.35 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.17 | 66.20 | 15.67 |  | 130.0 |  |
|  |  | Z | 4.19 | 65.76 | 15.46 |  | 130.0 |  |


| $\begin{aligned} & 10591- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | X | 4.45 | 66.46 | 16.22 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.56 | 66.80 | 16.44 |  | 130.0 |  |
|  |  | Z | 4.57 | 66.34 | 16.25 |  | 130.0 |  |
| $\begin{aligned} & 10592- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20 MHz , MCS1, 90pc duty cycle) | X | 4.56 | 66.73 | 16.33 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.67 | 67.08 | 16.56 |  | 130.0 |  |
|  |  | Z | 4.69 | 66.64 | 16.38 |  | 130.0 |  |
| $\begin{aligned} & 10593- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | X | 4.47 | 66.59 | 16.17 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 4.59 | 66.95 | 16.42 |  | 130.0 |  |
|  |  | Z | 4.60 | 66.51 | 16.23 |  | 130.0 |  |
| $\begin{aligned} & \hline 10594- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20 MHz , MCS3, 90pc duty cycle) | X | 4.53 | 66.78 | 16.36 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.64 | 67.13 | 16.59 |  | 130.0 |  |
|  |  | Z | 4.66 | 66.69 | 16.40 |  | 130.0 |  |
| $\begin{aligned} & 10595- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | X | 4.49 | 66.75 | 16.26 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.61 | 67.12 | 16.50 |  | 130.0 |  |
|  |  | Z | 4.62 | 66.66 | 16.30 |  | 130.0 |  |
| $\begin{aligned} & 10596- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS5,90pc duty cycle) | X | 4.42 | 66.68 | 16.23 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.53 | 67.07 | 16.49 |  | 130.0 |  |
|  |  | Z | 4.55 | 66.62 | 16.29 |  | 130.0 |  |
| $\begin{aligned} & 10597- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 20 MHz , MCS6, 90pc duty cycle) | X | 4.37 | 66.54 | 16.07 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.49 | 66.93 | 16.34 |  | 130.0 |  |
|  |  | Z | 4.51 | 66.49 | 16.14 |  | 130.0 |  |
| $\begin{aligned} & 10598- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | X | 4.38 | 66.81 | 16.37 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 67.18 | 16.61 |  | 130.0 |  |
|  |  | Z | 4.50 | 66.72 | 16.41 |  | 130.0 |  |
| $\begin{aligned} & 10599- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS0, 90pc duty cycle) | X | 5.17 | 67.00 | 16.56 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.23 | 67.23 | 16.68 |  | 130.0 |  |
|  |  | Z | 5.27 | 66.93 | 16.57 |  | 130.0 |  |
| $\begin{aligned} & 10600- \\ & \text { AAB } \end{aligned}$ | JEEE 802.11n (HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | X | 5.26 | 67.35 | 16.71 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.31 | 67.52 | 16.80 |  | 130.0 |  |
|  |  | Z | 5.40 | 67.37 | 16.76 |  | 130.0 |  |
| $\begin{aligned} & 10601- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS2, 90pc duty cycle) | X | 5.19 | 67.20 | 16.65 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.24 | 67.37 | 16.74 |  | 130.0 |  |
|  |  | Z | 5.28 | 67.08 | 16.63 |  | 130.0 |  |
| $\begin{aligned} & 10602- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS3, 90pc duty cycle) | X | 5.24 | 67.11 | 16.52 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.31 | 67.34 | 16.64 |  | 130.0 |  |
|  |  | Z | 5.41 | 67.24 | 16.63 |  | 130.0 |  |
| $\begin{aligned} & 10603- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS4, 90 pc duty cycle) | X | 5.29 | 67.35 | 16.79 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | $Y$ | 5.38 | 67.63 | 16.93 |  | 130.0 |  |
|  |  | Z | 5.49 | 67.59 | 16.94 |  | 130.0 |  |
| $\begin{aligned} & 10604- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS5, 90pc duty cycle) | X | 5.15 | 66.85 | 16.51 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.25 | 67.21 | 16.70 |  | 130.0 |  |
|  |  | Z | 5.37 | 67.21 | 16.74 |  | 130.0 |  |
| $\begin{aligned} & 10605- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11n (HT Mixed, 40 MHz , MCS6, 90 pc duty cycle) | X | 5.23 | 67.14 | 16.65 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.30 | 67.39 | 16.79 |  | 130.0 |  |
|  |  | Z | 5.38 | 67.23 | 16.74 |  | 130.0 |  |
| $\begin{aligned} & 10606- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11 n (HT Mixed, 40 MHz , MCS7, 90pc duty cycle) | X | 5.05 | 66.67 | 16.26 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.11 | 66.89 | 16.39 |  | 130.0 |  |
|  |  | Z | 5.14 | 66.57 | 16.26 |  | 130.0 |  |


| $\begin{aligned} & 10607- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi ( 20 MHz , MCSO, 90 pc duty cycle) | X | 4.30 | 65.79 | 15.85 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 4.41 | 66.18 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.41 | 65.65 | 15.87 |  | 130.0 |  |
| $\begin{aligned} & 10608- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS1, 90 pc duty cycle) | X | 4.42 | 66.08 | 15.98 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.54 | 66.48 | 16.24 |  | 130.0 |  |
|  |  | Z | 4.55 | 65.99 | 16.03 |  | 130.0 |  |
| $\begin{aligned} & 10609- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS2, 90 pc duty cycle) | X | 4.32 | 65.89 | 15.79 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.44 | 66.32 | 16.07 |  | 130.0 |  |
|  |  | Z | 4.44 | 65.81 | 15.84 |  | 130.0 |  |
| 10610- $A A B$ | IEEE 802.11ac WiFi (20MHz, MCS3, 90 pc duty cycle) | X | 4.37 | 66.08 | 15.98 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.49 | 66.49 | 16.24 |  | 130.0 |  |
|  |  | Z | 4.49 | 65.99 | 16.01 |  | 130.0 |  |
| 10611- $A A B$ | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS} 4$, 90 pc duty cycle) | X | 4.28 | 65.85 | 15.80 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.40 | 66.28 | 16.08 |  | 130.0 |  |
|  |  | Z | 4.41 | 65.78 | 15.85 |  | 130.0 |  |
| $\begin{aligned} & 10612- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS5, 90 pc duty cycle) | X | 4.26 | 65.94 | 15.82 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.39 | 66.39 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.40 | 65.90 | 15.88 |  | 130.0 |  |
| $\begin{aligned} & \text { 10613- } \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (20MHz, MCS6, 90 pc duty cycle) | X | 4.25 | 65.75 | 15.65 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.38 | 66.20 | 15.95 |  | 130.0 |  |
|  |  | Z | 4.40 | 65.73 | 15.73 |  | 130.0 |  |
| 10614- $A A B$ | IEEE 802.11ac WiFi (20MHz, MCS7, 90 pc duty cycle) | X | 4.24 | 66.02 | 15.94 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.36 | 66.46 | 16.22 |  | 130.0 |  |
|  |  | Z | 4.36 | 65.95 | 15.99 |  | 130.0 |  |
| 10615- $\mathrm{AAB}$ | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | X | 4.26 | 65.66 | 15.54 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 4.39 | 66.11 | 15.84 |  | 130.0 |  |
|  |  | Z | 4.40 | 65.60 | 15.61 |  | 130.0 |  |
| $\begin{aligned} & 10616- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCSO, 90 pc duty cycle) | X | 4.95 | 66.09 | 16.09 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.04 | 66.42 | 16.27 |  | 130.0 |  |
|  |  | Z | 5.06 | 66.06 | 16.12 |  | 130.0 |  |
| $\begin{aligned} & 10617- \\ & \mathrm{AAB} \end{aligned}$ | IEEE 802,11ac WiFi (40MHz, MCS1, 90 pc duty cycle) | X | 4.98 | 66.18 | 16.11 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.07 | 66.52 | 16.29 |  | 130.0 |  |
|  |  | Z | 5.13 | 66.25 | 16.19 |  | 130.0 |  |
| 10618- $\mathrm{AAB}$ | IEEE 802.11ac WiFi (40MHz, MCS2, 90 pc duty cycle) | X | 4.89 | 66.22 | 16.14 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 4.99 | 66.61 | 16.35 |  | 130.0 |  |
|  |  | Z | 5.02 | 66.28 | 16.21 |  | 130.0 |  |
| $\begin{aligned} & \hline 10619- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS3, 90 pc duty cycle) | X | 4.94 | 66.16 | 16.04 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.01 | 66.45 | 16.21 |  | 130.0 |  |
|  |  | Z | 5.04 | 66.09 | 16.05 |  | 130.0 |  |
| $\begin{aligned} & 10620- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS4, 90 pc duty cycle) | X | 4.98 | 66.07 | 16.05 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.08 | 66.42 | 16.24 |  | 130.0 |  |
|  |  | Z | 5.12 | 66.10 | 16.11 |  | 130.0 |  |
| $\begin{aligned} & \hline 10621- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS5, 90 pc duty cycle) | X | 5.00 | 66.21 | 16.25 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.09 | 66.55 | 16.43 |  | 130.0 |  |
|  |  | Z | 5.12 | 66.22 | 16.29 |  | 130.0 |  |
| $\begin{array}{\|l\|} \hline 10622- \\ \text { AAB } \end{array}$ | IEEE 802.11ac WiFi (40MHz, MCS6, 90 pc duty cycle) | X | 4.98 | 66.29 | 16.29 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.08 | 66.63 | 16.46 |  | 130.0 |  |
|  |  | Z | 5.11 | 66.32 | 16.34 |  | 130.0 |  |


| $\begin{aligned} & 10623 m \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS7, 90 pc duty cycle) | X | 4.88 | 65.86 | 15.92 | 0.46 | 130.0 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $Y$ | 4.97 | 66.20 | 16.11 |  | 130.0 |  |
|  |  | Z | 4.99 | 65.82 | 15.95 |  | 130.0 |  |
| 10624- <br> AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90 pc duty cycle) | X | 5.07 | 66.13 | 16.12 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.16 | 66.45 | 16.30 |  | 130.0 |  |
|  |  | Z | 5.20 | 66.12 | 16.17 |  | 130.0 |  |
| $\begin{aligned} & 10625- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (40MHz, MCS9, 90 pc duty cycle) | X | 5.18 | 66.36 | 16.31 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.24 | 66.57 | 16.42 |  | 130.0 |  |
|  |  | Z | 5.32 | 66.38 | 16.36 |  | 130.0 |  |
| $\begin{aligned} & 10626- \\ & \text { AAB } \end{aligned}$ | $\begin{aligned} & \text { IEEE } 802.11 \mathrm{ac} \text { WiFi }(80 \mathrm{MHz}, \mathrm{MCSO}, \\ & 90 \mathrm{pc} \text { duty cycle) } \end{aligned}$ | X | 5.30 | 66.10 | 16.05 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.38 | 66.44 | 16.22 |  | 130.0 |  |
|  |  | Z | 5.40 | 66.12 | 16.09 |  | 130.0 |  |
| $\begin{aligned} & 10627- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS1, 90 pc duty cycle) | X | 5.53 | 66.77 | 16.36 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $\gamma$ | 5.59 | 67.01 | 16.48 |  | 130.0 |  |
|  |  | Z | 5.65 | 66.81 | 16.41 |  | 130.0 |  |
| $\begin{aligned} & 10628- \\ & A A B \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS2, 90pc duty cycle) | X | 5.29 | 66.06 | 15.93 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.37 | 66.41 | 16.10 |  | 130.0 |  |
|  |  | Z | 5.40 | 66.11 | 15.98 |  | 130.0 |  |
| $\begin{aligned} & 10629- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS3, 90 pc duty cycle) | X | 5.43 | 66.42 | 16.11 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.47 | 66.61 | 16.20 |  | 130.0 |  |
|  |  | Z | 5.50 | 66.31 | 16.08 |  | 130.0 |  |
| $\begin{aligned} & 10630- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS4, 90 pc duty cycle) | X | 5.59 | 67.09 | 16.45 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.66 | 67.38 | 16.59 |  | 130.0 |  |
|  |  | Z | 5.82 | 67.46 | 16.66 |  | 130.0 |  |
| $\begin{aligned} & 10631- \\ & \mathrm{AAB} \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS5, 90 pc duty cycle) | X | 5.58 | 67.18 | 16.70 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.66 | 67.50 | 16.84 |  | 130.0 |  |
|  |  | Z | 5.74 | 67.33 | 16.79 |  | 130.0 |  |
| $\begin{aligned} & 10632- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS6, 90 pc duty cycle) | X | 5.57 | 67.09 | 16.67 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.60 | 67.22 | 16.72 |  | 130.0 |  |
|  |  | Z | 5.64 | 66.96 | 16.63 |  | 130.0 |  |
| $\begin{aligned} & 10633- \\ & \text { AAB } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS7, 90pc duty cycle) | X | 5.30 | 66.12 | 16.00 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | $Y$ | 5.39 | 66.49 | 16.18 |  | 130.0 |  |
|  |  | Z | 5.45 | 66.28 | 16.11 |  | 130.0 |  |
| $\begin{aligned} & 10634- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS8, 90 pc duty cycle) | X | 5.34 | 66.35 | 16.17 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.43 | 66.70 | 16.34 |  | 130.0 |  |
|  |  | Z | 5.44 | 66.35 | 16.20 |  | 130.0 |  |
| $\begin{aligned} & 10635- \\ & \text { AAB } \end{aligned}$ | IEEE 802.11ac WiFi (80MHz, MCS9, 90 pc duty cycle) | X | 5.19 | 65.54 | 15.47 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.28 | 65.93 | 15.68 |  | 130.0 |  |
|  |  | Z | 5.31 | 65.62 | 15.55 |  | 130.0 |  |
| $\begin{aligned} & 10636- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCSO}$, 90 pc duty cycle) | X | 5.75 | 66.48 | 16.16 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.81 | 66.78 | 16.30 |  | 130.0 |  |
|  |  | Z | 5.84 | 66.50 | 16.20 |  | 130.0 |  |
| $\begin{aligned} & 10637- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS1, 90 pc duty cycle) | X | 5.86 | 66.76 | 16.29 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.91 | 67.05 | 16.42 |  | 130.0 |  |
|  |  | Z | 5.98 | 66.87 | 16.37 |  | 130.0 |  |
| $\begin{aligned} & 10638- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi ( 160 MHz , MCS2, 90 pc duty cycle) | X | 5.90 | 66.89 | 16.33 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.95 | 67.16 | 16.45 |  | 130.0 |  |
|  |  | $Z$ | 5.98 | 66.88 | 16.35 |  | 130.0 |  |


| $\begin{aligned} & 10639- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFI ( $160 \mathrm{MHz}, \mathrm{MCS} 3$, 90 pc duty cycle) | X | 5.83 | 66.70 | 16.28 | 0.46 | 130.0 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 5.90 | 67.02 | 16.42 |  | 130.0 |  |
|  |  | Z | 5.94 | 66.76 | 16.33 |  | 130.0 |  |
| $\begin{aligned} & 10640- \\ & \text { AAC } \\ & \hline \end{aligned}$ | IEEE 802.11ac WiFi (160MHz, MCS4, 90 pc duty cycle) | X | 5.77 | 66.49 | 16.12 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.85 | 66.88 | 16.30 |  | 130.0 |  |
|  |  | Z | 5.92 | 66.69 | 16.24 |  | 130.0 |  |
| $10641$ $A A C$ | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS5}$, 90 pc duty cycle) | X | 5.90 | 66.70 | 16.24 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.96 | 66.97 | 16.37 |  | 130.0 |  |
|  |  | Z | 6.02 | 66.77 | 16.30 |  | 130.0 |  |
| 10642- <br> AAC | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS}$, 90 pc duty cycle) | X | 5.91 | 66.85 | 16.49 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.98 | 67.18 | 16.64 |  | 130.0 |  |
|  |  | Z | 6.03 | 66.94 | 16.56 |  | 130.0 |  |
| 10643- <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 90 pc duty cycle) | X | 5.75 | 66.52 | 16.20 | 0.46 | 130.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.83 | 66.86 | 16.37 |  | 130.0 |  |
|  |  | Z | 5.88 | 66.65 | 16.30 |  | 130.0 |  |
| 10644- <br> AAC | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 8$, 90pc duty cycle) | X | 5.80 | 66.66 | 16.30 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 5.88 | 67.03 | 16.47 |  | 130.0 |  |
|  |  | Z | 5.94 | 66.85 | 16.42 |  | 130.0 |  |
| 10645- <br> AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS9, 90pc duty cycle) | X | 5.94 | 66.78 | 16.33 | 0.46 | 130.0 | $\pm 9.6$ \% |
|  |  | Y | 6.00 | 67.06 | 16.46 |  | 130.0 |  |
|  |  | Z | 6.15 | 67.15 | 16.54 |  | 130.0 |  |
| 10646- AAE | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe=2.7) | X | 5.05 | 83.78 | 28.65 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 6.98 | 93.27 | 32.89 |  | 60.0 |  |
|  |  | Z | 7.15 | 91.85 | 32.42 |  | 60.0 |  |
| 10647- <br> AAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,7$ ) | X | 4.54 | 81.82 | 27.99 | 9.30 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 5.99 | 90.07 | 31.84 |  | 60.0 |  |
|  |  | Z | 6.33 | 89.46 | 31.67 |  | 60.0 |  |
| $10648$ | CDMA2000 (1x Advanced) | X | 0.37 | 60.00 | 6.05 | 0.00 | 150.0 | $\pm 9.6 \%$ |
|  |  | Y | 0.48 | 61.63 | 8.16 |  | 150.0 |  |
|  |  | Z | 0.43 | 60.11 | 6.90 |  | 150.0 |  |
| $\begin{aligned} & 10652- \\ & \text { AAC } \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1 , Clipping 44\%) | X | 2.93 | 65.21 | 15.11 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.20 | 66.58 | 16.05 |  | 80.0 |  |
|  |  | Z | 3.10 | 65.44 | 15.57 |  | 80.0 |  |
| $\begin{aligned} & 10653- \\ & \text { AAC } \end{aligned}$ | LTE-TDD (OFDMA, 10 MHz , E-TM 3.1, Clipping 44\%) | X | 3.55 | 64.93 | 15.73 | 2.23 | 80.0 | $\pm 9.6 \%$ |
|  |  | Y | 3.74 | 65.80 | 16.31 |  | 80.0 |  |
|  |  | Z | 3.68 | 65.02 | 15.99 |  | 80.0 |  |
| $10654$ <br> AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44\%) | X | 3.60 | 64.60 | 15.83 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.76 | 65.39 | 16.34 |  | 80.0 |  |
|  |  | Z | 3.70 | 64.69 | 16.04 |  | 80.0 |  |
| $\begin{aligned} & \hline 10655- \\ & \text { AAD } \\ & \hline \end{aligned}$ | LTE-TDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | X | 3.69 | 64.52 | 15.89 | 2.23 | 80.0 | $\pm 9.6$ \% |
|  |  | Y | 3.83 | 65.30 | 16.38 |  | 80.0 |  |
|  |  | Z | 3.78 | 64.64 | 16.09 |  | 80.0 |  |
| $\begin{aligned} & 10658- \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | X | 3.48 | 68.63 | 11.85 | 10.00 | 50.0 | $\pm 9.6 \%$ |
|  |  | Y | 5.65 | 74.45 | 13.80 |  | 50.0 |  |
|  |  | Z | 7.21 | 77.53 | 15.77 |  | 50.0 |  |
| 10659- | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | X | 2.03 | 66.95 | 10.03 | 6.99 | 60.0 | $\pm 9.6$ \% |
|  |  | Y | 100.00 | 101.12 | 19.79 |  | 60.0 |  |
|  |  | Z | 100.00 | 104.10 | 21.38 |  | 60.0 |  |


| $10660-$ <br> AAA | Pulse Waveform (200Hz, 40\%) | X | 0.68 | 62.61 | 6.79 | 3.98 | 80.0 | $\pm 9.6 \%$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Y | 100.00 | 101.16 | 18.64 |  | 80.0 |  |
|  |  | Z | 100.00 | 99.78 | 18.10 |  | 80.0 |  |
| $10661-$ <br> AAA | Pulse Waveform (200Hz, 60\%) | X | 0.25 | 60.00 | 4.25 | 2.22 | 100.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 102.31 | 18.13 |  | 100.0 |  |
|  |  | Z | 0.28 | 60.39 | 4.93 |  | 100.0 |  |
| $10662-$ <br> AAA | Pulse Waveform (200Hz, 80\%) | X | 6.06 | 60.21 | 1.38 | 0.97 | 120.0 | $\pm 9.6 \%$ |
|  |  | Y | 100.00 | 96.37 | 14.68 |  | 120.0 |  |
|  | Z | 9.95 | 60.38 | 1.42 |  | 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.

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The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates
Client
PC Test
Certificate No: EX3-7417-Feb19
CALIBRATION CERTIFICATE V

Accreditation No.: SCS 0108

Object

Calibration procedure(s)


## EX3DV4-SN:7417

Calibration date:
February 19, 2019

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

All calibrations have been conducted in the closed laboratory facility: environment temperature $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$.

Calibration Equipment used (M\&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
| :---: | :---: | :---: | :---: |
| Power meter NRP | SN: 104778 | 04-Apr-18 (No. 217-02672/02673) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-18 (No. 217-02672) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-18 (No. 217-02673) | Apr-19 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 04-Apr-18 (No. 217-02682) | Apr-19 |
| DAE4 | SN: 660 | 19-Dec-18 (No. DAE4-660_Dec18) | Dec-19 |
| Reference Probe ES3DV2 | SN: 3013 | 31-Dec-18 (No. ES3-3013_Dec18) | Dec-19 |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-18) | In house check: Oct-19 |



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Multilateral Agreement for the recognition of calibration certificates

## Glossary:

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

Polarization 9 information used in DASY system to align probe sensor $X$ to the robot coordinate system
Connector Angle

## 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 handheld 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 "

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $\vartheta=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORM $x, y, z$ are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- NORM(f)x,y,z=NORMx,y,z**equency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCPx,y,z: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- $A x, y, z ; B x, y, z ; C x, y, z ; D x, y, z ; \vee R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $\mathrm{f}>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMX (no uncertainty required).


## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

## Basic Calibration Parameters

|  | Sensor $\mathbf{X}$ | Sensor $\mathbf{Y}$ | Sensor $\mathbf{Z}$ | Unc $(\mathbf{k}=\mathbf{2})$ |
| :--- | :---: | :---: | :---: | :---: |
| Norm $\left(\mu \mathrm{V} /(\mathrm{V} / \mathrm{m})^{2}\right)^{\mathrm{A}}$ | 0.54 | 0.43 | 0.53 | $\pm 10.1 \%$ |
| $\mathrm{DCP}(\mathrm{mV})^{8}$ | 98.7 | 97.4 | 100.4 |  |

Calibration Results for Modulation Response

| UID | Communication System Name |  | $\begin{gathered} \mathrm{A} \\ \mathrm{~dB} \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ \mathrm{~dB} \sqrt{ } \mathrm{~V} \mathrm{~V} \end{gathered}$ | C | $\begin{gathered} \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \text { VR } \\ & \mathrm{mV} \end{aligned}$ | Max dev. | $\begin{aligned} & \operatorname{Max}^{\operatorname{Max}} \\ & \mathrm{Unc}^{\mathrm{E}} \\ & (\mathrm{k}=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 144.6 | $\pm 3.3 \%$ | $\pm 4.7$ \% |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 149.7 |  |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 143.1 |  |  |
| $\begin{aligned} & 10352- \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | X | 15.00 | 88.38 | 19.65 | 10.00 | 60.0 | $\pm 3.3$ \% | $\pm 9.6$ \% |
|  |  | Y | 4.33 | 71.38 | 13.30 |  | 60.0 |  |  |
|  |  | Z | 7.40 | 77.44 | 14.95 |  | 60.0 |  |  |
| $\begin{aligned} & 10353- \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | X | 15.00 | 92.19 | 20.43 | 6.99 | 80.0 | $\pm 2.2$ \% | $\pm 9.6$ \% |
|  |  | Y | 5.53 | 76.01 | 13.64 |  | 80.0 |  |  |
|  |  | Z | 15.00 | 85.74 | 16.43 |  | 80.0 |  |  |
| $\begin{aligned} & \text { 10354- } \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 40 \%$ ) | X | 15.00 | 107.68 | 26.54 | 3.98 | 95.0 | $\pm 1.3$ \% | $\pm 9.6$ \% |
|  |  | Y | 9.05 | 79.53 | 12.66 |  | 95.0 |  |  |
|  |  | Z | 15.00 | 90.71 | 17.41 |  | 95.0 |  |  |
| $\begin{aligned} & 10355- \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 60 \%$ ) | X | 15.00 | 127.17 | 33.83 | 2.22 | 120.0 | $\pm 1.2$ \% | $\pm 9.6$ \% |
|  |  | Y | 0.26 | 60.00 | 4.45 |  | 120.0 |  |  |
|  |  | Z | 15.00 | 99.84 | 20.30 |  | 120.0 |  |  |
| $\begin{aligned} & 10387- \\ & \text { AAA } \end{aligned}$ | QPSK Waveform, 1 MHz | X | 0.56 | 60.62 | 7.74 | 0.00 | 150.0 | $\pm 3.6 \%$ | $\pm 9.6$ \% |
|  |  | Y | 0.42 | 60.00 | 4.69 |  | 150.0 |  |  |
|  |  | Z | 0.44 | 60.00 | 5.48 |  | 150.0 |  |  |
| $\begin{aligned} & 10388- \\ & \text { AAA } \end{aligned}$ | QPSK Waveform, 10 MHz | X | 2.27 | 69.09 | 16.46 | 0.00 | 150.0 | $\pm 1.3$ \% | $\pm 9.6$ \% |
|  |  | Y | 1.94 | 67.43 | 15.43 |  | 150.0 |  |  |
|  |  | Z | 2.06 | 68.27 | 16.05 |  | 150.0 |  |  |
| $\begin{aligned} & \text { 10396- } \\ & \text { AAA } \end{aligned}$ | 64-QAM Waveform, 100 kHz | X | 3.15 | 72.71 | 19.95 | 3.01 | 150.0 | $\pm 2.5$ \% | $\pm 9.6$ \% |
|  |  | Y | 2.04 | 67.08 | 18.19 |  | 150.0 |  |  |
|  |  | Z | 2.07 | 66.03 | 16.88 |  | 150.0 |  |  |
| $\begin{aligned} & \text { 10399- } \\ & \text { AAA } \end{aligned}$ | 64-QAM Waveform, 40 MHz | X | 3.52 | 67.53 | 16.10 | 0.00 | 150.0 | $\pm 2.4$ \% | $\pm 9.6$ \% |
|  |  | Y | 3.32 | 66.83 | 15.68 |  | 150.0 |  |  |
|  |  | Z | 3.38 | 67.15 | 15.89 |  | 150.0 |  |  |
| $\begin{aligned} & 10414- \\ & \text { AAA } \end{aligned}$ | WLAN CCDF, 64-QAM, 40MHz | X | 4.80 | 65.90 | 15.74 | 0.00 | 150.0 | $\pm 4.4$ \% | $\pm 9.6$ \% |
|  |  | Y | 4.58 | 65.58 | 15.59 |  | 150.0 |  |  |
|  |  | Z | 4.60 | 65.76 | 15.65 |  | 150.0 |  |  |

Note: For details on UID parameters see Appendix

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 $95 \%$.

[^10]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\boldsymbol{\alpha}$ <br> $\mathbf{V}^{-\mathbf{1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s .} \mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s . \mathbf { V } ^ { - 1 }}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 37.6 | 279.10 | 35.33 | 9.45 | 0.00 | 5.09 | 1.69 | 0.14 | 1.01 |
| Y | 29.6 | 227.60 | 37.50 | 5.19 | 0.43 | 5.04 | 0.00 | 0.16 | 1.01 |
| Z | 28.8 | 214.34 | 35.37 | 6.91 | 0.00 | 5.04 | 0.00 | 0.24 | 1.00 |

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle $\left(^{\circ}\right)$ | 120.5 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

## Calibration Parameter Determined in Head Tissue Simulating Media

| $f(\mathrm{MHz})^{\mathrm{C}}$ | $\begin{gathered} \text { Relative } \\ \text { Permittivity } \end{gathered}$ | $\begin{gathered} \text { Conductivity } \\ (\mathrm{S} / \mathrm{m})^{F} \end{gathered}$ $(\mathrm{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF Z | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{6} \\ (\mathrm{~mm}) \end{gathered}$ | $\begin{aligned} & \text { Unc } \\ & (\mathrm{k}=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 10.36 | 10.36 | 10.36 | 0.54 | 0.99 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 10.07 | 10.07 | 10.07 | 0.48 | 0.84 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 8.39 | 8.39 | 8.39 | 0.38 | 0.85 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 8.11 | 8.11 | 8.11 | 0.39 | 0.84 | $\pm 12.0$ \% |
| 2300 | 39.5 | 1.67 | 7.73 | 7.73 | 7.73 | 0.30 | 0.93 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 7.46 | 7.46 | 7.46 | 0.39 | 0.95 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 7.17 | 7.17 | 7.17 | 0.31 | 1.05 | $\pm 12.0 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is $4-9 \mathrm{MHz}$, and ConvF assessed at 13 MHz is $9-19 \mathrm{MHz}$. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{G}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7417

Calibration Parameter Determined in Body Tissue Simulating Media

| $f(\mathrm{MHz})^{\mathrm{c}}$ | Relative Permittivity ${ }^{F}$ | Conductivity $(\mathrm{S} / \mathrm{m})^{\mathrm{F}}$ | ConvF X | ConvF Y | ConvF $Z$ | Alpha ${ }^{\text {G }}$ | $\begin{gathered} \text { Depth }^{G} \\ (\mathrm{~mm}) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Unc } \\ (\mathrm{k}=2) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 10.35 | 10.35 | 10.35 | 0.63 | 0.84 | $\pm 12.0$ \% |
| 835 | 55.2 | 0.97 | 10.11 | 10.11 | 10.11 | 0.43 | 0.84 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 8.21 | 8.21 | 8.21 | 0.43 | 0.88 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 7.86 | 7.86 | 7.86 | 0.43 | 0.87 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 7.64 | 7.64 | 7.64 | 0.41 | 0.93 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 7.51 | 7.51 | 7.51 | 0.40 | 0.95 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 7.37 | 7.37 | 7.37 | 0.33 | 1.05 | $\pm 12.0 \%$ |

[^11]Frequency Response of E-Field (TEM-Cell:ifi110 EXX, Waveguide: R22)


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

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

$f=600 \mathrm{MHz}$, TEM

$\mathrm{f}=1800 \mathrm{MHz}, \mathrm{R} 22$



Uncertainty of Axial Isotropy Assessment: $\pm \mathbf{0 . 5 \%}(\mathbf{k}=2)$

## Dynamic Range f(SAR $\left.{ }_{\text {head }}\right)$ (TEM cell , $\mathrm{f}_{\text {eval }}=\mathbf{1 9 0 0} \mathbf{~ M H z}$ )




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

## Conversion Factor Assessment





## Appendix: Modulation Calibration Parameters

| UID | Rev | Communication System Name | Group | $\begin{aligned} & \text { PAR } \\ & \text { (dB) } \end{aligned}$ | $\begin{aligned} & \text { Unc }^{E} \\ & (k=2) \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  | CW | CW | 0.00 | $\pm 4.7 \%$ |
| 10010 | CAA | SAR Validation (Square, $100 \mathrm{~ms}, 10 \mathrm{~ms}$ ) | Test | 10.00 | $\pm 9.6 \%$ |
| 10011 | CAB | UMTS-FDD (WCDMA) | WCDMA | 2.91 | $\pm 9.6 \%$ |
| 10012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps ) | WLAN | 1.87 | $\pm 9.6 \%$ |
| 10013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps ) | WLAN | 9.46 | $\pm 9.6 \%$ |
| 10021 | DAC | GSM-FDD (TDMA, GMSK) | GSM | 9.39 | $\pm 9.6 \%$ |
| 10023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0) | GSM | 9.57 | $\pm 9.6 \%$ |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1) | GSM | 6.56 | $\pm 9.6 \%$ |
| 10025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0) | GSM | 12.62 | $\pm 9.6 \%$ |
| 10026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1) | GSM | 9.55 | $\pm 9.6 \%$ |
| 10027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | GSM | 4.80 | $\pm 9.6 \%$ |
| 10028 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | GSM | 3.55 | $\pm 9.6 \%$ |
| 10029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | GSM | 7.78 | $\pm 9.6 \%$ |
| 10030 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1) | Bluetooth | 5.30 | $\pm 9.6 \%$ |
| 10031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3) | Bluetooth | 1.87 | $\pm 9.6 \%$ |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5) | Bluetooth | 1.16 | $\pm 9.6 \%$ |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (P1/4-DQPSK, DH1) | Bluetooth | 7.74 | $\pm 9.6 \%$ |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH3) | Bluetooth | 4.53 | $\pm 9.6 \%$ |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5) | Bluetooth | 3.83 | $\pm 9.6 \%$ |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | Bluetooth | 8.01 | $\pm 9.6 \%$ |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | Bluetooth | 4.77 | $\pm 9.6 \%$ |
| 10038 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | Bluetooth | 4.10 | $\pm 9.6 \%$ |
| 10039 | CAB | CDMA2000 (1xRTT, RC1) | CDMA2000 | 4.57 | $\pm 9.6 \%$ |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, Pl/4-DQPSK, Halfrate) | AMPS | 7.78 | $\pm 9.6 \%$ |
| 10044 | CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM) | AMPS | 0.00 | $\pm 9.6 \%$ |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | DECT | 13.80 | $\pm 9.6 \%$ |
| 10049 | CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | DECT | 10.79 | $\pm 9.6 \%$ |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps ) | TD-SCDMA | 11.01 | $\pm 9.6 \%$ |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | GSM | 6.52 | $\pm 9.6 \%$ |
| 10059 | CAB | IEEE 802.110 WiFi 2.4 GHz (DSSS, 2 Mbps ) | WLAN | 2.12 | $\pm 9.6 \%$ |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps ) | WLAN | 2.83 | $\pm 9.6 \%$ |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps ) | WLAN | 3.60 | $\pm 9.6 \%$ |
| 10062 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps ) | WLAN | 8.68 | $\pm 9.6 \%$ |
| 10063 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps ) | WLIAN | 8.63 | $\pm 9.6 \%$ |
| 10064 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps ) | WLAN | 9.09 | $\pm 9.6 \%$ |
| 10065 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps ) | WLAN | 9.00 | $\pm 9.6 \%$ |
| 10066 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps ) | WLAN | 9.38 | $\pm 9.6 \%$ |
| 10067 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps ) | WLAN | 10.12 | $\pm 9.6 \%$ |
| 10068 | CAC | IEEE 802.11 $/ \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps ) | WLAN | 10.24 | $\pm 9.6 \%$ |
| 10069 | CAC | IEEE 802.11 $\mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 54 Mbps ) | WLAN | 10.56 | $\pm 9.6 \%$ |
| 10071 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | WLAN | 9.83 | $\pm 9.6 \%$ |
| 10072 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | WLAN | 9.62 | $\pm 9.6 \%$ |
| 10073 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | WLAN | 9.94 | $\pm 9.6 \%$ |
| 10074 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | WLAN | 10.30 | $\pm 9.6 \%$ |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | WLAN | 10.77 | $\pm 9.6 \%$ |
| 10076 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | WLAN | 10.94 | $\pm 9.6 \%$ |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | WLAN | 11.00 | $\pm 9.6 \%$ |
| 10081 | CAB | CDMA2000 (1xRTT, RC3) | CDMA2000 | 3.97 | $\pm 9.6 \%$ |
| 10082 | CAB | IS-54 / IS-136 FDD (TDMAFDM, Pl/4-DQPSK, Fullirate) | AMPS | 4.77 | $\pm 9.6 \%$ |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4) | GSM | 6.56 | $\pm 9.6 \%$ |
| 10097 | CAB | UMTS-FDD (HSDPA) | WCDMA | 3.98 | $\pm 9.6 \%$ |
| 10098 | CAB | UMTS-FDD (HSUPA, Subtest 2) | WCDMA | 3.98 | $\pm 9.6 \%$ |
| 10099 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | GSM | 9.55 | $\pm 9.6 \%$ |
| 10100 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.67 | $\pm 9.6 \%$ |
| 10101 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}, 16$-QAM) | LTE-FDD | 6.42 | $\pm 9.6 \%$ |
| 10102 | CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, 20 MHz , 64-QAM) | LTE-FDD | 6.60 | $\pm 9.6 \%$ |
| 10103 | CAG | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}, ~ Q P S K$ ) | LTE-TDD | 9.29 | $\pm 9.6 \%$ |
| 10104 | CAG | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | LTE-TDD | 9.97 | $\pm 9.6 \%$ |
| 10105 | CAG | LTE-TDD (SC-FDMA, $100 \%$ RB, 20 MHz , 64-QAM) | LTE-TDD | 10.01 | $\pm 9.6$ \% |
| 10108 | CAG | LTE-FDD (SC-FDMA, $100 \%$ RB, 10 MHz, QPSK) | LTE-FDD | 5.80 | $\pm 9.6 \%$ |


| 10109 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.43 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10110 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.75 | $\pm 9.6 \%$ |
| 10111 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}, 16$ QAM $)$ | LTE-FDD | 6.44 | $\pm 9.6$ \% |
| 10112 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.59 | $\pm 9.6 \%$ |
| 10113 | CAG | LTE-FDD (SC-FDMA, $100 \%$ RB, $5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.62 | $\pm 9.6 \%$ |
| 10114 | CAC | IEEE 802.11n (HT Greenfield, 13.5 Mbps , BPSK) | WLAN | 8.10 | $\pm 9.6 \%$ |
| 10115 | CAC | IEEE 802.11n (HT Greenfield, 81 Mbps , 16-QAM) | WLAN | 8.46 | $\pm 9.6 \%$ |
| 10116 | CAC | IEEE 802.11n (HT Greenfield, 135 Mbps , 64-QAM) | WLAN | 8.15 | $\pm 9.6 \%$ |
| 10117 | CAC | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK) | WLAN | 8.07 | $\pm 9.6 \%$ |
| 10118 | CAC | IEEE 802.11n (HT Mixed, 81 Mbps , 16-QAM) | WLAN | 8.59 | $\pm 9.6 \%$ |
| 10119 | CAC | IEEE 802.11n (HT Mixed, 135 Mbps , 64-QAM) | WLAN | 8.13 | $\pm 9.6 \%$ |
| 10140 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.49 | $\pm 9.6 \%$ |
| 10141 | CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, $15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.53 | $\pm 9.6 \%$ |
| 10142 | CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | $\pm 9.6 \%$ |
| 10143 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.35 | $\pm 9.6 \%$ |
| 10144 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.65 | $\pm 9.6 \%$ |
| 10145 | CAF | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.76 | $\pm 9.6$ \% |
| 10146 | CAF | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.41 | $\pm 9.6 \%$ |
| 10147 | CAF | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 64-QAM) | LTE-FDD | 6.72 | $\pm 9.6 \%$ |
| 10149 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.42 | $\pm 9.6 \%$ |
| 10150 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.60 | $\pm 9.6 \%$ |
| 10151 | CAG | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.28 | $\pm 9.6 \%$ |
| 10152 | CAG | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}, 16$-QAM) | LTE-TDD | 9.92 | $\pm 9.6 \%$ |
| 10153 | CAG | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.05 | $\pm 9.6 \%$ |
| 10154 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.75 | $\pm 9.6 \%$ |
| 10155 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.43 | $\pm 9.6 \%$ |
| 10156 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 5.79 | $\pm 9.6 \%$ |
| 10157 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 16-QAM) | LTE-FDD | 6.49 | $\pm 9.6 \%$ |
| 10158 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 64$-QAM) | LTE-FDD | 6.62 | $\pm 9.6 \%$ |
| 10159 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, 64-QAM) | LTE-FDD | 6.56 | $\pm 9.6 \%$ |
| 10160 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.82 | $\pm 9.6 \%$ |
| 10161 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.43 | $\pm 9.6 \%$ |
| 10162 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 64-QAM) | LTE-FDD | 6.58 | $\pm 9.6 \%$ |
| 10166 | CAF | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.46 | $\pm 9.6 \%$ |
| 10167 | CAF | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}_{1}$, 16-QAM) | LTE-FDD | 6.21 | $\pm 9.6 \%$ |
| 10168 | CAF | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, 64-QAM) | LTE-FDD | 6.79 | $\pm 9.6 \%$ |
| 10169 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-FDD | 5.73 | $\pm 9.6 \%$ |
| 10170 | CAE | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 20 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | L.TE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10171 | AAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz , 64-QAM) | LTE-FDD | 6.49 | $\pm 9.6 \%$ |
| 10172 | CAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK) | LTE-TDD | 9.21 | $\pm 9.6 \%$ |
| 10173 | CAG | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 20 \mathrm{MHz}, 16$-QAM) | LTE-TDD | 9.48 | $\pm 9.6 \%$ |
| 10174 | CAG | LTE-TDD (SC-FDMA, 1 RB, $20 \mathrm{MHz}, 64$-QAM) | LTE-TDD | 10.25 | $\pm 9.6 \%$ |
| 10175 | CAG | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | LTE-FDD | 5.72 | $\pm 9.6 \%$ |
| 10176 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10177 | CAI | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.73 | $\pm 9.6 \%$ |
| 10178 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10179 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10180 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}, 64$-QAM) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10181 | CAE | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.72 | $\pm 9.6 \%$ |
| 10182 | CAE | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10183 | AAD | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10184 | CAE | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.73 | $\pm 9.6 \%$ |
| 10185 | CAE | LTE-FDD (SC-FDMA 1 RB, $3 \mathrm{MHz}, 16$-QAM) | LTE-FDD | 6.51 | $\pm 9.6 \%$ |
| 10186 | AAE | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10187 | CAF | LTE-FDD (SC-FDMA , 1 RB, $1.4 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 5.73 | $\pm 9.6 \%$ |
| 10188 | CAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10189 | AAF | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10193 | CAC | IEEE 802.11 n (HT Greenfield, $6.5 \mathrm{Mbps}, \mathrm{BPSK}$ ) | WLAN | 8.09 | $\pm 9.6 \%$ |
| 10194 | CAC | IEEE 802.11 n (HT Greenfield, 39 Mbps , 16-QAM) | WLAN | 8.12 | $\pm 9.6 \%$ |
| 10195 | CAC | IEEE 802.11 n (HT Greenfield, 65 Mbps , 64-QAM) | WLAN | 8.21 | $\pm 9.6 \%$ |
| 10196 | CAC | IEEE 802.11 n (HT Mixed, 6.5 Mbps , BPSK) | WLAN | 8.10 | $\pm 9.6 \%$ |
| 10197 | CAC | IEEE 802.11n (HT Mixed, 39 Mbps , 16-QAM) | WLAN | 8.13 | $\pm 9.6 \%$ |
| 10198 | CAC | IEEE 802.11 n (HT Mixed, $65 \mathrm{Mbps}, 64-\mathrm{QAM}$ ) | WLAN | 8.27 | $\pm 9.6 \%$ |
| 10219 | CAC | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | WLAN | 8.03 | $\pm 9.6 \%$ |


| 10220 | CAC | IEEE 802.11 n (HT Mixed, 43.3 Mbps , 16-QAM) | WLAN | 8.13 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10221 | CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps , 64-QAM) | WLAN | 8.27 | $\pm 9.6$ \% |
| 10222 | CAC | IEEE 802.11 n (HT Mixed, 15 Mbps , BPSK) | WLAN | 8.06 | $\pm 9.6 \%$ |
| 10223 | CAC | IEEE 802.11 n (HT Mixed, $90 \mathrm{Mbps}, 16-\mathrm{QAM}$ ) | WLAN | 8.48 | $\pm 9.6 \%$ |
| 10224 | CAC | IEEE 802.11 n (HT Mixed, $150 \mathrm{Mbps}, 64-\mathrm{QAM}$ ) | WLAN | 8.08 | $\pm 9.6$ \% |
| 10225 | CAB | UMTS-FDD (HSPA+) | WCDMA | 5.97 | $\pm 9.6$ \% |
| 10226 | CAA | LTE-TDD (SC-FDMA, 1 RB, $1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.49 | $\pm 9.6$ \% |
| 10227 | CAA | LTE-TDD (SC-FDMA, 1 RB, $1.4 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.26 | $\pm 9.6$ \% |
| 10228 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , QPSK) | LTE-TDD | 9.22 | $\pm 9.6$ \% |
| 10229 | CAC | LTE-TDD (SC-FDMA, 1 RB, $3 \mathrm{MHz}, 16$-QAM) | LTE-TDD | 9.48 | $\pm 9.6$ \% |
| 10230 | CAC | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.25 | $\pm 9.6$ \% |
| 10231 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz , QPSK) | LTE-TDD | 9.19 | $\pm 9.6 \%$ |
| 10232 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6$ \% |
| 10233 | CAF | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.25 | $\pm 9.6$ \% |
| 10234 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-TDD | 9.21 | $\pm 9.6 \%$ |
| 10235 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6 \%$ |
| 10236 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | LTE-TDD | 10.25 | $\pm 9.6$ \% |
| 10237 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.21 | $\pm 9.6 \%$ |
| 10238 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6 \%$ |
| 10239 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.25 | $\pm 9.6$ \% |
| 10240 | CAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz , QPSK) | LTE-TDD | 9.21 | $\pm 9.6 \%$ |
| 10241 | CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.82 | $\pm 9.6$ \% |
| 10242 | CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, $64-\mathrm{QAM}$ ) | LTE-TDD | 9.86 | $\pm 9.6$ \% |
| 10243 | CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.46 | $\pm 9.6$ \% |
| 10244 | CAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, 16 \mathrm{QAM}$ ) | LTE-TDD | 10.06 | $\pm 9.6$ \% |
| 10245 | CAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.06 | $\pm 9.6 \%$ |
| 10246 | CAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.30 | $\pm 9.6 \%$ |
| 10247 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.91 | $\pm 9.6 \%$ |
| 10248 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.09 | $\pm 9.6$ \% |
| 10249 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.29 | $\pm 9.6 \%$ |
| 10250 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.81 | $\pm 9.6 \%$ |
| 10251 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.17 | $\pm 9.6 \%$ |
| 10252 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.24 | $\pm 9.6$ \% |
| 10253 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, $16-\mathrm{QAM}$ ) | LTE-TDD | 9.90 | $\pm 9.6 \%$ |
| 10254 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 64-QAM) | LTE-TDD | 10.14 | $\pm 9.6 \%$ |
| 10255 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-TDD | 9.20 | $\pm 9.6$ \% |
| 10256 | CAA | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.96 | $\pm 9.6$ \% |
| 10257 | CAA | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.08 | $\pm 9.6 \%$ |
| 10258 | CAA | LTE-TDD (SC-FDMA, $100 \%$ RB, $1.4 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-TDD | 9.34 | $\pm 9.6$ \% |
| 10259 | CAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.98 | $\pm 9.6$ \% |
| 10260 | CAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 9.97 | $\pm 9.6$ \% |
| 10261 | CAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.24 | $\pm 9.6 \%$ |
| 10262 | CAF | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM) | LTE-TDD | 9.83 | $\pm 9.6$ \% |
| 10263 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.16 | $\pm 9.6$ \% |
| 10264 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.23 | $\pm 9.6$ \% |
| 10265 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}, 16$-QAM) | LTE-TDD | 9.92 | $\pm 9.6 \%$ |
| 10266 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | LTE-TDD | 10.07 | $\pm 9.6 \%$ |
| 10267 | CAF | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz , QPSK) | LTE-TDD | 9.30 | $\pm 9.6$ \% |
| 10268 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 10.06 | $\pm 9.6$ \% |
| 10269 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.13 | $\pm 9.6$ \% |
| 10270 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.58 | $\pm 9.6$ \% |
| 10274 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | WCDMA | 4.87 | $\pm 9.6$ \% |
| 10275 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | WCDMA | 3.96 | $\pm 9.6$ \% |
| 10277 | CAA | PHS (QPSK) | PHS | 11.81 | $\pm 9.6 \%$ |
| 10278 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5) | PHS | 11.81 | $\pm 9.6$ \% |
| 10279 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38) | PHS | 12.18 | $\pm 9.6 \%$ |
| 10290 | AAB | CDMA2000, RC1, SO55, Full Rate | CDMA2000 | 3.91 | $\pm 9.6$ \% |
| 10291 | AAB | CDMA2000, RC3, SO55, Full Rate | CDMA2000 | 3.46 | $\pm 9.6$ \% |
| 10292 | AAB | CDMA2000, RC3, SO32, Full Rate | CDMA2000 | 3.39 | $\pm 9.6$ \% |
| 10293 | AAB | CDMA2000, RC3, SO3, Full Rate | CDMA2000 | 3.50 | $\pm 9.6 \%$ |
| 10295 | AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr . | CDMA2000 | 12.49 | $\pm 9.6 \%$ |
| 10297 | AAD | LTE-FDD (SC-FDMA, $50 \%$ RB, 20 MHz, QPSK) | LTE-FDD | 5.81 | $\pm 9.6$ \% |
| 10298 | AAD | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 5.72 | $\pm 9.6 \%$ |
| 10299 | AAD | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, 16$-QAM) | LTE-FDD | 6.39 | $\pm 9.6 \%$ |


| 10300 | AAD | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.60 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10301 | AAA | IEEE 802.16e WiMAX ( $29: 18,5 \mathrm{~ms}, 10 \mathrm{MHz}$, QPSK, PUSC) | WIMAX | 12.03 | $\pm 9.6$ \% |
| 10302 | AAA | IEEE 802.16e WiMAX ( $29: 18,5 \mathrm{~ms}, 10 \mathrm{MHz}$, QPSK, PUSC, 3 CTRL symbols) | WIMAX | 12.57 | $\pm 9.6$ \% |
| 10303 | AAA | IEEE 802.16 e WiMAX ( $31: 15,5 \mathrm{~ms}, 10 \mathrm{MHz}, 64 \mathrm{QAM}, \mathrm{PUSC})$ | WIMAX | 12.52 | $\pm 9.6$ \% |
| 10304 | AAA | IEEE 802.16 e WIMAX ( $29: 18,5 \mathrm{~ms}, 10 \mathrm{MHz}, 64 \mathrm{QAM}, \mathrm{PUSC}$ ) | WIMAX | 11.86 | $\pm 9.6$ \% |
| 10305 | AAA | IEEE 802.16e WiMAX ( $31: 15,10 \mathrm{~ms}, 10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 15 symbols) | WiMAX | 15.24 | $\pm 9.6$ \% |
| 10306 | AAA | IEEE 802.16e WIMAX ( $29: 18,10 \mathrm{~ms}, 10 \mathrm{MHz}, 64 \mathrm{QAM}$, PUSC, 18 symbols) | WIMAX | 14.67 | $\pm 9.6$ \% |
| 10307 | AAA | IEEE 802.16e WiMAX ( $29: 18,10 \mathrm{~ms}, 10 \mathrm{MHz}$, QPSK, PUSC, 18 symbols) | WiMAX | 14.49 | $\pm 9.6$ \% |
| 10308 | AAA | IEEE 802.16e WiMAX (29:18, $10 \mathrm{~ms}, 10 \mathrm{MHz}, 16 \mathrm{QAM}, \mathrm{PUSC})$ | WIMAX | 14.46 | $\pm 9.6 \%$ |
| 10309 | AAA | IEEE 802.16e WiMAX ( $29: 18,10 \mathrm{~ms}, 10 \mathrm{MHz}, 16$ QAM, AMC $2 \times 3,18$ symbols) | WiMAX | 14.58 | $\pm 9.6$ \% |
| 10310 | AAA | IEEE 802.16e WiMAX ( $29: 18,10 \mathrm{~ms}, 10 \mathrm{MHz}$, QPSK, AMC $2 \times 3,18$ symbols) | WiMAX | 14.57 | $\pm 9.6$ \% |
| 10311 | AAD | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 6.06 | $\pm 9.6$ \% |
| 10313 | AAA | IDEN 1:3 | IDEN | 10.51 | $\pm 9.6$ \% |
| 10314 | AAA | iDEN 1:6 | iDEN | 13.48 | $\pm 9.6$ \% |
| 10315 | AAB | IEEE 802.11 b WiFi 2.4 GHz (DSSS, $1 \mathrm{Mbps}, 96 \mathrm{pc}$ duty cycle) | WLAN | 1.71 | $\pm 9.6$ \% |
| 10316 | $A A B$ | IEEE 802.11 g WiFi 2.4 GHz (ERP-OFDM, $6 \mathrm{Mbps}, 96 \mathrm{pc}$ duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |
| 10317 | AAC | IEEE 802.11a WIFi 5 GHz (OFDM, $6 \mathrm{Mbps}, 96 \mathrm{pc}$ duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |
| 10352 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | Generic | 10.00 | $\pm 9.6 \%$ |
| 10353 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | Generic | 6.99 | $\pm 9.6 \%$ |
| 10354 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 40 \%$ ) | Generic | 3.98 | $\pm 9.6 \%$ |
| 10355 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 60 \%$ ) | Generic | 2.22 | $\pm 9.6 \%$ |
| 10356 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 80 \%$ ) | Generic | 0.97 | $\pm 9.6$ \% |
| 10387 | AAA | QPSK Waveform, 1 MHz | Generic | 5.10 | $\pm 9.6 \%$ |
| 10388 | AAA | QPSK Waveform, 10 MHz | Generic | 5.22 | $\pm 9.6$ \% |
| 10396 | AAA | 64-QAM Waveform, 100 kHz | Generic | 6.27 | $\pm 9.6 \%$ |
| 10399 | AAA | 64-QAM Waveform, 40 MHz | Generic | 6.27 | $\pm 9.6$ \% |
| 10400 | AAD | IEEE 802.11 ac WiFi ( 20 MHz , 64-QAM, 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6 \%$ |
| 10401 | AAD | IEEE 802.11ac WiFi (40MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.60 | $\pm 9.6$ \% |
| 10402 | AAD | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 80 \mathrm{MHz}, 64-\mathrm{QAM}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.53 | $\pm 9.6 \%$ |
| 10403 | AAB | CDMA2000 ( 1 XEV-DO, Rev. 0) | CDMA2000 | 3.76 | $\pm 9.6 \%$ |
| 10404 | AAB | CDMA2000 (1xEV-DO, Rev. A) | CDMA2000 | 3.77 | $\pm 9.6$ \% |
| 10406 | AAB | CDMA2000, RC3, SO32, SCH0, Full Rate | CDMA2000 | 5.22 | $\pm 9.6$ \% |
| 10410 | AAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf $=4$ ) | LTE-TDD | 7.82 | $\pm 9.6$ \% |
| 10414 | AAA | WLAN CCDF, $64-\mathrm{QAM}, 40 \mathrm{MHz}$ | Generic | 8.54 | $\pm 9.6$ \% |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $1 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 1.54 | $\pm 9.6$ \% |
| 10416 | AAA | IEEE 802.11 g WiFi 2.4 GHz (ERP-OFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.23 | $\pm 9.6$ \% |
| 10417 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.23 | $\pm 9.6$ \% |
| 10418 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle, Long preambule) | WLAN | 8.14 | $\pm 9.6$ \% |
| 10419 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps , 99 pc duty cycle, Short preambule) | WLAN | 8.19 | $\pm 9.6$ \% |
| 10422 | AAB | IEEE 802.11n (HT Greenfield, 7.2 Mbps , BPSK) | WLAN | 8.32 | $\pm 9.6$ \% |
| 10423 | AAB | IEEE 802.11n (HT Greenfield, 43.3 Mbps , 16-QAM) | WLAN | 8.47 | $\pm 9.6$ \% |
| 10424 | $A A B$ | IEEE 802.11n (HT Greenfield, 72.2 Mbps , 64-QAM) | WLAN | 8.40 | $\pm 9.6$ \% |
| 10425 | AAB | IEEE 802.11n (HT Greenfield, 15 Mbps , BPSK) | WLAN | 8.41 | $\pm 9.6$ \% |
| 10426 | AAB | IEEE 802.11n (HT Greenfield, 90 Mbps , 16-QAM) | WLAN | 8.45 | $\pm 9.6$ \% |
| 10427 | AAB | IEEE 802.11 n (HT Greenfield, 150 Mbps , 64-QAM) | WLAN | 8.41 | $\pm 9.6 \%$ |
| 10430 | AAD | LTE-FDD (OFDMA, 5 MHz , E-TM 3.1) | LTE-FDD | 8.28 | $\pm 9.6 \%$ |
| 10431 | AAD | LTE-FDD (OFDMA, $10 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | LTE-FDD | 8.38 | $\pm 9.6 \%$ |
| 10432 | AAC | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1) | LTE-FDD | 8.34 | $\pm 9.6 \%$ |
| 10433 | AAC | LTE-FDD (OFDMA, $20 \mathrm{MHz}, \mathrm{E}$-TM 3.1) | LTE-FDD | 8.34 | $\pm 9.6 \%$ |
| 10434 | AAA | W-CDMA (BS Test Model 1, 64 DPCH) | WCDMA | 8.60 | $\pm 9.6 \%$ |
| 10435 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.82 | $\pm 9.6$ \% |
| 10447 | AAD | LTE-FDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | LTE-FDD | 7.56 | $\pm 9.6$ \% |
| 10448 | AAD | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | LTE-FDD | 7.53 | $\pm 9.6 \%$ |
| 10449 | AAC | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1, Cliping 44\%) | LTE-FDD | 7.51 | $\pm 9.6 \%$ |
| 10450 | AAC | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | LTE-FDD | 7.48 | $\pm 9.6$ \% |

$\left.\begin{array}{|l|l|l|l|c|c|}\hline 10451 & \text { AAA } & \text { W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44\%) } & \text { WCDMA } & 7.59 & \pm 9.6 \% \\ \hline 10456 & \text { AAB } & \text { IEEE 802.11ac WiFi } 160 \mathrm{MHz}, 64-\mathrm{QAM}, 99 \mathrm{pC} \text { duty cycle) } & \text { WLAN } & 8.63 & \pm 9.6 \% \\ \hline 10457 & \text { AAA } & \text { UMTS-FDD (DC-HSDPA) }\end{array}\right)$

| 10492 | AAE | LTE-TDD (SC-FDMA, $50 \%$ RB, $15 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe=2,3,4,7,8,9) | LTE-TDD | 8.41 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10493 | AAE | LTE-TDD (SC-FDMA, $50 \%$ RB, $15 \mathrm{MHz}, 64$-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.55 | $\pm 9.6 \%$ |
| 10494 | AAF | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.74 | $\pm 9.6 \%$ |
| 10495 | AAF | LTE-TDD (SC-FDMA, $50 \%$ RB, $20 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.37 | $\pm 9.6 \%$ |
| 10496 | AAF | LTE-TDD (SC-FDMA, $50 \%$ RB, $20 \mathrm{MHz}, 64-Q A M$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.54 | $\pm 9.6 \%$ |
| 10497 | AAA | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.67 | $\pm 9.6 \%$ |
| 10498 | AAA | $\begin{aligned} & \text { LTE-TDD (SC-FDMA, } 100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL} \\ & \text { Subframe }=2,3,4,7,8,9 \text { ) } \end{aligned}$ | LTE-TDD | 8.40 | $\pm 9.6$ \% |
| 10499 | AAA | LTE-TDD (SC-FDMA, $100 \%$ RB, $1.4 \mathrm{MHz}, 64-Q A M$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.68 | $\pm 9.6 \%$ |
| 10500 | AAB | LTE-TDD (SC-FDMA, $100 \%$ RB, 3 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.67 | $\pm 9.6$ \% |
| 10501 | AAB | LTE-TDD (SC-FDMA, $100 \%$ RB, $3 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.44 | $\pm 9.6$ \% |
| 10502 | AAB | LTE-TDD (SC-FDMA, $100 \%$ RB, $3 \mathrm{MHz}, 64-Q A M$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.52 | $\pm 9.6$ \% |
| 10503 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.72 | $\pm 9.6$ \% |
| 10504 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, $5 \mathrm{MHz}, 16-\mathrm{QAM}$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.31 | $\pm 9.6$ \% |
| 10505 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, $5 \mathrm{MHz}, 64-Q A M$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.54 | $\pm 9.6$ \% |
| 10506 | AAE | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.74 | $\pm 9.6$ \% |
| 10507 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, $10 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.36 | $\pm 9.6$ \% |
| 10508 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, $10 \mathrm{MHz}, 64$-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.55 | $\pm 9.6$ \% |
| 10509 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.99 | $\pm 9.6$ \% |
| 10510 | AAE | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.49 | $\pm 9.6$ \% |
| 10511 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, $15 \mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.51 | $\pm 9.6 \%$ |
| 10512 | AAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.74 | $\pm 9.6$ \% |
| 10513 | AAF | LTE-TDD (SC-FDMA, $100 \%$ RB, $20 \mathrm{MHz}, 16-\mathrm{QAM}$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.42 | $\pm 9.6$ \% |
| 10514 | AAF | LTE-TDD (SC-FDMA, $100 \%$ RB, $20 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.45 | $\pm 9.6$ \% |
| 10515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps , 99pc duty cycle) | WLAN | 1.58 | $\pm 9.6$ \% |
| 10516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $5.5 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 1.57 | $\pm 9.6 \%$ |
| 10517 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $11 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 1.58 | $\pm 9.6 \%$ |
| 10518 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, $9 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.23 | $\pm 9.6 \%$ |
| 10519 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps , 99pc duty cycle) | WLAN | 8.39 | $\pm 9.6 \%$ |
| 10520 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps , 99pc duty cycle) | WLAN | 8.12 | $\pm 9.6 \%$ |
| 10521 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps , 99pc duty cycle) | WLAN | 7.97 | $\pm 9.6 \%$ |
| 10522 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 36 Mbps , 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |
| 10523 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $48 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.08 | $\pm 9.6 \%$ |
| 10524 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 54 Mbps , 99pc duty cycle) | WL.AN | 8.27 | $\pm 9.6 \%$ |
| 10525 | AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |
| 10526 | AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) | WLAN | 8.42 | $\pm 9.6 \%$ |
| 10527 | AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) | WLAN | 8.21 | $\pm 9.6 \%$ |
| 10528 | AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |
| 10529 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |
| 10531 | AAB | IEEE 802.11 ac WiFi (20MHz, MCS6, 99pc duty cycle) | WLAN | 8.43 | $\pm 9.6 \%$ |
| 10532 | AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | $\pm 9.6 \%$ |
| 10533 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle) | WLAN | 8.38 | $\pm 9.6 \%$ |
| 10534 | AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duly cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |


| 10535 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10536 | AAB | IEEE 802.11 ac WiFi ( 40 MHz , MCS2, 99 pc duty cycle) | WLAN | 8.32 | $\pm 9.6 \%$ |
| 10537 | AAB | IEEE 802.11 ac WiFi ( 40 MHz , MCS3, 99pc duty cycle) | WLAN | 8.44 | $\pm 9.6$ \% |
| 10538 | AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle) | WLAN | 8.54 | $\pm 9.6 \%$ |
| 10540 | AAB | IEEE 802.11 ac WiFi ( 40 MHz , MCS6, 99pc duty cycle) | WLAN | 8.39 | $\pm 9.6$ \% |
| 10541 | AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | WLAN | 8.46 | $\pm 9.6 \%$ |
| 10542 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle) | WLAN | 8.65 | $\pm 9.6$ \% |
| 10543 | AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | WLAN | 8.65 | $\pm 9.6$ \% |
| 10544 | AAB | IEEE 802.11ac WiFi ( 80 MHz , MCS0, 99pc duty cycle) | WLAN | 8.47 | $\pm 9.6$ \% |
| 10545 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 80 \mathrm{MHz}$, MCS1, 99 pc duty cycle) | WLAN | 8.55 | $\pm 9.6$ \% |
| 10546 | AAB | IEEE 802.11ac WiFi (80MHz, MCS2, 99pc duty cycle) | WLAN | 8.35 | $\pm 9.6 \%$ |
| 10547 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle) | WLAN | 8.49 | $\pm 9.6 \%$ |
| 10548 | AAB | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6 \%$ |
| 10550 | AAB | IEEE 802.11ac WiFi ( 80 MHz , MCS6, 99pc duty cycle) | WLAN | 8.38 | $\pm 9.6 \%$ |
| 10551 | AAB | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS7}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10552 | AAB | IEEE 802.11 ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS8}$, 99pc duty cycle) | WLAN | 8.42 | $\pm 9.6 \%$ |
| 10553 | AAB | IEEE 802.11ac WiFi ( 80 MHz , MCS9, 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |
| 10554 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCSO, 99pc duty cycle) | WLAN | 8.48 | $\pm 9.6 \%$ |
| 10555 | AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | WLAN | 8.47 | $\pm 9.6 \%$ |
| 10556 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS2, 99pc duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10557 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 99pc duty cycle) | WLAN | 8.52 | $\pm 9.6 \%$ |
| 10558 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS4, 99pc duty cycle) | WLAN | 8.61 | $\pm 9.6$ \% |
| 10560 | AAC | IEEE 802.11 ac WiFi ( 160 MHz , MCS6, 99pc duty cycle) | WLAN | 8.73 | $\pm 9.6$ \% |
| 10561 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS7, 99pc duty cycle) | WLAN | 8.56 | $\pm 9.6 \%$ |
| 10562 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 99pc duty cycle) | WLAN | 8.69 | $\pm 9.6 \%$ |
| 10563 | AAC | IEEE 802,11ac WiFi (160MHz, MCS9, 99pc duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10564 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps , 99 pc duty cycle) | WLAN | 8.25 | $\pm 9.6 \%$ |
| 10565 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps , 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6$ \% |
| 10566 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $18 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.13 | $\pm 9.6 \%$ |
| 10567 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps , 99pc duty cycle) | WLAN | 8.00 | $\pm 9.6$ \% |
| 10568 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps , 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6$ \% |
| 10569 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps , 99 pc duty cycle) | WLAN | 8.10 | $\pm 9.6 \%$ |
| 10570 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps , 99pc duty cycle) | WLAN | 8.30 | $\pm 9.6$ \% |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $1 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.99 | $\pm 9.6 \%$ |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $2 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.99 | $\pm 9.6 \%$ |
| 10573 | AAA | IEEE 802.11 b WiFi 2.4 GHz (DSSS, $5.5 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.98 | $\pm 9.6$ \% |
| 10574 | AAA | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 11 Mbps , 90pc duty cycle) | WLAN | 1.98 | $\pm 9.6$ \% |
| 10575 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps , 90 pc duty cycle) | WLAN | 8.59 | $\pm 9.6$ \% |
| 10576 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps , 90 pc duty cycle) | WLAN | 8.60 | $\pm 9.6$ \% |
| 10577 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $12 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.70 | $\pm 9.6$ \% |
| 10578 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps , 90pc duty cycle) | WLAN | 8.49 | $\pm 9.6$ \% |
| 10579 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $24 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |
| 10580 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps , 90pc duty cycle) | WLAN | 8.76 | $\pm 9.6$ \% |
| 10581 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps , 90pc duty cycle) | WLAN | 8.35 | $\pm 9.6$ \% |
| 10582 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps , 90pc duty cycle) | WLAN | 8.67 | $\pm 9.6$ \% |
| 10583 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps , 90pc duty cycle) | WLAN | 8.59 | $\pm 9.6$ \% |
| 10584 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $9 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.60 | $\pm 9.6$ \% |
| 10585 | AAB | IEEE 802.11 $/ \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, $12 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.70 | $\pm 9.6$ \% |
| 10586 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $18 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.49 | $\pm 9.6$ \% |
| 10587 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $24 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |


| 10588 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, $36 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.76 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10589 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps , 90pc duty cycle) | WLAN | 8.35 | $\pm 9.6$ \% |
| 10590 | AAB | IEEE 802.11 $/ \mathrm{h}$ W WiFi 5 GHz (OFDM, 54 Mbps , 90pc duty cycle) | WLAN | 8.67 | $\pm 9.6$ \% |
| 10591 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS0, 90pc duty cycle) | WLAN | 8.63 | $\pm 9.6$ \% |
| 10592 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS1, 90pc duty cycle) | WLAN | 8.79 | $\pm 9.6$ \% |
| 10593 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS2, 90pc duty cycle) | WLAN | 8.64 | $\pm 9.6$ \% |
| 10594 | AAB | IEEE 802.11n (HT Mixed, $20 \mathrm{MHz}, \mathrm{MCS3}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10595 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | WLAN | 8.74 | $\pm 9.6$ \% |
| 10596 | AAB | IEEE 802.11 n (HT Mixed, $20 \mathrm{MHz}, \mathrm{MCS5}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.71 | $\pm 9.6$ \% |
| 10597 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS6, 90pc duty cycle) | WLAN | 8.72 | $\pm 9.6$ \% |
| 10598 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS7, 90pc duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10599 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS0}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.79 | $\pm 9.6 \%$ |
| 10600 | AAB | IEEE 802.11 n (HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | WLAN | 8.88 | $\pm 9.6 \%$ |
| 10601 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS2}$, 90pc duty cycle) | WLAN | 8.82 | $\pm 9.6$ \% |
| 10602 | AAB | IEEE 802.11 n (HT Mixed, 40MHz, MCS3, 90pc duty cycle) | WLAN | 8.94 | $\pm 9.6$ \% |
| 10603 | AAB | IEEE 802.1 in (HT Mixed, 40 MHz , MCS4, 90pc duty cycle) | WLAN | 9.03 | $\pm 9.6 \%$ |
| 10604 | AAB | IEEE 802.11 l ( HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS5}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.76 | $\pm 9.6$ \% |
| 10605 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS6, 90pc duty cycle) | WLAN | 8.97 | $\pm 9.6$ \% |
| 10606 | AAB | IEEE 802.1 1n (HT Mixed, 40MHz, MCS7, 90pc duty cycle) | WLAN | 8.82 | $\pm 9.6$ \% |
| 10607 | AAB | IEEE 802.11ac WiFi ( 20 MHz , MCSO, 90pc duty cycle) | WLAN | 8.64 | $\pm 9.6$ \% |
| 10608 | AAB | IEEE 802.11 ac WiFi ( 20 MHz , MCS1, 90 pc duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10609 | AAB | IEEE 802.11 ac WiFi ( 20 MHz , MCS2, 90 pc duty cycle) | WLAN | 8.57 | $\pm 9.6$ \% |
| 10610 | AAB | IEEE 802,11ac WiFi ( 20 MHz , MCS3, 90pc duty cycle) | WLAN | 8.78 | $\pm 9.6 \%$ |
| 10611 | AAB | IEEE 802.11ac WiFi ( 20 MHz , MCS4, 90pc duty cycle) | WLAN | 8.70 | $\pm 9.6$ \% |
| 10612 | AAB | IEEE 802.11ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS5}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10613 | AAB | IEEE 802.11ac WiFi ( 20 MHz , MCS6, 90pc duty cycle) | WLAN | 8.94 | $\pm 9.6$ \% |
| 10614 | AAB | IEEE 802.11 ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS7}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.59 | $\pm 9.6$ \% |
| 10615 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | WLAN | 8.82 | $\pm 9.6$ \% |
| 10616 | AAB | IEEE 802.11ac WiFi ( 40 MHz , MCSO, 90 pc duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10617 | AAB | IEEE 802.11 ac WiFi ( $40 \mathrm{MHz}, \mathrm{MCS1}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.81 | $\pm 9.6$ \% |
| 10618 | AAB | IEEE 802.11 ac WiFi (40MHz, MCS2, 90pc duty cycle) | WLAN | 8.58 | $\pm 9.6$ \% |
| 10619 | AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | WLAN | 8.86 | $\pm 9.6$ \% |
| 10620 | AAB | IEEE 802.11ac WiFi (40MHz, MCS4, 90pc duty cycle) | WLAN | 8.87 | $\pm 9.6 \%$ |
| 10621 | AAB | IEEE 802.11ac WiFi (40MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | $\pm 9.6$ \% |
| 10622 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | WLAN | 8.68 | $\pm 9.6 \%$ |
| 10623 | AAB | IEEE 802.11ac WiFi (40MHz, MCS7, 90pc duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10624 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle) | WLAN | 8.96 | $\pm 9.6 \%$ |
| 10625 | AAB | IEEE 802.11 ac WiFi ( 40 MHz , MCS9, 90pc duty cycle) | WLAN | 8.96 | $\pm 9.6 \%$ |
| 10626 | AAB | IEEE 802.11 ac WiFi ( 80 MHz , MCSO, 90 pc duty cycle) | WLAN | 8.83 | $\pm 9.6 \%$ |
| 10627 | AAB | IEEE 802.11 ac WiFi ( 80 MHz , MCS1, 90 pc duty cycle) | WLAN | 8.88 | $\pm 9.6$ \% |
| 10628 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 80 \mathrm{MHz}, \mathrm{MCS2}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.71 | $\pm 9.6 \%$ |
| 10629 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | $\pm 9.6 \%$ |
| 10630 | AAB | IEEE 802.11ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS4}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.72 | $\pm 9.6 \%$ |
| 10631 | AAB | IEEE 802.11ac WiFi ( 80 MHz , MCS5, 90pc duty cycle) | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10632 | AAB | IEEE 802.11ac WiFi ( 80 MHz , MCS6, 90pc duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10633 | AAB | IEEE 802.11ac WiFi ( 80 MHz , MCS7, 90 pc duty cycle) | WLAN | 8.83 | $\pm 9.6$ \% |
| 10634 | AAB | IEEE 802.11 ac WiFi ( $80 \mathrm{MHz}, \mathrm{MCS8}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.80 | $\pm 9.6$ \% |
| 10635 | AAB | IEEE 802.11ac WiFi ( 80 MHz , MCS9, 90 pc duty cycle) | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10636 | AAC | IEEE 802.11ac WiFl ( 160 MHz , MCSO, 90pc duty cycle) | WLAN | 8.83 | $\pm 9.6$ \% |
| 10637 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS1, 90pc duty cycle) | WLAN | 8.79 | $\pm 9.6 \%$ |
| 10638 | AAC | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 2,90 \mathrm{pc}$ duty cycle) | WLAN | 8.86 | $\pm 9.6 \%$ |
| 10639 | AAC | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS3}$, 90pc duty cycle) | WLAN | 8.85 | $\pm 9.6 \%$ |
| 10640 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS4, 90pc duty cycle) | WLAN | 8.98 | $\pm 9.6$ \% |
| 10641 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS5, 90pc duty cycle) | WLAN | 9.06 | $\pm 9.6 \%$ |
| 10642 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS6, 90pc duty cycle) | WLAN | 9.06 | $\pm 9.6 \%$ |
| 10643 | AAC | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS7}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.89 | $\pm 9.6$ \% |
| 10644 | AAC | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS8}, 90 \mathrm{pc}$ duty cycle) | WLAN | 9.05 | $\pm 9.6$ \% |
| 10645 | AAC | IEEE 802.11 ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS9}$, 90pc duty cycle) | WLAN | 9.11 | $\pm 9.6 \%$ |
| 10646 | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe $=2,7$ ) | LTE-TDD | 11.96 | $\pm 9.6 \%$ |
| 10647 | AAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 20 \mathrm{MHz}$, QPSK, UL Subframe $=2,7$ ) | LTE-TDD | 11.96 | $\pm 9.6 \%$ |
| 10648 | AAA | CDMA2000 (1x Advanced) | CDMA2000 | 3.45 | $\pm 9.6 \%$ |
| 10652 | AAD | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | LTE-TDD | 6.91 | $\pm 9.6 \%$ |
| 10653 | AAD | LTE-TDD (OFDMA, 10 MHz , E-TM 3.1, Clipping 44\%) | LTE-TDD | 7.42 | $\pm 9.6 \%$ |
| 10654 | AAD | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | LTE-TDD | 6.96 | $\pm 9.6$ \% |


| 10655 | AAE | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44\%) | LTE-TDD | 7.21 | $\pm 9.6 \%$ |
| :--- | :--- | :--- | :--- | :---: | :---: |
| 10658 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 10 \%)$ | Test | 10.00 | $\pm 9.6 \%$ |
| 10659 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 20 \%)$ | Test | 6.99 | $\pm 9.6 \%$ |
| 10660 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 40 \%)$ | Test | 3.98 | $\pm 9.6 \%$ |
| 10661 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 60 \%)$ | Test | 2.22 | $\pm 9.6 \%$ |
| 10662 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 80 \%)$ | Test | 0.97 | $\pm 9.6 \%$ |
| 10670 | AAA | Bluetooth Low Energy | Bluetooth | 2.19 | $\pm 9.6 \%$ |

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

Calibration Laboratory of<br>Schmid \& Partner<br>Engineering AG<br>Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
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Accredited by the Swiss Accreditation Service (SAS)
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Multilateral Agreement for the recognition of calibration certificates
Client
PC Test
Certificate No: EX3-7488_Jan 19

## CALIBRATION CERTIFICATE

| Object |  |
| :---: | :---: |
| Calibration procedure(s) |  <br>  |
| Calibration date: |  |
| This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate. |  |
|  |  |
| All calibrations have been conducted in the closed laboratory facility: environment temperature (22 $\pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$. |  |
| Calibration Equipment used (M\&TE critical for calibration) |  |


| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
| :---: | :---: | :---: | :---: |
| Power meter NRP | SN: 104778 | 04-Apr-18 (No. 217-02672/02673) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-18 (No. 217-02672) | Apr-19 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-18 (No. 217-02673) | Apr-19 |
| Reference 20 dB Attenuator | SN: S5277 (20x) | 04-Apr-18 (No. 217-02682) | Apr-19 |
| DAE4 | SN: 660 | 19-Dec-18 (No. DAE4-660_Dec18) | Dec-19 |
| Reference Probe ES3DV2 | SN: 3013 | 31-Dec-18 (No. ES3-3013_Dec18) | Dec-19 |
| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-18) | In house check: Jun-20 |
| RF generator HP 8648C | SN: US3642U01700 | 04-Aug-99 (in house check Jun-18) | In house check: Jun-20 |
| Network Analyzer E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-18) | In house check: Oct-19 |



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

Connector Angle information used in DASY system to align probe sensor $X$ to the robot coordinate system

## Calibration is Performed According to the Following Standards:

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 handheld 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 "

## Methods Applied and Interpretation of Parameters:

- NORMx,y,z: Assessed for E-field polarization $9=0$ ( $f \leq 900 \mathrm{MHz}$ in TEM-cell; $\mathrm{f}>1800 \mathrm{MHz}$ : R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORM $x, y, z$ does not affect the $E^{2}$-field uncertainty inside TSL (see below ConvF).
- NORM(f) $x, y, z=N O R M x, y, z$ * frequency_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- $D C P x, y, z$ : DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- $A x, y, z ; B x, y, z ; C x, y, z ; D x, y, z ; V R x, y, z: A, B, C, D$ are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $\mathrm{f} \leq 800 \mathrm{MHz}$ ) and inside waveguide using analytical field distributions based on power measurements for $\mathrm{f}>800 \mathrm{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50 \mathrm{MHz}$ to $\pm 100$ MHz .
- Spherical isotropy (3D deviation from isotropy): in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle: The angle is assessed using the information gained by determining the NORMx (no uncertainty required).


## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488

## Basic Calibration Parameters

|  | Sensor $\mathbf{X}$ | Sensor $\mathbf{Y}$ | Sensor $\mathbf{Z}$ | Unc (k=2) |
| :--- | :---: | :---: | :---: | :---: |
| Norm $\left(\mu \mathrm{V} /(\mathrm{V} / \mathrm{m})^{2}\right)^{\mathrm{A}}$ | 0.45 | 0.49 | 0.50 | $\pm 10.1 \%$ |
| $\mathrm{DCP}(\mathrm{mV})^{B}$ | 98.9 | 102.3 | 99.6 |  |

Calibration Results for Modulation Response

| UID | Communication System Name |  | $\begin{gathered} \hline A \\ d B \end{gathered}$ | $\stackrel{B}{d B \cup \mu v}$ | C | $\begin{gathered} \\ \hline \mathrm{D} \\ \mathrm{~dB} \end{gathered}$ | $\begin{aligned} & \mathrm{VR} \\ & \mathrm{mV} \end{aligned}$ | Max dev. | $\underset{\text { Mnc }^{\text {Max }}}{ }$ $(k=2)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | CW | $X$ | 0.00 | 0.00 | 1.00 | 0.00 | 149.5 | $\pm 2.7$ \% | $\pm 4.7$ \% |
|  |  | Y | 0.00 | 0.00 | 1.00 |  | 140.8 |  |  |
|  |  | Z | 0.00 | 0.00 | 1.00 |  | 138.2 |  |  |
| $\begin{aligned} & \text { 10352- } \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | X | 10.21 | 80.63 | 15.98 | 10.00 | 60.0 | $\pm 3.1$ \% | $\pm 9.6$ \% |
|  |  | Y | 5.90 | 74.67 | 14.18 |  | 60.0 |  |  |
|  |  | Z | 15.00 | 89.30 | 20.53 |  | 60,0 |  |  |
| $\begin{aligned} & 10353- \\ & \text { AAA } \end{aligned}$ | Pulse Waveform (200Hz, 20\%) | X | 15.00 | 85.88 | 16.55 | 6.99 | 80.0 | $\pm 2.1$ \% | $\pm 9.6 \%$ |
|  |  | Y | 15.00 | 84.35 | 15.79 |  | 80.0 |  |  |
|  |  | Z | 15.00 | 92.51 | 21.01 |  | 80.0 |  |  |
| $\begin{aligned} & 10354- \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 40 \%$ ) | X | 15.00 | 90.08 | 17.19 | 3.98 | 95.0 | $\pm 1.3$ \% | $\pm 9.6$ \% |
|  |  | Y | 15.00 | 83.37 | 13.66 |  | 95.0 |  |  |
|  |  | Z | 15.00 | 104.27 | 25.33 |  | 95.0 |  |  |
| $\begin{aligned} & 10355- \\ & \text { AAA } \end{aligned}$ | Pulse Waveform ( $200 \mathrm{~Hz}, 60 \%$ ) | X | 15.00 | 97.36 | 19.30 | 2.22 | 120.0 | $\pm 1.2$ \% | $\pm 9.6$ \% |
|  |  | Y | 0.26 | 60.00 | 4.43 |  | 120.0 |  |  |
|  |  | Z | 15.00 | 117.38 | 29.81 |  | 120.0 |  |  |
| $\begin{aligned} & 10387- \\ & \text { AAA } \end{aligned}$ | QPSK Waveform, 1 MHz | X | 0.51 | 60.28 | 7.04 | 0.00 | 150.0 | $\pm 3.3$ \% | $\pm 9.6$ \% |
|  |  | Y | 0.47 | 60.00 | 5.79 |  | 150.0 |  |  |
|  |  | Z | 0.61 | 61.09 | 8.42 |  | 150.0 |  |  |
| $\begin{aligned} & 10388- \\ & \text { AAA } \end{aligned}$ | QPSK Waveform, 10 MHz | X | 2.29 | 69.54 | 16.64 | 0.00 | 150.0 | $\pm 1.1$ \% | $\pm 9.6$ \% |
|  |  | Y | 1.90 | 66.64 | 14.97 |  | 150.0 |  |  |
|  |  | Z | 2.23 | 68.54 | 16.09 |  | 150.0 |  |  |
| $\begin{aligned} & 10396- \\ & \text { AAA } \end{aligned}$ | 64-QAM Waveform, 100 kHz | X | 2.94 | 72.04 | 19.55 | 3.01 | 150.0 | $\pm 0.7$ \% | $\pm 9.6$ \% |
|  |  | Y | 2.49 | 68.13 | 17.71 |  | 150.0 |  |  |
|  |  | Z | 3.35 | 73.33 | 20.07 |  | 150.0 |  |  |
| 10399AAA | 64-QAM Waveform, 40 MHz | X | 3.54 | 67.80 | 16.20 | 0.00 | 150.0 | $\pm 2.2$ \% | $\pm 9.6$ \% |
|  |  | Y | 3.42 | 67.12 | 15.74 |  | 150.0 |  |  |
|  |  | Z | 3.49 | 67.32 | 15.92 |  | 150.0 |  |  |
| 10414AAA | WLAN CCDF, 64-QAM, 40MHz | X | 4.65 | 65.56 | 15.55 | 0.00 | 150.0 | $\pm 4.0 \%$ | $\pm 9.6$ \% |
|  |  | Y | 4.74 4.80 | 65.87 | 15.68 |  | 150.0 |  |  |
|  |  | Z | 4.80 |  |  |  |  |  |  |

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $\mathrm{k}=2$, which for a normal distribution corresponds to a coverage probability of approximately $95 \%$.

[^12]
## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488

## Sensor Model Parameters

|  | $\mathbf{C 1}$ <br> $\mathbf{f F}$ | $\mathbf{C 2}$ <br> $\mathbf{f F}$ | $\mathbf{a}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 1}$ <br> $\mathbf{m s} . \mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 2}$ <br> $\mathbf{m s} . \mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 3}$ <br> $\mathbf{m s}$ | $\mathbf{T 4}$ <br> $\mathbf{V}^{\mathbf{- 2}}$ | $\mathbf{T 5}$ <br> $\mathbf{V}^{\mathbf{- 1}}$ | $\mathbf{T 6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| X | 35.2 | 259.64 | 34.83 | 7.55 | 0.00 | 5.04 | 1.52 | 0.11 | 1.01 |
| Y | 34.3 | 261.80 | 36.90 | 6.01 | 0.21 | 5.06 | 0.00 | 0.41 | 1.01 |
| Z | 40.7 | 301.53 | 35.10 | 11.37 | 0.14 | 5.09 | 1.94 | 0.15 | 1.01 |

Other Probe Parameters

| Sensor Arrangement | Triangular |
| :--- | ---: |
| Connector Angle $\left(^{\circ}\right.$ ) | -129.2 |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488

## Calibration Parameter Determined in Head Tissue Simulating Media

| $\mathbf{f ( M H z})^{\mathbf{C}}$ | Relative <br> Permittivity $^{\mathbf{F}}$ | Conductivity <br> $(\mathbf{S} / \mathrm{m})^{\mathbf{F}}$ | ConvF X | ConvF $\mathbf{Y}$ | ConvF $Z^{\text {Alpha }}{ }^{\mathbf{G}}$ | Dept $^{\mathbf{G}}$ <br> $(\mathbf{m m})$ | Unc <br> $(\mathrm{k}=2)$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 41.9 | 0.89 | 10.77 | 10.77 | 10.77 | 0.56 | 0.80 | $\pm 12.0 \%$ |
| 835 | 41.5 | 0.90 | 10.37 | 10.37 | 10.37 | 0.40 | 0.93 | $\pm 12.0 \%$ |
| 1750 | 40.1 | 1.37 | 8.87 | 8.87 | 8.87 | 0.33 | 0.84 | $\pm 12.0 \%$ |
| 1900 | 40.0 | 1.40 | 8.53 | 8.53 | 8.53 | 0.27 | 0.84 | $\pm 12.0 \%$ |
| 2300 | 39.5 | 1.67 | 8.25 | 8.25 | 8.25 | 0.33 | 0.85 | $\pm 12.0 \%$ |
| 2450 | 39.2 | 1.80 | 7.86 | 7.86 | 7.86 | 0.34 | 0.90 | $\pm 12.0 \%$ |
| 2600 | 39.0 | 1.96 | 7.69 | 7.69 | 7.69 | 0.35 | 0.86 | $\pm 12.0 \%$ |
| 5250 | 35.9 | 4.71 | 5.35 | 5.35 | 5.35 | 0.40 | 1.80 | $\pm 13.1 \%$ |
| 5600 | 35.5 | 5.07 | 4.70 | 4.70 | 4.70 | 0.40 | 1.80 | $\pm 13.1 \%$ |
| 5750 | 35.4 | 5.22 | 5.03 | 5.03 | 5.03 | 0.40 | 1.80 | $\pm 13.1 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is $4-9 \mathrm{MHz}$, and ConvF assessed at 13 MHz is $9-19 \mathrm{MHz}$. Above 5 GHz frequency validify can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{G}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

## DASY/EASY - Parameters of Probe: EX3DV4 - SN:7488

Calibration Parameter Determined in Body Tissue Simulating Media

| $\mathbf{f ( M H z )}{ }^{\text {c }}$ | Relative <br> Permittivity $^{\text {F }}$ | Conductivity <br> $(\mathbf{S} / \mathrm{m})^{F}$ | ConvF X | ConvFY | ConvF Z | Alpha $^{\text {G }}$ | Depth <br> $(\mathrm{mm})$ | Unc <br> $(\mathbf{k}=\mathbf{2})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 750 | 55.5 | 0.96 | 11.28 | 11.28 | 11.28 | 0.46 | 0.80 | $\pm 12.0 \%$ |
| 835 | 55.2 | 0.97 | 11.03 | 11.03 | 11.03 | 0.46 | 0.81 | $\pm 12.0 \%$ |
| 1750 | 53.4 | 1.49 | 8.68 | 8.68 | 8.68 | 0.38 | 0.88 | $\pm 12.0 \%$ |
| 1900 | 53.3 | 1.52 | 8.37 | 8.37 | 8.37 | 0.38 | 0.88 | $\pm 12.0 \%$ |
| 2300 | 52.9 | 1.81 | 8.21 | 8.21 | 8.21 | 0.42 | 0.84 | $\pm 12.0 \%$ |
| 2450 | 52.7 | 1.95 | 8.07 | 8.07 | 8.07 | 0.35 | 0.98 | $\pm 12.0 \%$ |
| 2600 | 52.5 | 2.16 | 7.94 | 7.94 | 7.94 | 0.25 | 0.95 | $\pm 12.0 \%$ |
| 5250 | 48.9 | 5.36 | 4.82 | 4.82 | 4.82 | 0.50 | 1.90 | $\pm 13.1 \%$ |
| 5600 | 48.5 | 5.77 | 4.09 | 4.09 | 4.09 | 0.50 | 1.90 | $\pm 13.1 \%$ |
| 5750 | 48.3 | 5.94 | 4.32 | 4.32 | 4.32 | 0.50 | 1.90 | $\pm 13.1 \%$ |

${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is $4-9 \mathrm{MHz}$, and ConvF assessed at 13 MHz is $9-19 \mathrm{MHz}$. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if fiquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( z and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
${ }^{6}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

## Frequency Response of E-Field

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

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


## Dynamic Range f(SAR $\left.{ }_{\text {head }}\right)$

 (TEM cell , $\mathrm{f}_{\text {eval }}=1900 \mathrm{MHz}$ )


Uncertainty of Linearity Assessment: $\pm \mathbf{0 . 6 \%}$ ( $k=2$ )

## Conversion Factor Assessment

 Error ( $\phi, \vartheta$ ), $\mathbf{f}=\mathbf{9 0 0} \mathbf{~ M H z}$



## Appendix: Modulation Calibration Parameters

| UID | Rev | Communication System Name | Group | $\begin{aligned} & \text { PAR } \\ & \text { (dB) } \end{aligned}$ | $\begin{aligned} & \text { Unc }^{E} \\ & \text { (k=2) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  | CW | CW | 0.00 | $\pm 4.7$ \% |
| 10010 | CAA | SAR Validation (Square, $100 \mathrm{~ms}, 10 \mathrm{~ms}$ ) | Test | 10.00 | $\pm 9.6 \%$ |
| 10011 | CAB | UMTS-FDD (WCDMA) | WCDMA | 2.91 | $\pm 9.6 \%$ |
| 10012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps ) | WLAN | 1.87 | $\pm 9.6 \%$ |
| 10013 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps ) | WLAN | 9.46 | $\pm 9.6 \%$ |
| 10021 | DAC | GSM-FDD (TDMA, GMSK) | GSM | 9.39 | $\pm 9.6 \%$ |
| 10023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0) | GSM | 9.57 | $\pm 9.6 \%$ |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1) | GSM | 6.56 | $\pm 9.6 \%$ |
| 10025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0) | GSM | 12.62 | $\pm 9.6 \%$ |
| 10026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1) | GSM | 9.55 | $\pm 9.6 \%$ |
| 10027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | GSM | 4.80 | $\pm 9.6 \%$ |
| 10028 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | GSM | 3.55 | $\pm 9.6 \%$ |
| 10029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | GSM | 7.78 | $\pm 9.6 \%$ |
| 10030 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1) | Bluetooth | 5.30 | $\pm 9.6 \%$ |
| 10031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3) | Bluetooth | 1.87 | $\pm 9.6 \%$ |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5) | Bluetooth | 1.16 | $\pm 9.6 \%$ |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH1) | Bluetooth | 7.74 | $\pm 9.6 \%$ |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH3) | Bluetooth | 4.53 | $\pm 9.6$ \% |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (Pl/4-DQPSK, DH5) | Bluetooth | 3.83 | $\pm 9.6 \%$ |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | Bluetooth | 8.01 | $\pm 9.6 \%$ |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | Bluetooth | 4.77 | $\pm 9.6 \%$ |
| 10038 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | Bluetooth | 4.10 | $\pm 9.6 \%$ |
| 10039 | CAB | CDMA2000 (1xRTT, RC1) | CDMA2000 | 4.57 | $\pm 9.6 \%$ |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, Pl/4-DQPSK, Halfrate) | AMPS | 7.78 | $\pm 9.6 \%$ |
| 10044 | CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM) | AMPS | 0.00 | $\pm 9.6 \%$ |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | DECT | 13.80 | $\pm 9.6$ \% |
| 10049 | CAA | DECT (TDD, TDMAIFDM, GFSK, Double Slot, 12) | DECT | 10.79 | $\pm 9.6 \%$ |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | TD-SCDMA | 11.01 | $\pm 9.6 \%$ |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | GSM | 6.52 | $\pm 9.6 \%$ |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps ) | WLAN | 2.12 | $\pm 9.6 \%$ |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps ) | WLAN | 2.83 | $\pm 9.6 \%$ |
| 10061 | CAB | IEEE 802.11b WIFi 2.4 GHz (DSSS, 11 Mbps ) | WLAN | 3.60 | $\pm 9.6 \%$ |
| 10062 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps ) | WLAN | 8.68 | $\pm 9.6 \%$ |
| 10063 | CAC | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 9 Mbps ) | WLAN | 8.63 | $\pm 9.6 \%$ |
| 10064 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps ) | WLAN | 9.09 | $\pm 9.6$ \% |
| 10065 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps ) | WLAN | 9.00 | $\pm 9.6 \%$ |
| 10066 | CAC | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 24 Mbps ) | WLAN | 9.38 | $\pm 9.6 \%$ |
| 10067 | CAC | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 36 Mbps ) | WLAN | 10.12 | $\pm 9.6 \%$ |
| 10068 | CAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps ) | WLAN | 10.24 | $\pm 9.6 \%$ |
| 10069 | CAC | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 54 Mbps ) | WLAN | 10.56 | $\pm 9.6 \%$ |
| 10071 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps ) | WLAN | 9.83 | $\pm 9.6 \%$ |
| 10072 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps ) | WLAN | 9.62 | $\pm 9.6 \%$ |
| 10073 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps ) | WLAN | 9.94 | $\pm 9.6 \%$ |
| 10074 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps ) | WLAN | 10.30 | $\pm 9.6 \%$ |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps ) | WLAN | 10.77 | $\pm 9.6 \%$ |
| 10076 | CAB | IEEE 802.11 g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps ) | WLAN | 10.94 | $\pm 9.6 \%$ |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps ) | WLAN | 11.00 | $\pm 9.6 \%$ |
| 10081 | CAB | CDMA2000 (1xRTT, RC3) | CDMA2000 | 3.97 | $\pm 9.6 \%$ |
| 10082 | CAB | IS-54/IS-136 FDD (TDMAFDM, PI/4-DQPSK, Fullrate) | AMPS | 4.77 | $\pm 9.6 \%$ |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4) | GSM | 6.56 | $\pm 9.6 \%$ |
| 10097 | CAB | UMTS-FDD (HSDPA) | WCDMA | 3.98 | $\pm 9.6 \%$ |
| 10098 | CAB | UMTS-FDD (HSUPA, Subtest 2) | WCDMA | 3.98 | $\pm 9.6 \%$ |
| 10099 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | GSM | 9.55 | $\pm 9.6 \%$ |
| 10100 | CAE | L.TE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.67 | $\pm 9.6 \%$ |
| 10101 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.42 | $\pm 9.6 \%$ |
| 10102 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.60 | $\pm 9.6 \%$ |
| 10103 | CAG | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.29 | $\pm 9.6$ \% |
| 10104 | CAG | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM) | LTE-TDD | 9.97 | $\pm 9.6 \%$ |
| 10105 | CAG | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.01 | $\pm 9.6 \%$ |
| 10108 | CAG | LTE-FDD (SC-FDMA, 100\% RB, 10 MHz , QPSK) | LTE-FDD | 5.80 | $\pm 9.6 \%$ |


| 10109 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}$, 16-QAM) | LTE-FDD | 6.43 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10110 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 5.75 | $\pm 9.6 \%$ |
| 10111 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.44 | $\pm 9.6 \%$ |
| 10112 | CAG | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.59 | $\pm 9.6$ \% |
| 10113 | CAG | LTE-FDD (SC-FDMA, $100 \%$ RB, $5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.62 | $\pm 9.6 \%$ |
| 10114 | CAC | IEEE 802.11 n (HT Greenfield, 13.5 Mbps , BPSK) | WLAN | 8.10 | $\pm 9.6 \%$ |
| 10115 | CAC | IEEE 802.11n (HT Greenfield, $81 \mathrm{Mbps}, 16$-QAM ) | WLAN | 8.46 | $\pm 9.6 \%$ |
| 10116 | CAC | IEEE 802.11 n (HT Greenfield, $135 \mathrm{Mbps}, 64$-QAM) | WLAN | 8.15 | $\pm 9.6 \%$ |
| 10117 | CAC | IEEE 802.11 n (HT Mixed, 13.5 Mbps , BPSK) | WLAN | 8.07 | $\pm 9.6$ \% |
| 10118 | CAC | IEEE 802.11n (HT Mixed, 81 Mbps , 16-QAM) | WLAN | 8.59 | $\pm 9.6 \%$ |
| 10119 | CAC | IEEE 802.11n (HT Mixed, 135 Mbps , 64-QAM) | WLAN | 8.13 | $\pm 9.6 \%$ |
| 10140 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, 16$-QAM) | LTE-FDD | 6.49 | $\pm 9.6 \%$ |
| 10141 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.53 | $\pm 9.6$ \% |
| 10142 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.73 | $\pm 9.6$ \% |
| 10143 | CAE | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, $16-\mathrm{QAM}$ ) | LTE-FDD | 6.35 | $\pm 9.6 \%$ |
| 10144 | CAE | LTE-FDD (SC-FDMA, $100 \%$ RB, $3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.65 | $\pm 9.6 \%$ |
| 10145 | CAF | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 5.76 | $\pm 9.6 \%$ |
| 10146 | CAF | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.41 | $\pm 9.6 \%$ |
| 10147 | CAF | LTE-FDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.72 | $\pm 9.6 \%$ |
| 10149 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.42 | $\pm 9.6$ \% |
| 10150 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.60 | $\pm 9.6 \%$ |
| 10151 | CAG | LTE-TDD (SC-FDMA $, 50 \% \mathrm{RB}, 20 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.28 | $\pm 9.6 \%$ |
| 10152 | CAG | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.92 | $\pm 9.6 \%$ |
| 10153 | CAG | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 20 \mathrm{MHz}$, $64-\mathrm{QAM}$ ) | LTE-TDD | 10.05 | $\pm 9.6$ \% |
| 10154 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 5.75 | $\pm 9.6$ \% |
| 10155 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.43 | $\pm 9.6 \%$ |
| 10156 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.79 | $\pm 9.6 \%$ |
| 10157 | CAG | LTE-FDD (SC-FDMA, $50 \%$ RB, $5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.49 | $\pm 9.6$ \% |
| 10158 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.62 | $\pm 9.6$ \% |
| 10159 | CAG | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.56 | $\pm 9.6$ \% |
| 10160 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.82 | $\pm 9.6 \%$ |
| 10161 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, 16-QAM) | LTE-FDD | 6.43 | $\pm 9.6$ \% |
| 10162 | CAE | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.58 | $\pm 9.6 \%$ |
| 10166 | CAF | LTE-FDD (SC-FDMA, $50 \%$ RB, 1.4 MHz , QPSK) | LTE-FDD | 5.46 | $\pm 9.6 \%$ |
| 10167 | CAF | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.21 | $\pm 9.6 \%$ |
| 10168 | CAF | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.79 | $\pm 9.6$ \% |
| 10169 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-FDD | 5.73 | $\pm 9.6$ \% |
| 10170 | CAE | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 20 \mathrm{MHz}, 16 \mathrm{QAM}$ ) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10171 | AAE | LTE-FDD (SC-FDMA, 1 RB, $20 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.49 | $\pm 9.6$ \% |
| 10172 | CAG | LTE-TDD (SC-FDMA, 1 RB, $20 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-TDD | 9.21 | $\pm 9.6$ \% |
| 10173 | CAG | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 20 \mathrm{MHz}, 16 \mathrm{-QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6 \%$ |
| 10174 | CAG | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 20 \mathrm{MHz}$, 64-QAM) | LTE-TDD | 10.25 | $\pm 9.6$ \% |
| 10175 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.72 | $\pm 9.6$ \% |
| 10176 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10177 | CAI | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.73 | $\pm 9.6$ \% |
| 10178 | CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz , 16-QAM) | LTE-FDD | 6.52 | $\pm 9.6$ \% |
| 10179 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10180 | CAG | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6$ \% |
| 10181 | CAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-FDD | 5.72 | $\pm 9.6 \%$ |
| 10182 | CAE | LTE-FDD (SC-FDMA, 1 RB, $15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10183 | AAD | LTE-FDD (SC-FDMA, 1 RB, $15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10184 | CAE | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.73 | $\pm 9.6$ \% |
| 10185 | CAE | LTE-FDD (SC-FDMA, 1 RB, $3 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-FDD | 6.51 | $\pm 9.6$ \% |
| 10186 | AAE | LTE-FDD (SC-FDMA, 1 RB, $3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6$ \% |
| 10187 | CAF | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 1.4 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.73 | $\pm 9.6$ \% |
| 10188 | CAF | LTE-FDD (SC-FDMA, $1 \mathrm{RB}, 1.4 \mathrm{MHz}, 16 \mathrm{-QAM}$ ) | LTE-FDD | 6.52 | $\pm 9.6 \%$ |
| 10189 | AAF | L.TE-FDD (SC-FDMA, 1 RB, $1.4 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-FDD | 6.50 | $\pm 9.6 \%$ |
| 10193 | CAC | IEEE 802.11 n (HT Greenfield, 6.5 Mbps , BPSK) | WLAN | 8.09 | $\pm 9.6$ \% |
| 10194 | CAC | IEEE 802.11n (HT Greenfield, 39 Mbps , 16-QAM) | WLAN | 8.12 | $\pm 9.6 \%$ |
| 10195 | CAC | IEEE 802.11n (HT Greenfield, 65 Mbps , 64-QAM) | WLAN | 8.21 | $\pm 9.6 \%$ |
| 10196 | CAC | IEEE 802.11n (HT Mixed, $6.5 \mathrm{Mbps}, \mathrm{BPSK}$ ) | WLAN | 8.10 | $\pm 9.6$ \% |
| 10197 | CAC | IEEE 802.11 n (HT Mixed, $39 \mathrm{Mbps}, 16-\mathrm{QAM}$ ) | WLAN | 8.13 | $\pm 9.6 \%$ |
| 10198 | CAC | IEEE 802.11 n (HT Mixed, 65 Mbps , 64 -QAM) | WLAN | 8.27 | $\pm 9.6 \%$ |
| 10219 | CAC | IEEE 802.11 n (HT Mixed, 7.2 Mbps , BPSK) | WLAN | 8.03 | $\pm 9.6$ \% |


| 10220 | CAC | IEEE 802.11n (HT Mixed, 43.3 Mbps , 16-QAM) | WLAN | 8.13 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10221 | CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps , 64-QAM) | WLAN | 8.27 | $\pm 9.6 \%$ |
| 10222 | CAC | IEEE 802.11n (HT Mixed, 15 Mbps , BPSK) | WLAN | 8.06 | $\pm 9.6 \%$ |
| 10223 | CAC | IEEE 802.11 n (HT Mixed, 90 Mbps , $16-\mathrm{QAM}$ ) | WLAN | 8.48 | $\pm 9.6$ \% |
| 10224 | CAC | IEEE 802.11n (HT Mixed, $150 \mathrm{Mbps}, 64$-QAM) | WLAN | 8.08 | $\pm 9.6$ \% |
| 10225 | CAB | UMTS-FDD (HSPA+) | WCDMA | 5.97 | $\pm 9.6$ \% |
| 10226 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 16-QAM) | LTE-TDD | 9.49 | $\pm 9.6 \%$ |
| 10227 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz , 64-QAM) | LTE-TDD | 10.26 | $\pm 9.6 \%$ |
| 10228 | CAA | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | LTE-TDD | 9.22 | $\pm 9.6$ \% |
| 10229 | CAC | LTE-TDD (SC-FDMA, 1 RB, $3 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6$ \% |
| 10230 | CAC | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.25 | $\pm 9.6 \%$ |
| 10231 | CAC | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 3 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-TDD | 9.19 | $\pm 9.6 \%$ |
| 10232 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6 \%$ |
| 10233 | CAF | LTE-TDD (SC-FDMA, 1 RB, $5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.25 | $\pm 9.6 \%$ |
| 10234 | CAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK) | LTE-TDD | 9.21 | $\pm 9.6$ \% |
| 10235 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6 \%$ |
| 10236 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}$, $64-\mathrm{QAM}$ ) | LTE-TDD | 10.25 | $\pm 9.6 \%$ |
| 10237 | CAF | LTE-TDD (SC-FDMA, 1 RB, 10 MHz , QPSK) | LTE-TDD | 9.21 | $\pm 9.6 \%$ |
| 10238 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.48 | $\pm 9.6$ \% |
| 10239 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.25 | $\pm 9.6$ \% |
| 10240 | CAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.21 | $\pm 9.6 \%$ |
| 10241 | CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.82 | $\pm 9.6$ \% |
| 10242 | CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 9.86 | $\pm 9.6$ \% |
| 10243 | CAA | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}$, 1.4 MHz , QPSK) | LTE-TDD | 9.46 | $\pm 9.6 \%$ |
| 10244 | CAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 10.06 | $\pm 9.6$ \% |
| 10245 | CAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.06 | $\pm 9.6 \%$ |
| 10246 | CAC | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.30 | $\pm 9.6 \%$ |
| 10247 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.91 | $\pm 9.6 \%$ |
| 10248 | CAF | LTE-TDD (SC-FDMA, $50 \%$ RB, $5 \mathrm{MHz}, 64$-QAM) | LTE-TDD | 10.09 | $\pm 9.6$ \% |
| 10249 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.29 | $\pm 9.6$ \% |
| 10250 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.81 | $\pm 9.6 \%$ |
| 10251 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.17 | $\pm 9.6$ \% |
| 10252 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 10 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-TDD | 9.24 | $\pm 9.6 \%$ |
| 10253 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.90 | $\pm 9.6 \%$ |
| 10254 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.14 | $\pm 9.6 \%$ |
| 10255 | CAF | LTE-TDD (SC-FDMA, $50 \% \mathrm{RB}, 15 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.20 | $\pm 9.6$ \% |
| 10256 | CAA | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.96 | $\pm 9.6 \%$ |
| 10257 | CAA | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, 64-QAM) | LTE-TDD | 10.08 | $\pm 9.6 \%$ |
| 10258 | CAA | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 1.4 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-TDD | 9.34 | $\pm 9.6$ \% |
| 10259 | CAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.98 | $\pm 9.6$ \% |
| 10260 | CAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 9.97 | $\pm 9.6$ \% |
| 10261 | CAC | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-TDD | 9.24 | $\pm 9.6 \%$ |
| 10262 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}, 16-\mathrm{QAM}$ ) | LTE-TDD | 9.83 | $\pm 9.6 \%$ |
| 10263 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.16 | $\pm 9.6$ \% |
| 10264 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 5 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.23 | $\pm 9.6 \%$ |
| 10265 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}, 16$-QAM) | LTE-TDD | 9.92 | $\pm 9.6 \%$ |
| 10266 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}$, 64-QAM) | LTE-TDD | 10.07 | $\pm 9.6$ \% |
| 10267 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}$, QPSK) | LTE-TDD | 9.30 | $\pm 9.6$ \% |
| 10268 | CAF | LTE-TDD (SC-FDMA, $100 \%$ RB, $15 \mathrm{MHz}, 16$-QAM) | LTE-TDD | 10.06 | $\pm 9.6 \%$ |
| 10269 | CAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 15 \mathrm{MHz}, 64-\mathrm{QAM}$ ) | LTE-TDD | 10.13 | $\pm 9.6 \%$ |
| 10270 | CAF | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz, QPSK) | LTE-TDD | 9.58 | $\pm 9.6$ \% |
| 10274 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | WCDMA | 4.87 | $\pm 9.6 \%$ |
| 10275 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | WCDMA | 3.96 | $\pm 9.6$ \% |
| 10277 | CAA | PHS (QPSK) | PHS | 11.81 | $\pm 9.6$ \% |
| 10278 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.5) | PHS | 11.81 | $\pm 9.6$ \% |
| 10279 | CAA | PHS (QPSK, BW 884MHz, Rolloff 0.38) | PHS | 12.18 | $\pm 9.6$ \% |
| 10290 | AAB | CDMA2000, RC1, SO55, Full Rate | CDMA2000 | 3.91 | $\pm 9.6 \%$ |
| 10291 | AAB | CDMA2000, RC3, SO55, Full Rate | CDMA2000 | 3.46 | $\pm 9.6 \%$ |
| 10292 | AAB | CDMA2000, RC3, SO32, Full Rate | CDMA2000 | 3.39 | $\pm 9.6$ \% |
| 10293 | AAB | CDMA2000, RC3, SO3, Full Rate | CDMA2000 | 3.50 | $\pm 9.6$ \% |
| 10295 | AAB | CDMA2000, RC1, SO3, 1/8th Rate 25 fr . | CDMA2000 | 12.49 | $\pm 9.6 \%$ |
| 10297 | AAD | LTE-FDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK) | LTE-FDD | 5.81 | $\pm 9.6 \%$ |
| 10298 | AAD | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK) | LTE-FDD | 5.72 | $\pm 9.6$ \% |
| 10299 | AAD | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}, 16 \mathrm{-QAM}$ ) | LTE-FDD | 6.39 | $\pm 9.6$ \% |


| 10300 | AAD | LTE-FDD (SC-FDMA, $50 \% \mathrm{RB}, 3 \mathrm{MHz}$, 64-QAM) | LTE-FDD | 6.60 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10301 | AAA | IEEE 802.16e WiMAX (29:18, $5 \mathrm{~ms}, 10 \mathrm{MHz}$, QPSK, PUSC $)$ | WIMAX | 12.03 | $\pm 9.6$ \% |
| 10302 | AAA | IEEE 802.16e WiMAX (29:18, 5ms, 10MHz, QPSK, PUSC, 3 CTRL symbols) | WIMAX | 12.57 | $\pm 9.6$ \% |
| 10303 | AAA |  | WIMAX | 12.52 | $\pm 9.6 \%$ |
| 10304 | AAA |  | WIMAX | 11.86 | $\pm 9.6 \%$ |
| 10305 | AAA | IEEE 802.16 e WiMAX ( $31: 15,10 \mathrm{~ms}, 10 \mathrm{MHz}$, 64QAM, PUSC, 15 symbols) | WIMAX | 15.24 | $\pm 9.6$ \% |
| 10306 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 64QAM, PUSC, 18 symbols) | WIMAX | 14.67 | $\pm 9.6$ \% |
| 10307 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, PUSC, 18 symbols) | WIMAX | 14.49 | $\pm 9.6$ \% |
| 10308 | AAA | IEEE 802.16 e WIMAX ( $29: 18,10 \mathrm{~ms}, 10 \mathrm{MHz}, 16 \mathrm{QAM}, \mathrm{PUSC})$ | WIMAX | 14.46 | $\pm 9.6$ \% |
| 10309 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, 16QAM, AMC $2 \times 3,18$ symbols) | WIMAX | 14.58 | $\pm 9.6$ \% |
| 10310 | AAA | IEEE 802.16e WiMAX (29:18, 10ms, 10MHz, QPSK, AMC $2 \times 3,18$ symbols) | WIMAX | 14.57 | $\pm 9.6$ \% |
| 10311 | AAD | LTE-FDD (SC-FDMA, 100\% RB, $15 \mathrm{MHz}, \mathrm{QPSK}$ ) | LTE-FDD | 6.06 | $\pm 9.6$ \% |
| 10313 | AAA | iDEN 1:3 | iDEN | 10.51 | $\pm 9.6$ \% |
| 10314 | AAA | IDEN 1:6 | iDEN | 13.48 | $\pm 9.6$ \% |
| 10315 | AAB | IEEE 802.11 bWiFi 2.4 GHz (DSSS, 1 Mbps , 96 pc duty cycle) | WLAN | 1.71 | $\pm 9.6 \%$ |
| 10316 | AAB | IEEE 802.11 g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps , 96pc duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |
| 10317 | AAC | IEEE 802.11a WiFi 5 GHz (OFDM, $6 \mathrm{Mbps}, 96 \mathrm{pc}$ duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |
| 10352 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 10 \%$ ) | Generic | 10.00 | $\pm 9.6$ \% |
| 10353 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 20 \%$ ) | Generic | 6.99 | $\pm 9.6$ \% |
| 10354 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 40 \%$ ) | Generic | 3.98 | $\pm 9.6$ \% |
| 10355 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 60 \%$ ) | Generic | 2.22 | $\pm 9.6$ \% |
| 10356 | AAA | Pulse Waveform ( $200 \mathrm{~Hz}, 80 \%$ ) | Generic | 0.97 | $\pm 9.6$ \% |
| 10387 | AAA | QPSK Waveform, 1 MHz | Generic | 5.10 | $\pm 9.6$ \% |
| 10388 | AAA | QPSK Waveform, 10 MHz | Generic | 5.22 | $\pm 9.6$ \% |
| 10396 | AAA | 64-QAM Waveform, 100 kHz | Generic | 6.27 | $\pm 9.6$ \% |
| 10399 | AAA | 64-QAM Waveform, 40 MHz | Generic | 6.27 | $\pm 9.6 \%$ |
| 10400 | AAD | IEEE 802.11ac WiFi (20MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6 \%$ |
| 10401 | AAD | IEEE 802.11 ac WiFi ( $40 \mathrm{MHz}, 64-\mathrm{QAM}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.60 | $\pm 9.6 \%$ |
| 10402 | AAD | IEEE 802.11ac WiFi (80MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.53 | $\pm 9.6 \%$ |
| 10403 | AAB | CDMA2000 (1xEV-DO, Rev. 0 ) | CDMA2000 | 3.76 | $\pm 9.6$ \% |
| 10404 | AAB | CDMA2000 (1xEV-DO, Rev. A) | CDMA2000 | 3.77 | $\pm 9.6$ \% |
| 10406 | AAB | CDMA2000, RC3, SO32, SCHO, Full Rate | CDMA2000 | 5.22 | $\pm 9.6 \%$ |
| 10410 | AAF | LTE-TDD (SC-FDMA, $1 \mathrm{RB}, 10 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$, Subframe Conf=4) | LTE-TDD | 7.82 | $\pm 9.6$ \% |
| 10414 | AAA | WLAN CCDF, $64-\mathrm{QAM}, 40 \mathrm{MHz}$ | Generic | 8.54 | $\pm 9.6$ \% |
| 10415 | AAA | IEEE 802.11 b WiFi 2.4 GHz (DSSS, 1 Mbps , 99pc duty cycle) | WLAN | 1.54 | $\pm 9.6$ \% |
| 10416 | AAA | IEEE 802.11 g WiFi 2.4 GHz (ERP-OFDM, $6 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.23 | $\pm 9.6$ \% |
| 10417 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 6 Mbps , 99pc duty cycle) | WLAN | 8.23 | $\pm 9.6$ \% |
| 10418 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps , 99 pc duty cycle, Long preambule) | WLAN | 8.14 | $\pm 9.6$ \% |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps , 99pc duty cycle, Short preambule) | WLAN | 8.19 | $\pm 9.6$ \% |
| 10422 | AAB | IEEE 802.11n (HT Greenfield, $7.2 \mathrm{Mbps}, \mathrm{BPSK}$ ) | WLAN | 8.32 | $\pm 9.6$ \% |
| 10423 | AAB | IEEE 802.11 n (HT Greenfield, 43.3 Mbps , 16-QAM) | WLAN | 8.47 | $\pm 9.6$ \% |
| 10424 | AAB | IEEE 802.11 n (HT Greenfield, 72.2 Mbps , 64-QAM) | WLAN | 8.40 | $\pm 9.6$ \% |
| 10425 | AAB | IEEE 802.11 n (HT Greenfield, 15 Mbps , BPSK) | WLAN | 8.41 | $\pm 9.6 \%$ |
| 10426 | AAB | IEEE 802.11n (HT Greenfield, 90 Mbps , 16-QAM) | WLAN | 8.45 | $\pm 9.6 \%$ |
| 10427 | AAB | IEEE 802.11 n (HT Greenfield, 150 Mbps , 64-QAM) | WLAN | 8.41 | $\pm 9.6$ \% |
| 10430 | AAD | LTE-FDD (OFDMA, $5 \mathrm{MHz}, \mathrm{E}-\mathrm{TM} 3.1$ ) | LTE-FDD | 8.28 | $\pm 9.6$ \% |
| 10431 | AAD | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1) | LTE-FDD | 8.38 | $\pm 9.6 \%$ |
| 10432 | AAC | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1) | LTE-FDD | 8.34 | $\pm 9.6$ \% |
| 10433 | AAC | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1) | LTE-FDD | 8.34 | $\pm 9.6$ \% |
| 10434 | AAA | W-CDMA (BS Test Model 1, 64 DPCH) | WCDMA | 8.60 | $\pm 9.6 \%$ |
| 10435 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.82 | $\pm 9.6$ \% |
| 10447 | AAD | LTE-FDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | LTE-FDD | 7.56 | $\pm 9.6 \%$ |
| 10448 | AAD | LTE-FDD (OFDMA, 10 MHz , E-TM 3.1, Clippin 44\%) | LTE-FDD | 7.53 | $\pm 9.6 \%$ |
| 10449 | AAC | LTE-FDD (OFDMA, 15 MHz , E-TM 3.1, Cliping 44\%) | LTE-FDD | 7.51 | $\pm 9.6$ \% |
| 10450 | AAC | LTE-FDD (OFDMA, 20 MHz , E-TM 3.1, Clipping 44\%) | LTE-FDD | 7.48 | $\pm 9.6 \%$ |

$\left.\begin{array}{|l|l|l|l|l|l|}\hline 10451 & \text { AAA } & \text { W-CDMA (BS Test Model 1, } 64 \text { DPCH, Clipping 44\%) } & \text { WCDMA } & 7.59 & \pm 9.6 \% \\ \hline 10456 & \text { AAB } & \text { IEEE } 802.11 \text { ac WiFi (160MHz, 64-QAM, 99pc duty CyCle) } & \text { WLLAN } & 8.63 & \pm 9.6 \% \\ \hline 10457 & \text { AAA } & \text { UMTS-FDD (DC-HSDPA) }\end{array}\right)$

| 10492 | AAE | LTE-TDD (SC-FDMA, $50 \%$ RB, $15 \mathrm{MHz}, 16-\mathrm{QAM}$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.41 | $\pm 9.6$ \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10493 | AAE | LTE-TDD (SC-FDMA, $50 \%$ RB, $15 \mathrm{MHz}, 64-\mathrm{QAM}$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.55 | $\pm 9.6$ \% |
| 10494 | AAF | LTE-TDD (SC-FDMA, $50 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.74 | $\pm 9.6$ \% |
| 10495 | AAF | LTE-TDD (SC-FDMA, $50 \%$ RB, $20 \mathrm{MHz}, 16-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.37 | $\pm 9.6$ \% |
| 10496 | AAF | LTE-TDD (SC-FDMA, $50 \%$ RB, $20 \mathrm{MHz}, 64-$ QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.54 | $\pm 9.6$ \% |
| 10497 | AAA | LTE-TDD (SC-FDMA, $100 \%$ RB, 1.4 MHz, QPSK, UL Subframe $=2,3,4,7,8,9)$ | LTE-TDD | 7.67 | $\pm 9.6$ \% |
| 10498 | AAA | LTE-TDD (SC-FDMA, $100 \%$ RB, $1.4 \mathrm{MHz}, 16-\mathrm{QAM}$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.40 | $\pm 9.6$ \% |
| 10499 | AAA | LTE-TDD (SC-FDMA, $100 \%$ RB, $1.4 \mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.68 | $\pm 9.6$ \% |
| 10500 | AAB | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 3 \mathrm{MHz}$, QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.67 | $\pm 9.6$ \% |
| 10501 | AAB | LTE-TDD (SC-FDMA, $100 \%$ RB, $3 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.44 | $\pm 9.6$ \% |
| 10502 | AAB | LTE-TDD (SC-FDMA, $100 \%$ RB, $3 \mathrm{MHz}, 64-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.52 | $\pm 9.6$ \% |
| 10503 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.72 | $\pm 9.6$ \% |
| 10504 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 5 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.31 | $\pm 9.6$ \% |
| 10505 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, $5 \mathrm{MHz}, 64-\mathrm{QAM}$, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.54 | $\pm 9.6$ \% |
| 10506 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz , QPSK, UL. Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.74 | $\pm 9.6$ \% |
| 10507 | AAE | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 10 \mathrm{MHz}, 16-\mathrm{QAM}, \mathrm{UL}$ Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.36 | $\pm 9.6$ \% |
| 10508 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 10 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.55 | $\pm 9.6$ \% |
| 10509 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.99 | $\pm 9.6$ \% |
| 10510 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz , 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.49 | $\pm 9.6$ \% |
| 10511 | AAE | LTE-TDD (SC-FDMA, $100 \%$ RB, 15 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.51 | $\pm 9.6$ \% |
| 10512 | AAF | LTE-TDD (SC-FDMA, $100 \%$ RB, 20 MHz , QPSK, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 7.74 | $\pm 9.6$ \% |
| 10513 | AAF | LTE-TDD (SC-FDMA, $100 \% \mathrm{RB}, 20 \mathrm{MHz}$, 16-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.42 | $\pm 9.6$ \% |
| 10514 | AAF | LTE-TDD (SC-FDMA, $100 \%$ RB, 20 MHz , 64-QAM, UL Subframe $=2,3,4,7,8,9$ ) | LTE-TDD | 8.45 | $\pm 9.6$ \% |
| 10515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $2 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 1.58 | $\pm 9.6$ \% |
| 10516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $5.5 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 1.57 | $\pm 9.6$ \% |
| 10517 | AAA | IEEE 802.11b Wifi 2.4 GHz (DSSS, 11 Mbps , 99pc duty cycle) | WLAN | 1.58 | $\pm 9.6 \%$ |
| 10518 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $9 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.23 | $\pm 9.6 \%$ |
| 10519 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, $12 \mathrm{Mbps}, 99 p \mathrm{duty}$ cycle) | WLAN | 8.39 | $\pm 9.6 \%$ |
| 10520 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $18 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.12 | $\pm 9.6$ \% |
| 10521 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, $24 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 7.97 | $\pm 9.6 \%$ |
| 10522 | AAB | IEEE 802.11 $\mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 36 Mbps , 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |
| 10523 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 48 Mbps , 99pc duty cycle) | WLAN | 8.08 | $\pm 9.6 \%$ |
| 10524 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 54 Mbps , 99pc duty cycle) | WLAN | 8.27 | $\pm 9.6 \%$ |
| 10525 | AAB | IEEE 802.11ac WiFi ( 20 MHz , MCS0, 99pc duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |
| 10526 | AAB | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle) | WLAN | 8.42 | $\pm 9.6$ \% |
| 10527 | AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle) | WLAN | 8.21 | $\pm 9.6$ \% |
| 10528 | AAB | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |
| 10529 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |
| 10531 | AAB | IEEE 802.11ac WiFi ( 20 MHz , MCS6, 99pc duty cycle) | WLAN | 8.43 | $\pm 9.6$ \% |
| 10532 | AAB | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | $\pm 9.6 \%$ |
| 10533 | AAB | IEEE 802.11 ac WiFi ( 20 MHz , MCS8, 99pc duty cycle) | WLAN | 8.38 | $\pm 9.6 \%$ |
| 10534 | AAB | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |


| 10535 | AAB | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10536 | AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle) | WLAN | 8.32 | $\pm 9.6 \%$ |
| 10537 | AAB | IEEE 802.11ac WiFi ( 40 MHz , MCS3, 99pc duty cycle) | WLAN | 8.44 | $\pm 9.6 \%$ |
| 10538 | AAB | IEEE 802.11ac WiFi ( 40 MHz , MCS4, 99pc duty cycle) | WLAN | 8.54 | $\pm 9.6 \%$ |
| 10540 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle) | WLAN | 8.39 | $\pm 9.6 \%$ |
| 10541 | $A A B$ | IEEE 802.11ac WiFi (40MHz, MCS7, 99pc duty cycle) | WLAN | 8.46 | $\pm 9.6 \%$ |
| 10542 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 99pc duty cycle) | WLAN | 8.65 | $\pm 9.6 \%$ |
| 10543 | AAB | IEEE 802.11ac WiFi (40MHz, MCS9, 99pc duty cycle) | WLAN | 8.65 | $\pm 9.6 \%$ |
| 10544 | AAB | IEEE 802.11 ac WiFi (80MHz, MCS0, 99pc duty cycle) | WLAN | 8.47 | $\pm 9.6 \%$ |
| 10545 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 99pc duty cycle) | WLAN | 8.55 | $\pm 9.6 \%$ |
| 10546 | $A A B$ | IEEE 802.11 ac WiFi ( 80 MHz , MCS2, 99pc duty cycle) | WLAN | 8.35 | $\pm 9.6 \%$ |
| 10547 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 99pc duty cycle) | WLAN | 8.49 | $\pm 9.6 \%$ |
| 10548 | $A A B$ | IEEE 802.11ac WiFi (80MHz, MCS4, 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6 \%$ |
| 10550 | AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 99pc duty cycle) | WLAN | 8.38 | $\pm 9.6 \%$ |
| 10551 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{(80MHz}, \mathrm{MCS7}, \mathrm{99pc} \mathrm{duty} \mathrm{cycle)}$ | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10552 | AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 99pc duty cycle) | WLAN | 8.42 | $\pm 9.6 \%$ |
| 10553 | AAB | IEEE 802.11 ac WiFi ( 80 MHz , MCS9, 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6$ \% |
| 10554 | AAC | IEEE 802.11ac WiFi (160MHz, MCS0, 99pc duty cycle) | WLAN | 8.48 | $\pm 9.6 \%$ |
| 10555 | AAC | IEEE 802.11ac WiFi (160MHz, MCS1, 99pc duty cycle) | WLAN | 8.47 | $\pm 9.6 \%$ |
| 10556 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS2, 99 pc duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10557 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCS3}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.52 | $\pm 9.6 \%$ |
| 10558 | AAC | IEEE 802.11ac $\mathrm{WiFl}(160 \mathrm{MHz}, \mathrm{MCS4}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.61 | $\pm 9.6 \%$ |
| 10560 | AAC | IEEE 802.11ac WiFi (160MHz, MCS6, 99pc duty cycle) | WLAN | 8.73 | $\pm 9.6 \%$ |
| 10561 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}$, MCS7, 99pc duty cycle) | WLAN | 8.56 | $\pm 9.6 \%$ |
| 10562 | AAC | IEEE 802.11ac WiFi (160MHz, MCS8, 99pc duty cycle) | WLAN | 8.69 | $\pm 9.6 \%$ |
| 10563 | AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 99pc duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10564 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps , 99 pc duty cycle) | WLAN | 8.25 | $\pm 9.6 \%$ |
| 10565 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps , 99pc duty cycle) | WLAN | 8.45 | $\pm 9.6$ \% |
| 10566 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $18 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.13 | $\pm 9.6$ \% |
| 10567 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $24 \mathrm{Mbps}, 99 \mathrm{pc}$ duty cycle) | WLAN | 8.00 | $\pm 9.6 \%$ |
| 10568 | AAA | IEEE 802,11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps , 99pc duty cycle) | WLAN | 8.37 | $\pm 9.6$ \% |
| 10569 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps , 99 pc duty cycle) | WLAN | 8.10 | $\pm 9.6$ \% |
| 10570 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps , 99 pc duty cycle) | WLAN | 8.30 | $\pm 9.6$ \% |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps , 90pc duty cycle) | WLAN | 1.99 | $\pm 9.6 \%$ |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, $2 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.99 | $\pm 9.6 \%$ |
| 10573 | AAA | IEEE 802.11 bWiFi 2.4 GHz (DSSS, $5.5 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 1.98 | $\pm 9.6 \%$ |
| 10574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps , 90pc duty cycle) | WLAN | 1.98 | $\pm 9.6 \%$ |
| 10575 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $6 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.59 | $\pm 9.6 \%$ |
| 10576 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps , 90 pc duty cycle) | WLAN | 8.60 | $\pm 9.6$ \% |
| 10577 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps , 90pc duty cycle) | WLAN | 8.70 | $\pm 9.6 \%$ |
| 10578 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $18 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.49 | $\pm 9.6 \%$ |
| 10579 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps , 90pc duty cycle) | WLAN | 8.36 | $\pm 9.6$ \% |
| 10580 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $36 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.76 | $\pm 9.6$ \% |
| 10581 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $48 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.35 | $\pm 9.6$ \% |
| 10582 | AAA | IEEE 802.11 g WiFi 2.4 GHz (DSSS-OFDM, $54 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.67 | $\pm 9.6$ \% |
| 10583 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, 6 Mbps , 90pc duty cycle) | WLAN | 8.59 | $\pm 9.6 \%$ |
| 10584 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h}$ WiFi 5 GHz (OFDM, 9 Mbps , 90pc duty cycle) | WLAN | 8.60 | $\pm 9.6 \%$ |
| 10585 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps , 90pc duty cycle) | WLAN | 8.70 | $\pm 9.6 \%$ |
| 10586 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, $18 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.49 | $\pm 9.6 \%$ |
| 10587 | AAB | IEEE $802.11 \mathrm{a} / \mathrm{h} \mathrm{WiFi} 5 \mathrm{GHz}$ (OFDM, $24 \mathrm{Mbps}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.36 | $\pm 9.6 \%$ |


| 10588 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps , 90pc duty cycle) | WLAN | 8.76 | $\pm 9.6 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10589 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps , 90pc duty cycle) | WLAN | 8.35 | $\pm 9.6 \%$. |
| 10590 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps , 90pc duty cycle) | WLAN | 8.67 | $\pm 9.6 \%$ |
| 10591 | AAB | IEEE 802.11 n (HT Mixed, 20 MHz , MCSO, 90pc duty cycle) | WLAN | 8.63 | $\pm 9.6 \%$ |
| 10592 | AAB | IEEE 802.11n (HT Mixed, 20 MHz , MCS1, 90pc duty cycle) | WLAN | 8.79 | $\pm 9.6 \%$ |
| 10593 | AAB | IEEE 802.11 n (HT Mixed, 20 MHz , MCS2, 90pc duty cycle) | WLAN | 8.64 | $\pm 9.6 \%$ |
| 10594 | AAB | IEEE 802.11n (HT Mixed, 20 MHz , MCS3, 90pc duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10595 | AAB | IEEE 802.11n (HT Mixed, 20MHz, MCS4, 90pc duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10596 | AAB | IEEE 802.11n (HT Mixed, 20 MHz , MCS5, 90pc duty cycle) | WLAN | 8.71 | $\pm 9.6 \%$ |
| 10597 | AAB | IEEE 802.11 n (HT Mixed, 20 MHz , MCS6, 90pc duty cycle) | WLAN | 8.72 | $\pm 9.6 \%$ |
| 10598 | AAB | JEEE 802.11 n (HT Mixed, 20 MHz , MCS7, 90pc duty cycle) | WLAN | 8.50 | $\pm 9.6 \%$ |
| 10599 | AAB | IEEE 802.11 n (HT Mixed, 40 MHz , MCS0, 90pc duty cycle) | WLAN | 8.79 | $\pm 9.6 \%$ |
| 10600 | AAB | IEEE 802.11 n ( HT Mixed, 40 MHz , MCS1, 90pc duty cycle) | WLAN | 8.88 | $\pm 9.6 \%$ |
| 10601 | AAB | IEEE 802.11n (HT Mixed, 40MHz, MCS2, 90pc duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10602 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS3}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.94 | $\pm 9.6 \%$ |
| 10603 | AAB | IEEE 802.11 n (HT Mixed, 40 MHz , MCS4, 90pc duty cycle) | WLAN | 9.03 | $\pm 9.6 \%$ |
| 10604 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS5}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.76 | $\pm 9.6 \%$ |
| 10605 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS6}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.97 | $\pm 9.6 \%$ |
| 10606 | AAB | IEEE 802.11 n (HT Mixed, $40 \mathrm{MHz}, \mathrm{MCS7}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10607 | AAB | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc duty cycle) | WLAN | 8.64 | $\pm 9.6 \%$ |
| 10608 | AAB | IEEE 802.11 ac WiFi (20MHz, MCS1, 90pc duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10609 | AAB | IEEE 802.11ac WiFi (20MHz, MCS2, 90pc duty cycle) | WLAN | 8.57 | $\pm 9.6 \%$ |
| 10610 | AAB | IEEE 802,11ac WiFi (20MHz, MCS3, 90pc duty cycle) | WLAN | 8.78 | $\pm 9.6 \%$ |
| 10611 | AAB | IEEE 802.11ac WiFi (20MHz, MCS4, 90pc duty cycle) | WLAN | 8.70 | $\pm 9.6 \%$ |
| 10612 | AAB | IEEE 802.11 ac WiFi ( 20 MHz , MCS5, 90pc duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10613 | AAB | IEEE 802.11 ac WiFi ( 20 MHz , MCS6, 90pc duty cycle) | WLAN | 8.94 | $\pm 9.6 \%$ |
| 10614 | AAB | IEEE 802.11 ac WiFi ( $20 \mathrm{MHz}, \mathrm{MCS} 7,90 \mathrm{pc}$ duty cycle) | WLAN | 8.59 | $\pm 9.6 \%$ |
| 10615 | AAB | IEEE 802.11ac WiFi (20MHz, MCS8, 90pc duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10616 | AAB | IEEE 802.11ac WiFi ( 40 MHz , MCSO, 90pc duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10617 | AAB | IEEE 802.11 ac WiFi ( 40 MHz , MCS1, 90 pc duty cycle) | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10618 | AAB | IEEE 802.11ac WiFi (40MHz, MCS2, 90pc duty cycle) | WLAN | 8.58 | $\pm 9.6 \%$ |
| 10619 | AAB | IEEE 802.11ac WiFi (40MHz, MCS3, 90pc duty cycle) | WLAN | 8.86 | $\pm 9.6 \%$ |
| 10620 | AAB | IEEE 802.11ac WiFi ( 40 MHz , MCS4, 90pc duty cycle) | WLAN | 8.87 | $\pm 9.6 \%$ |
| 10621 | AAB | IEEE 802.11ac WiFi ( 40 MHz , MCS5, 90pc duty cycle) | WLAN | 8.77 | $\pm 9.6 \%$ |
| 10622 | AAB | IEEE 802.11ac WiFi (40MHz, MCS6, 90pc duty cycle) | WLAN | 8.68 | $\pm 9.6 \%$ |
| 10623 | AAB | IEEE $802.11 \mathrm{ac} \mathrm{WiFi} \mathrm{( } 40 \mathrm{MHz}, \mathrm{MCS7}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.82 | $\pm 9.6 \%$ |
| 10624 | AAB | IEEE 802.11ac WiFi (40MHz, MCS8, 90pc duty cycle) | WLAN | 8.96 | $\pm 9.6 \%$ |
| 10625 | AAB | IEEE 802.11 ac WiFi ( 40 MHz , MCS9, 90pc duty cycle) | WLAN | 8.96 | $\pm 9.6 \%$ |
| 10626 | AAB | IEEE 802.11ac WiFi (80MHz, MCS0, 90pc duty cycle) | WLAN | 8.83 | $\pm 9.6 \%$ |
| 10627 | AAB | IEEE 802.11ac WiFi (80MHz, MCS1, 90pc duty cycle) | WLAN | 8.88 | $\pm 9.6 \%$ |
| 10628 | AAB | IEEE 802.11 ac WiFi ( 80 MHz , MCS2, 90pc duty cycle) | WLAN | 8.71 | $\pm 9.6 \%$ |
| 10629 | AAB | IEEE 802.11ac WiFi (80MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | $\pm 9.6 \%$ |
| 10630 | AAB | IEEE 802.11 ac WiFi ( 80 MHz , MCS4, 90pc duty cycle) | WLAN | 8.72 | $\pm 9.6 \%$ |
| 10631 | AAB | IEEE 802.11ac WiFi (80MHz, MCS5, 90pc duty cycle) | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10632 | AAB | IEEE 802.11ac WiFi (80MHz, MCS6, 90pc duty cycle) | WLAN | 8.74 | $\pm 9.6 \%$ |
| 10633 | AAB | IEEE 802.11 ac WiFi ( 80 MHz , MCS7, 90pc duty cycle) | WLAN | 8.83 | $\pm 9.6 \%$ |
| 10634 | AAB | IEEE 802.11ac WiFi (80MHz, MCS8, 90pc duty cycle) | WLAN | 8.80 | $\pm 9.6 \%$ |
| 10635 | AAB | IEEE 802.11ac WiFi (80MHz, MCS9, 90pc duty cycle) | WLAN | 8.81 | $\pm 9.6 \%$ |
| 10636 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS0, 90pc duty cycle) | WLAN | 8.83 | $\pm 9.6 \%$ |
| 10637 | AAC | IEEE $802.11 \mathrm{ac} \mathrm{WiFi}(160 \mathrm{MHz}, \mathrm{MCS1}, 90 \mathrm{pc}$ duty cycle) | WLAN | 8.79 | $\pm 9.6 \%$ |
| 10638 | AAC | IEEE 802.11ac WiFi (160MHz, MCS2, 90pc duty cycle) | WLAN | 8.86 | $\pm 9.6 \%$ |
| 10639 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS3, 90pc duty cycle) | WLAN | 8.85 | $\pm 9.6 \%$ |
| 10640 | AAC | IEEE 802.11ac WiFi (160MHz, MCS4, 90pc duty cycle) | WLAN | 8.98 | $\pm 9.6 \%$ |
| 10641 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS5, 90pc duty cycle) | WLAN | 9.06 | $\pm 9.6 \%$ |
| 10642 | AAC | IEEE 802.11ac WiFi ( 160 MHz MCS6, 90pc duty cycle) | WLAN | 9.06 | $\pm 9.6 \%$ |
| 10643 | AAC | IEEE 802.11ac WiFi ( $160 \mathrm{MHz}, \mathrm{MCS} 7,90 \mathrm{pc}$ duty cycle) | WLAN | 8.89 | $\pm 9.6 \%$ |
| 10644 | AAC | IEEE 802.11ac WiFi ( 160 MHz , MCS8, 90pc duty cycle) | WLAN | 9.05 | $\pm 9.6 \%$ |
| 10645 | AAC | IEEE 802.11ac WiFi (160MHz, MCS9, 90pc duty cycle) | WLAN | 9.11 | $\pm 9.6 \%$ |
| 10646 | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz , QPSK, UL Subframe=2,7) | LTE-TDD | 11.96 | $\pm 9.6 \%$ |
| 10647 | AAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz , QPSK, UL Subframe=2,7) | LTE-TDD | 11.96 | $\pm 9.6 \%$ |
| 10648 | AAA | CDMA2000 (1x Advanced) | CDMA2000 | 3.45 | $\pm 9.6 \%$ |
| 10652 | AAD | LTE-TDD (OFDMA, 5 MHz , E-TM 3.1, Clipping 44\%) | LTE-TDD | 6.91 | $\pm 9.6 \%$ |
| 10653 | AAD | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44\%) | LTE-TDD | 7.42 | $\pm 9.6 \%$ |
| 10654 | AAD | LTE-TDD (OFDMA, 15 MHz , E-TM 3.1, Clipping 44\%) | LTE-TDD | 6.96 | $\pm 9.6$ \% |


| 10655 | AAE | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44\%) | LTE-TDD | 7.21 |  |
| :---: | :--- | :--- | :--- | :---: | :---: |
| 10658 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 10 \%)$ | Test | 10.00 | $\pm 9.6 \%$ |
| 10659 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 20 \%)$ | Test | 6.99 | $\pm 9.6 \%$ |
| 10660 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 40 \%)$ | Test | 3.98 | $\pm 9.6 \%$ |
| 10661 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 60 \%)$ | Test | 2.22 | $\pm 9.6 \%$ |
| 10662 | AAA | Pulse Waveform $(200 \mathrm{~Hz}, 80 \%)$ | Test | 0.97 | $\pm 9.6 \%$ |
| 10670 | AAA | Bluetooth Low Energy | Bluetooth | 2.19 | $\pm 9.6 \%$ |

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

## APPENDIX D:SAR TISSUE SPECIFICATIONS

Measurement Procedure for Tissue verification:

1) The network analyzer and probe system was configured and calibrated.
2) The probe was immersed in the tissue. The tissue was placed in a nonmetallic container. Trapped air bubbles beneath the flange were minimized by placing the probe at a slight angle.
3) The complex admittance with respect to the probe aperture was measured
4) The complex relative permittivity $\varepsilon$ can be calculated from the below equation (Pournaropoulos and Misra):

$$
Y=\frac{j 2 \omega \varepsilon_{r} \varepsilon_{0}}{[\ln (b / a)]^{2}} \int_{a}^{b} \int_{a}^{b} \int_{0}^{\pi} \cos \phi^{\prime} \frac{\exp \left[-j \omega r\left(\mu_{0} \varepsilon_{r}^{\prime} \varepsilon_{0}\right)^{1 / 2}\right]}{r} d \phi^{\prime} d \rho^{\prime} d \rho
$$

where $Y$ is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^{2}=\rho^{2}+\rho^{\prime 2}-2 \rho \rho^{\prime} \cos \phi^{\prime}, \omega$ is the angular frequency, and $j=\sqrt{-1}$.

Table D-I
Composition of the Tissue Equivalent Matter

| Frequency (MHz) | 750 | 750 | 835 | 835 | 1750 | 1750 | 1900 | 1900 | 2450 | 2450 | 5200-5800 | 5200-5800 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tissue | Head | Body | Head | Body | Head | Body | Head | Body | Head | Body | Head | Body |
| Ingredients (\% by weight) |  |  |  |  |  |  |  |  |  |  |  |  |
| Bactericide | See page 2-3 | See page 2 | 0.1 | 0.1 |  |  |  |  | See page 4 |  | See page 5 | See page 6 |
| DGBE |  |  |  |  | 47 | 31 | 44.92 | 29.44 |  | 26.7 |  |  |
| HEC |  |  | 1 | 1 |  |  |  |  |  |  |  |  |
| NaCl |  |  | 1.45 | 0.94 | 0.4 | 0.2 | 0.18 | 0.39 |  | 0.1 |  |  |
| Sucrose |  |  | 57 | 44.9 |  |  |  |  |  |  |  |  |
| Polysorbate (Tween) 80 |  |  |  |  |  |  |  |  |  |  |  |  |
| Water |  |  | 40.45 | 53.06 | 52.6 | 68.8 | 54.9 | 70.17 |  | 73.2 |  |  |


| FCC ID: ZNFQ720CS | (I)PCTEST | SAR EVALUATION REPORT | (1) LG | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: $04 / 01 / 19-05 / 01 / 19$ | DUT Type: <br> Portable Handset |  |  | APPENDIX D: <br> Page 1 of 6 |
| 9 PCTEST Engineering Lab |  |  |  | $\begin{array}{r} \hline \text { REV 21.3 M } \\ 02 / 15 / 2019 \end{array}$ |


| 2 Composition / Information on ingredients The Item is composed of the following ingredients: |  |
| :---: | :---: |
|  |  |
| $\mathrm{H}_{2} \mathrm{O}$ | Water, 35-58\% |
| Sucrose | Sugar, white, refined, $40-60 \%$ |
| NaCl | Sodium Chloride, 0-6\% |
| Hydroxyethyl-cellulose | Medium Viscosity (CAS\# 9004-62-0), <0.3\% |
| Preventol-D7 | Preservative: aqueous preparation, (CAS\# 55965-84-9), containing |
|  | 5-chloro-2-methyl-3(2H)-isothiazolone and 2-methyyl-3(2H)-isothiazolone, 0.1-0.7\% |
|  | Relevant for safety, Refer to the respective Safety Data Sheet*. |

## Figure D-1

Composition of 750 MHz Head and Body Tissue Equivalent Matter
Note: 750 MHz liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.
Schmid \& Partner Engineering AG S O e a
Zeughausstrasse 43. 8004 Zurich. Switzerland
Phone +41442459700 , Fax +41442459779
info(speag.com, http://www.speag.com

Measurement Certificate / Material Test



Figure D-2
750MHz Body Tissue Equivalent Matter

| FCC ID: ZNFQ720CS | CSPCTEST | SAR EVALUATION REPORT | (1) LG | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: <br> 04/01/19 - 05/01/19 | DUT Type: <br> Portable Handset |  |  | $\begin{aligned} & \text { APPENDIX D: } \\ & \text { Page } 2 \text { of } 6 \end{aligned}$ |
| CTEST Engineering Lab |  |  |  | $\begin{array}{r} \text { REV 21.3 M } \\ 02 / 15 / 2019 \end{array}$ |


| Schmid \& Partner Engineering AG | ) |  | C | a |  |
| :---: | :---: | :---: | :---: | :---: | :---: |

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41442459700, Fax +41442459779
info@speag.com, http://www.speag.com

Measurement Certificate / Material Test

| Item Name | Head Tissue Simulating Liquid (HSL750V2) |
| :--- | :--- |
| Product No. | SL AAH 075 AA (Batch: 170612-4) |
| Manufacturer | SPEAG |

Measurement Method
TSL dielectric parameters measured using calibrated DAK probe.
Setup Validation
Validation results were within $\pm 2.5 \%$ towards the target values of Methanol.
Target Parameters
Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards
Test Condition

| Ambient | Environment temperatur $(22 \pm 3)^{\circ} \mathrm{C}$ and humidity $<70 \%$. |
| :--- | :--- |
| TSL Temperature | $22^{\circ} \mathrm{C}$ |
| Test Date | $20-$ Jun-17 |
| Operator | CL |



Figure D-3
750MHz Head Tissue Equivalent Matter

| FCC ID: ZNFQ720CS | EPCTEST | SAR EVALUATION REPORT | ( $-1 . \mathrm{LG}$ | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: $04 / 01 / 19-05 / 01 / 19$ | DUT Type: <br> Portable Handset |  |  | APPENDIX D: <br> Page 3 of 6 |
| PCTEST Engineering La |  |  |  | $\begin{array}{r} \hline \text { REV } 21.3 \mathrm{M} \\ 02 / 15 / 2019 \end{array}$ |


| e ltem is composed of | owing ingr |  |
| :---: | :---: | :---: |
|  | 50-73\% |  |
| Non-ionic detergents | 25-50\% | polyoxyethylenesorbitan monolaurate |
| NaCl | 0-2\% |  |
| Preservative | 0.05-0.1\% | Preventol-D7 |
| Safety relevant ingredients: |  |  |
| CAS-No. 55965-84-9 | < 0.1 \% | aqueous preparation, containing 5 -chloro-2-methyl-3(2H)isothiazolone and 2-methyyl-3(2H)-isothiazolone |
| CAS-No. 9005-64-5 | <50 \% | polyoxyethylenesorbitan monolaurate |
| According to international gui marked by symbols. | elines, the pr | duct is not a dangerous mixture and therefore not required |

Figure D-4

## Composition of 2.4 GHz Head Tissue Equivalent Matter

Note: 2.4 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.


Figure D-5
2.4 GHz Head Tissue Equivalent Matter

| FCC ID: $\mathrm{ZNFQ720CS}$ | (a)PCTEST | SAR EVALUATION REPORT | (1) LG | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: <br> 04/01/19-05/01/19 | DUT Type: <br> Portable Handset |  |  | APPENDIX D: <br> Page 4 of 6 |
| CTEST Engineering L |  |  |  | $\begin{array}{r} \hline \text { REV } 21.3 \mathrm{M} \\ 02 / 15 / 2019 \end{array}$ |

## 2 Composition / Information on ingredients

The Item is composed of the following ingredients:

| Water | $50-65 \%$ |
| :--- | :--- |
| Mineral oil | $10-30 \%$ |
| Emulsifiers | $8-25 \%$ |
| Sodium salt | $0-1.5 \%$ |

Figure D-6
Composition of 5 GHz Head Tissue Equivalent Matter
Note: 5 GHz head liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.


Figure D-7
5 GHz Head Tissue Equivalent Matter

| FCC ID: ZNFQ720CS | CPCTEST | SAR EVALUATION REPORT | (1) LG | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: <br> 04/01/19-05/01/19 | DUT Type: <br> Portable Handset |  |  | APPENDIX D: Page 5 of 6 |
| CTEST Engineering Lab |  |  |  | REV 21.3 M 02/15/2019 |

## 3 Composition / Information on ingredients

The Item is composed of the following ingredients:

| Water | $60-80 \%$ |
| :--- | :--- |
| Esters, Emulsifiers, Inhibitors | $20-40 \%$ |
| Sodium salt | $0-1.5 \%$ |

Figure D-8
Composition of 5 GHz Body Tissue Equivalent Matter
Note: 5 GHz Body liquid recipes are proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacturer tissue-equivalent liquid data sheets are provided below.


Figure D-9
5 GHz Body Tissue Equivalent Matter

| FCC ID: ZNFQ720CS | CPCTEST | SAR EVALUATION REPORT | (1) LG | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: <br> 04/01/19-05/01/19 | DUT Type: <br> Portable Handset |  |  | APPENDIX D: Page 6 of 6 |
| CTEST Engineering Lab |  |  |  | $\begin{gathered} \hline \text { REV 21.3 M } \\ 02 / 15 / 2019 \end{gathered}$ |

## APPENDIX E: SAR SYSTEM VALIDATION

Per FCC KDB Publication 865664 D02v01r02, SAR system validation status should be documented to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles were used with the required tissue- equivalent media for system validation, according to the procedures outlined in FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point was validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status including the validation date(s), measurement frequencies, SAR probes and tissue dielectric parameters has been included.

Table E-1
SAR System Validation Summary - 1g

| SAR System | Freq. (MHz) | Date | Probe SN | Probe Cal Point |  | Cond. ( $\sigma$ ) | Perm. ( $\varepsilon$ ) | CW VALIDATION |  |  | MOD. VALIDATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | SENSITIVITY |  | PROBE | $\begin{array}{\|c\|} \hline \text { PROBE } \\ \text { ISOTROPY } \end{array}$ | MOD. TYPE | $\begin{array}{\|c\|} \hline \text { DUTY } \\ \text { FACTOR } \end{array}$ | PAR |
| E | 750 | 2/6/2019 | 3589 | 750 | Head |  | 0.891 | 43.677 | PASS | PASS | PASS | N/A | N/A | N/A |
| D | 835 | 10/26/2018 | 7357 | 835 | Head | 0.927 | 40.689 | PASS | PASS | PASS | GMSK | PASS | N/A |
| L | 1750 | 4/10/2019 | 7308 | 1750 | Head | 1.350 | 38.660 | PASS | PASS | PASS | N/A | N/A | N/A |
| D | 1900 | 10/25/2018 | 7357 | 1900 | Head | 1.433 | 39.444 | PASS | PASS | PASS | GMSK | PASS | N/A |
| E | 2300 | 2/6/2019 | 3589 | 2300 | Head | 1.724 | 40.930 | PASS | PASS | PASS | N/A | N/A | N/A |
| E | 2450 | 2/5/2019 | 3589 | 2450 | Head | 1.825 | 39.836 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| H | 5250 | 7/5/2018 | 7409 | 5250 | Head | 4.492 | 34.994 | PASS | PASS | PASS | OFDM | N/A | PASS |
| H | 5600 | 7/5/2018 | 7409 | 5600 | Head | 4.839 | 34.496 | PASS | PASS | PASS | OFDM | N/A | PASS |
| H | 5750 | 7/5/2018 | 7409 | 5750 | Head | 4.995 | 34.288 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 750 | 11/6/2018 | 7308 | 750 | Body | 0.962 | 53.923 | PASS | PASS | PASS | N/A | N/A | N/A |
| D | 835 | 8/15/2018 | 7357 | 835 | Body | 1.000 | 53.368 | PASS | PASS | PASS | GMSK | PASS | N/A |
| J | 835 | 3/10/2019 | 7488 | 835 | Body | 0.988 | 53.868 | PASS | PASS | PASS | GMSK | PASS | N/A |
| J | 1750 | 2/7/2019 | 7488 | 1750 | Body | 1.509 | 51.017 | PASS | PASS | PASS | N/A | N/A | N/A |
| G | 1900 | 8/10/2018 | 7410 | 1900 | Body | 1.567 | 52.239 | PASS | PASS | PASS | GMSK | PASS | N/A |
| K | 2300 | 3/6/2019 | 7417 | 2300 | Body | 1.860 | 51.114 | PASS | PASS | PASS | N/A | N/A | N/A |
| K | 2450 | 3/6/2019 | 7417 | 2450 | Body | 2.039 | 50.670 | PASS | PASS | PASS | OFDM/TDD | PASS | PASS |
| L | 5250 | 10/29/2018 | 7308 | 5250 | Body | 5.511 | 48.770 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5600 | 10/29/2018 | 7308 | 5600 | Body | 5.994 | 48.200 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5750 | 10/29/2018 | 7308 | 5750 | Body | 6.219 | 47.960 | PASS | PASS | PASS | OFDM | N/A | PASS |

Table E-2
SAR System Validation Summary - 10g

| SAR System | Freq. (MHz) | Date | Probe SN | Probe Cal Point |  | Cond. <br> ( $\sigma$ ) | Perm. <br> ( $\varepsilon$ r) | CW VALIDATION |  |  | MOD. VALIDATION |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | SENSITIVITY |  | PROBE LINEARITY | PROBE ISOTROPY | MOD. | $\begin{array}{\|c\|} \hline \text { DUTY } \\ \text { FACTOR } \end{array}$ | PAR |
| K | 2300 | 3/6/2019 | 7417 | 2300 | Body |  | 1.860 | 51.114 | PASS | PASS | PASS | N/A | N/A | N/A |
| L | 5250 | 10/29/2018 | 7308 | 5250 | Body | 5.511 | 48.770 | PASS | PASS | PASS | OFDM | N/A | PASS |
| L | 5600 | 10/29/2018 | 7308 | 5600 | Body | 5.994 | 48.200 | PASS | PASS | PASS | OFDM | N/A | PASS |

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to FCC KDB Publication 865664 D01v01r04.

| FCC ID: ZNFQ720CS | (T)PCTEST | SAR EVALUATION REPORT | (1) LG | Approved by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: 04/01/19-05/01/19 | DUT Type: <br> Portable Handset |  |  | APPENDIX E: Page 1 of 1 |

## APPENDIX G POWER REDUCTION VERIFICATION

Per the May 2017 TCBC Workshop Notes, demonstration of proper functioning of the power reduction mechanisms is required to support the corresponding SAR configurations. The verification process was divided into two parts: (1) evaluation of output power levels for individual or multiple triggering mechanisms and (2) evaluation of the triggering distances for proximity-based sensors.

## G. 1 Power Verification Procedure

The power verification was performed according to the following procedure:

1. A base station simulator was used to establish a conducted RF connection and the output power was monitored. The power measurements were confirmed to be within expected tolerances for all states before and after a power reduction mechanism was triggered.
2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.
3. Steps 1 and 2 were repeated for all individual power reduction mechanisms and combinations thereof. For the combination cases, one mechanism was switched to a 'triggered' state at a time; powers were confirmed to be within tolerances after each additional mechanism was activated.

## G. 2 Distance Verification Procedure

The distance verification procedure was performed according to the following procedure:

1. A base station simulator was used to establish an RF connection and to monitor the power levels. The device being tested was placed below the relevant section of the phantom with the relevant side or edge of the device facing toward the phantom.
2. The device was moved toward and away from the phantom to determine the distance at which the mechanism triggers and the output power is reduced, per KDB Publication 616217 D04v01r02 and FCC Guidance. Each applicable test position was evaluated. The distances were confirmed to be the same or larger (more conservative) than the minimum distances provided by the manufacturer.
3. Steps 1 and 2 were repeated for low, mid, and high bands, as appropriate (see note below Table G-2 for more details).
4. Steps 1 through 3 were repeated for all distance-based power reduction mechanisms.


## G. 3 Main Antenna Verification Summary

Table G-1
Power Measurement Verification for Main Antenna

| Mechanism(s) | Mode/Band | Conducted Power (dBm) |  |
| :---: | :---: | :---: | :---: |
|  |  | Un-triggered <br> (Max) | Mechanism \#1 <br> (Reduced) |
|  | LTE FDD Band 30 | 23.31 | 21.36 |

Table G-2
Distance Measurement Verification for Main Antenna

| Test Condition | Band | Distance Measurements (mm) |  | Minimum Distance per Manufacturer (mm) |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Moving Toward | Moving Away |  |
| Phablet - Back Side | High | 3 | 5 | 2 |
| Phablet - Front Side | High | 3 | 5 | 2 |
| Phablet - Bottom Edge | High | 5 | 6 | 4 |

*Note: High band refers to: LTE B30

## G. 4 WIFI Verification Summary

Table G-3
Power Measurement Verification WIFI

| Mechanism(s) | Mode/Band | Conducted Power (dBm) |  |
| :---: | :---: | :---: | :---: |
| 1st |  | Un-triggered (Max) | Mechanism \#1 <br> (Reduced) |
| Held-to-Ear | 802.11 b | 22.76 | 18.48 |
| Held-to-Ear | 802.11g | 20.30 | 18.72 |
| Held-to-Ear | 802.11n (2.4GHz) | 20.09 | 18.42 |
| Held-to-Ear | 802.11a | 18.70 | 16.92 |
| Held-to-Ear | 802.11n ( $5 \mathrm{GHz}, 20 \mathrm{MHz} \mathrm{BW)}$ | 17.81 | 17.02 |


| FCC ID:ZNFQ720CS | (F)PCTEST | SAR EVALUATION REPORT | (1) LG | Reviewed by: <br> Quality Manager |
| :---: | :---: | :---: | :---: | :---: |
| Test Dates: $04 / 01 / 19-05 / 01 / 19$ | DUT Type: <br> Portable Handset |  |  | APPENDIX G: <br> Page 2 of 2 |
| © 2019 PCTEST Engineering Laboratory, Inc. |  |  |  | $\begin{array}{r} \hline \text { REV 20.05 M } \\ 11 / 15 / 2017 \end{array}$ |

## APPENDIX H: DOWNLINK LTE CARF CONDUCTED POWERS

### 1.1 LTE Downlink Only Carrier Aggregation Test Reduction Methodology

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number of component carriers (CCs) supported by the product implementation. Per April 2018 TCBC Workshop Notes, the following test reduction methodology was applied to determine the combinations required for conducted power measurements.

LTE DLCA Test Reduction Methodology:

- The supported combinations were arranged by the number of component carriers in columns.
- Any limitations on the PCC or SCC for each combination were identified alongside the combination (e.g. CA_2A-2A-4A-12A, but B12 can only be configured as a SCC).
- Power measurements were performed for "supersets" (LTE CA combinations with multiple components carriers) and any "subsets" (LTE CA combinations with fewer component carriers) that were not completely covered by the supersets.
- Only subsets that have the exact same components as a superset were excluded for measurement.
- When there were certain restrictions on component carriers that existed in the superset that were not applied for the subset, the subset configuration was additionally evaluated.
- Both inter-band and intra-band downlink carrier aggregation scenarios were considered.

Table 1 - Example of Exclusion Table for SISO Configurations


### 1.2 LTE Downlink Only Carrier Aggregation Test Selection and Setup

SAR test exclusion for LTE downlink Carrier Aggregation is determined by power measurements according to the number component carriers (CCs) supported by the product implementation. For those configurations required by April 2018 TCBC Workshop Notes, conducted power measurements with LTE Carrier Aggregation (CA) (downlink only) active are made in accordance to KDB Publication 941225 D05Av01r02. The RRC connection is only handled by one cell, the primary component carrier (PCC) for downlink and uplink communications. After making a data connection to the PCC, the UE device adds secondary component carrier(s) (SCC) on the downlink only. All uplink communications and acknowledgements remain identical to specifications when downlink carrier aggregation is inactive on the PCC. Additional conducted output powers are measured with the downlink carrier aggregation active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

Per FCC KDB Publication 941225 D05Av01r02, no SAR measurements are required for carrier aggregation configurations when the maximum average output power with downlink only carrier aggregation active is not more than 0.25 dB higher than the average output power with downlink only carrier aggregation inactive. All bands

required for SAR testing per FCC KDB procedures were considered. Based on the measured maximum powers below, no additional SAR tests were required for DLCA SAR configurations.

## General PCC and SCC configuration selection procedure

- PCC uplink channel, channel bandwidth, modulation and RB configurations were selected based on section C)3)b)iii) of KBD 941225 D05 V01r02. The downlink PCC channel was paired with the selected PCC uplink channel according to normal configurations without carrier aggregation.
- To maximize aggregated bandwidth, highest channel bandwidth available for that CA combination was selected for SCC. For inter-band CA, the SCC downlink channels were selected near the middle of their transmission bands. For contiguous intra-band CA, the downlink channel spacing between the component carriers was set to multiple of 300 kHz less than the nominal channel spacing defined in section 5.4.1A of 3GPP TS 36.521. For non-contiguous intra-band CA, the downlink channel spacing between the component carriers was set to be larger than the nominal channel spacing and provided maximum separation between the component carriers.
- All selected PCC and SCC(s) remained fully within the uplink/downlink transmission band of the respective component carrier.


Figure 1
DL CA Power Measurement Setup

### 1.3 Downlink Carrier Aggregation RF Conducted Powers

### 1.3.1 LTE Band 12 as PCC

Table 1
Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  |  | SCC 1 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | PCC BW <br> [MHz] | PCC (UL) Ch. | PCC (UL) <br> Freq. [MHz] | Mod. | PCC UL\# RB | PCC UL RB Offset | PCC (DL) Channel | PCC (DL) <br> Freq. [MHz] | SCC Band | $\begin{gathered} \text { SCC BW } \\ {[\mathrm{MHz}]} \end{gathered}$ | SCC (DL) Channel | $\begin{gathered} \text { SCC (DL) } \\ \text { Freq. }[\mathrm{MHz}] \end{gathered}$ | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_12A-30A | LTE B12 | 10 | 23095 | 707.5 | QPSK | 1 | 0 | 5095 | 737.5 | LTE B30 | 10 | 9820 | 2355 | 25.50 | 25.44 |
| CA_12A-66A (1) | LTE B12 | 10 | 23095 | 707.5 | QPSK | 1 | 0 | 5095 | 737.5 | LTE B66 | 20 | 66786 | 2145 | 25.43 | 25.44 |
| CA_12A-66A (2) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | LTE B66 | 20 | 66786 | 2145 | 25.38 | 25.49 |
| CA_2A-12A (1) | LTE B12 | 3 | 23025 | 700.5 | QPSK | 1 | 7 | 5025 | 730.5 | LTE B2 | 20 | 900 | 1960 | 25.34 | 25.49 |

### 1.3.2 LTE Band 14 as PCC

Table 2
Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  |  | SCC 1 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | $\begin{gathered} \text { PCC (UL) } \\ \text { Freq. [MHz] } \end{gathered}$ | Mod. | $\left\|\begin{array}{c} \text { PCC UL\# } \\ \text { RB } \end{array}\right\|$ | PCC UL RB Offset | PCC (DL) Channel | $\begin{gathered} \text { PCC (DL) } \\ \text { Freq. [MHz] } \end{gathered}$ | SCC Band | SCC BW [MHz] | SCC (DL) Channel | $\begin{aligned} & \text { SCC (DL) } \\ & \text { Freq. [MHz] } \end{aligned}$ | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-14A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 0 | 5330 | 763 | LTE B2 | 20 | 900 | 1960 | 25.50 | 25.50 |
| CA_14A-66A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 0 | 5330 | 763 | LTE B66 | 20 | 66786 | 2145 | 25.47 | 25.50 |
| CA_14A-30A | LTE B14 | 10 | 23330 | 793 | QPSK | 1 | 0 | 5330 | 763 | LTE B30 | 10 | 9820 | 2355 | 25.48 | 25.50 |



### 1.3.3 LTE Band 5 as PCC

Table 3
Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  |  | SCC 1 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | PCC (UL) <br> Freq. [MHz] | Mod. | $\left\|\begin{array}{c} \text { PCC UL\# } \\ \text { RB } \end{array}\right\|$ | PCC UL RB Offset | PCC (DL) Channel | $\begin{gathered} \text { PCC (DL) } \\ \text { Freq. [MHz] } \end{gathered}$ | SCC Band | SCC BW [MHz] | SCC (DL) Channel | $\begin{gathered} \text { SCC (DL) } \\ \text { Freq. [MHz] } \end{gathered}$ | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power ( dBm ) |
| CA_2A-5A | LTE B5 | 10 | 20525 | 836.5 | QPSK | 1 | 49 | 2525 | 881.5 | LTE B2 | 20 | 900 | 1960 | 25.47 | 25.50 |
| CA_5A-30A | LTE B5 | 10 | 20525 | 836.5 | QPSK | 1 | 49 | 2525 | 881.5 | LTE B30 | 10 | 9820 | 2355 | 25.50 | 25.50 |

### 1.3.4 LTE Band 66 as PCC

Table 4 Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  |  | SCC 1 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | $\begin{gathered} \text { PCC (UL) } \\ \text { Freq. [MHz] } \end{gathered}$ | Mod. | $\left\|\begin{array}{c} \text { PCC UL\# } \\ \text { RB } \end{array}\right\|$ | PCC UL RB Offset | PCC (DL) Channel | $\begin{gathered} \text { PCC (DL) } \\ \text { Freq. [MHz] } \end{gathered}$ | SCC Band | SCC BW [MHz] | SCC (DL) Channel | $\begin{gathered} \text { SCC (DL) } \\ \text { Freq. [MHz] } \end{gathered}$ | LTE Tx.Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_12A-66A (1) | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 99 | 66786 | 2145 | LTE B12 | 10 | 5095 | 737.5 | 23.73 | 24.00 |
| CA_12A-66A (2) | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 99 | 66786 | 2145 | LTE B12 | 10 | 5095 | 737.5 | 23.73 | 24.00 |
| CA_29A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 99 | 66786 | 2145 | LTE B29 | 10 | 9715 | 722.5 | 23.80 | 24.00 |
| CA_2A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 99 | 66786 | 2145 | LTE B2 | 20 | 900 | 1960 | 23.86 | 24.00 |
| CA_66A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 99 | 66786 | 2145 | LTE B66 | 20 | 67236 | 2190 | 23.92 | 24.00 |
| CA_66B | LTE B66 | 10 | 132022 | 1715 | QPSK | 1 | 49 | 66486 | 2115 | LTE B66 | 10 | 66585 | 2124.9 | 23.87 | 23.95 |
| CA_66C | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 99 | 66786 | 2145 | LTE B66 | 20 | 66588 | 2125.2 | 23.87 | 24.00 |
| CA_14A-66A | LTE B66 | 20 | 132322 | 1745 | QPSK | 1 | 99 | 66786 | 2145 | LTE B14 | 10 | 5330 | 763 | 23.73 | 24.00 |

### 1.3.5 LTE Band 2 as PCC

Table 5
Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  |  | SCC 1 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | $\begin{gathered} \text { PCC (UL) } \\ \text { Freq. [MHz] } \end{gathered}$ | Mod. | $\left\|\begin{array}{c} \text { PCC UL\# } \\ \text { RB } \end{array}\right\|$ | PCC UL RB Offset | PCC (DL) Channel | $\begin{gathered} \text { PCC (DL) } \\ \text { Freq. [MHz] } \end{gathered}$ | SCC Band | SCC BW [MHz] | SCC (DL) Channel | $\begin{gathered} \text { SCC (DL) } \\ \text { Freq. [MHz] } \end{gathered}$ | LTE Tx. Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_2A-12A (1) | LTE B2 | 20 | 19100 | 1900 | QPSK | 1 | 50 | 1100 | 1980 | LTE B12 | 10 | 5095 | 737.5 | 23.96 | 24.00 |
| CA_2A-29A | LTE B2 | 10 | 18900 | 1880 | QPSK | 1 | 49 | 900 | 1960 | LTE B29 | 10 | 9715 | 722.5 | 23.84 | 23.62 |
| CA_2A-29A (2) | LTE B2 | 20 | 19100 | 1900 | QPSK | 1 | 50 | 1100 | 1980 | LTE B29 | 10 | 9715 | 722.5 | 23.94 | 24.00 |
| CA_2A-2A | LTE B2 | 20 | 19100 | 1900 | QPSK | 1 | 50 | 1100 | 1980 | LTE B2 | 20 | 700 | 1940 | 23.86 | 24.00 |
| CA_2A-5A | LTE B2 | 20 | 19100 | 1900 | QPSK | 1 | 50 | 1100 | 1980 | LTE B5 | 10 | 2525 | 881.5 | 23.99 | 24.00 |
| CA_2A-66A | LTE B2 | 20 | 19100 | 1900 | QPSK | 1 | 50 | 1100 | 1980 | LTE B66 | 20 | 66786 | 2145 | 23.85 | 24.00 |
| CA_2A-14A | LTE B2 | 20 | 19100 | 1900 | QPSK | 1 | 50 | 1100 | 1980 | LTE B14 | 10 | 5330 | 763 | 23.94 | 24.00 |

### 1.3.6 LTE Band $\mathbf{3 0}$ as PCC

Table 6
Maximum Output Powers

|  | PCC |  |  |  |  |  |  |  |  | SCC 1 |  |  |  | Power |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Combination | PCC Band | PCC BW [MHz] | PCC (UL) Ch. | $\begin{gathered} \text { PCC (UL) } \\ \text { Freq. [MHz] } \end{gathered}$ | Mod. | $\begin{array}{\|c} \hline \text { PCC UL\# } \\ \text { RB } \end{array}$ | PCC UL RB Offset | PCC (DL) Channel | $\begin{gathered} \text { PCC (DL) } \\ \text { Freq. }[\mathrm{MHz}] \end{gathered}$ | SCC Band | SCC BW [MHz] | SCC (DL) Channel | $\begin{array}{\|l} \hline \text { SCC (DL) } \\ \text { Freq. [MHz] } \end{array}$ | LTE Tx. Power with DL CA Enabled (dBm) | LTE Single Carrier Tx Power (dBm) |
| CA_12A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 0 | 9820 | 2355 | LTE B12 | 10 | 5095 | 737.5 | 23.73 | 23.86 |
| CA_29A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 0 | 9820 | 2355 | LTE B29 | 10 | 9715 | 722.5 | 23.69 | 23.86 |
| CA_5A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 0 | 9820 | 2355 | LTE B5 | 10 | 2525 | 881.5 | 23.70 | 23.86 |
| CA_14A-30A | LTE B30 | 5 | 27710 | 2310 | QPSK | 1 | 0 | 9820 | 2355 | LTE B14 | 10 | 5330 | 763 | 23.61 | 23.86 |




[^0]:    This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

[^1]:    ${ }^{\text {A }}$ The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6).
    ${ }^{8}$ Numerical linearization parameter: uncertainty not required.
    ${ }^{E}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^2]:    c Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
    ${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
    ${ }^{6}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip
    diameter from the boundary.

[^3]:    ${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
    ${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
    Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip

[^4]:    A The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6)
    ${ }^{8}$ Numerical linearization parameter: uncertainty not required.
    ${ }^{E}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^5]:    ${ }^{\text {c }}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
    ${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
    ${ }^{6}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

[^6]:    ${ }^{\text {A }}$ The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6).
    ${ }^{\mathrm{B}}$ Numerical linearization parameter: uncertainty not required.
    ${ }^{E}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^7]:    ${ }^{\text {E }}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^8]:    ${ }^{\text {A }}$ The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6).
    ${ }^{\mathrm{B}}$ Numerical linearization parameter: uncertainty not required.
    ${ }^{E}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^9]:    ${ }^{\mathrm{c}}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
    ${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if fiquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
    ${ }^{G}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

[^10]:    ${ }^{\text {A }}$ The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6).
    ${ }^{B}$ Numerical linearization parameter: uncertainty not required.
    ${ }^{E}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

[^11]:    ${ }^{c}$ Frequency validity above 300 MHz of $\pm 100 \mathrm{MHz}$ only applies for DASY v4.4 and higher (see Page 2), else it is restricted to $\pm 50 \mathrm{MHz}$. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is $\pm 10,25,40,50$ and 70 MHz for ConvF assessments at $30,64,128,150$ and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is $4-9 \mathrm{MHz}$, and ConvF assessed at 13 MHz is $9-19 \mathrm{MHz}$. Above 5 GHz frequency validity can be extended to $\pm 110 \mathrm{MHz}$.
    ${ }^{F}$ At frequencies below 3 GHz , the validity of tissue parameters ( $\mathbf{\varepsilon}$ and $\sigma$ ) can be relaxed to $\pm 10 \%$ if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz , the validity of tissue parameters ( $\varepsilon$ and $\sigma$ ) is restricted to $\pm 5 \%$. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.
    ${ }^{6}$ Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than $\pm 1 \%$ for frequencies below 3 GHz and below $\pm 2 \%$ for frequencies between $3-6 \mathrm{GHz}$ at any distance larger than half the probe tip diameter from the boundary.

[^12]:    ${ }^{\text {A }}$ The uncertainties of Norm $X, Y, Z$ do not affect the $E^{2}$-field uncertainty inside TSL (see Pages 5 and 6).
    ${ }^{B}$ Numerical linearization parameter: uncertainty not required.
    ${ }^{E}$ Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

