



May 24, 2023

| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = |
|----------------|------------|--|--------------|----------|----------------------|
| 10609 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle) | WLAN | 8.57 | ±9.6 |
| 10610 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 10611 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 10612 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10613 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 10614 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle) | WLAN | 8.59 | ±9.6 |
| 10615 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10616 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10617 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10618 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 10619 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle) | WLAN | 8.86 | ±9.6 |
| 10620 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle) | WLAN | 8.87 | ±9.6 |
| 10621 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10622 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle) | WLAN | 8.68 | ±9.6 |
| 10623 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10624 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle) | WLAN | 8.96 | ±9.6 |
| 10625 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle) | WLAN | 8.96 | ±9.6 |
| 10620 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10628 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle) | WLAN | 8.88 | ±9.6 |
| 10629 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle) IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle) | WLAN | 8.71 | ±9.6 |
| 10630 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | ±9.6 |
| 10631 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle) | WLAN | 8.72 | ±9.6 |
| 10632 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10633 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10634 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10635 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle) | WLAN WLAN | 8.80 | ±9.6 |
| 10636 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10637 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10638 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 10639 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | ±9.6 |
| 10640 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle) | WLAN | 8.98 | ±9.6 |
| 10641 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle) | WLAN | 9.06 | ±9.6 ±9.6 |
| 10642 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle) | WLAN | 9.06 | ±9.6 |
| 10643 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle) | WLAN | 8.89 | ±9.6 |
| 10644 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle) | WLAN | 9.05 | ±9.6 |
| 10645 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle) | WLAN | 9.11 | ±9.6 |
| 10646 | AAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7) | LTE-TDD | 11.96 | ±9.6 |
| 10647 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | LTE-TDD | 11.96 | ±9.6 |
| 10648 | AAA | CDMA2000 (1x Advanced) | CDMA2000 | 3.45 | ±9.6 |
| 10652 | AAF | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.91 | ±9.6 |
| 10653 | AAF | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.42 | ±9.6 |
| 10654 | AAE | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.96 | ±9.6 |
| 10655 | AAF | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.21 | ±9.6 |
| 10658 | AAB | Pulse Waveform (200Hz, 10%) | Test | 10.00 | ±9.6 |
| 10659 | AAB | Pulse Waveform (200Hz, 20%) | Test | 6.99 | ±9.6 |
| 10660 | AAB | Pulse Waveform (200Hz, 40%) | Test | 3.98 | ±9.6 |
| 10661 | AAB | Pulse Waveform (200Hz, 60%) | Test | 2.22 | ±9.6 |
| 10662 | AAB | Pulse Waveform (200Hz, 80%) | Test | 0.97 | ±9.6 |
| 10670 | AAA | Bluetooth Low Energy | Bluetooth | 2.19 | ±9.6 |
| 10671 | AAC | IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle) | WLAN | 9.09 | ±9.6 |
| 10672 | AAC | IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle) | WLAN | 8.57 | ±9.6 |
| 10673 | AAC | IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 10674 | AAC | IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10675 | AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) | WLAN | 8.90 | ±9.6 |
| 10676 10677 | AAC | IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10677 | AAC AAC | IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) | WLAN | 8.73 | ±9.6 |
| 10678 | AAC | IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 10679 | AAC | IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) | WLAN | 8.89 | ±9.6 |
| 10680 | AAC | IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) | WLAN | 8.80 | ±9.6 |
| 10682 | AAC | IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle) | WLAN | 8.62 | ±9.6 |
| 10683 | AAC | | WLAN | 8.83 | ±9.6 |
| 10683 | AAC | IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 10685 | AAC | IEEE 802.11ax (20 MHz, MCS1, 99pc duty cycle) | WLAN | 8.26 | ±9.6 |
| 0685 | | IEEE 802.11ax (20 MHz, MCS2, 99pc duty cycle) | WLAN | 8.33 | ±9.6 |
| 0000 | AAC | IEEE 802.11ax (20 MHz, MCS3, 99pc duty cycle) | WLAN | 8.28 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | UnaE k - 0 |
|-------|-----|--|-------|----------|--------------|
| 10687 | AAC | IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle) | WLAN | 8.45 | |
| 10688 | AAC | IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10689 | AAC | IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10690 | AAC | IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10691 | AAC | IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10692 | AAC | IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10693 | AAC | IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle) | WLAN | 8.25 | ±9.6 |
| 10694 | AAC | IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle) | WLAN | 8.57 | ±9.6 |
| 10695 | AAC | IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 10696 | AAC | IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle) | WLAN | 8.91 | ±9.6 ±9.6 |
| 10697 | AAC | IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.61 | ±9.6 |
| 10698 | AAC | IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle) | WLAN | 8.89 | ±9.6 |
| 10699 | AAC | IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10700 | AAC | IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle) | WLAN | 8.73 | ±9.6 |
| 10701 | AAC | IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle) | WLAN | 8.86 | ±9.6 |
| 10702 | AAC | IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 10703 | AAC | IEEE 802.11ax (40 MHz, MCS8, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10704 | AAC | IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle) | WLAN | 8.56 | ±9.6 |
| 10705 | AAC | IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle) | WLAN | 8.69 | ±9.6 |
| 10706 | AAC | IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle) | WLAN | 8.66 | ±9.6 |
| 10707 | AAC | IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle) | WLAN | 8.32 | ±9.6 |
| 10708 | AAC | IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle) | WLAN | 8.55 | ±9.6 |
| 10709 | AAC | IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle) | WLAN | 8.33 | ±9.6 |
| 10710 | AAC | IEEE 802.11ax (40 MHz, MCS3, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10711 | AAC | IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle) | WLAN | 8.39 | ±9.6 |
| 10712 | AAC | IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle) | WLAN | 8.67 | ±9.6 |
| 10713 | AAC | IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle) | WLAN | 8.33 | ±9.6 |
| 10714 | AAC | IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle) | WLAN | 8.26 | ±9.6 |
| 10715 | AAC | IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 10716 | AAC | IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle) | WLAN | 8.30 | ±9.6 |
| 10717 | AAC | IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle) | WLAN | 8.48 | ±9.6 |
| 10718 | AAC | IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle) | WLAN | 8.24 | ±9.6 |
| 10719 | AAC | IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10720 | AAC | IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle) | WLAN | 8.87 | ±9.6 |
| 10721 | AAC | IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle) | WLAN | 8.76 | ±9.6 |
| 10722 | AAC | IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle) | WLAN | 8.55 | ±9.6 |
| 10723 | AAC | IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 10724 | AAC | IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle) | WLAN | 8.90 | ±9.6 |
| 10725 | AAC | IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10726 | AAC | IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle) | WLAN | 8.72 | ±9.6 |
| 10727 | AAC | IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle) | WLAN | 8.66 | ±9.6 |
| 10728 | AAC | IEEE 802.11ax (80 MHz, MCS9, 90pc duty cycle) | WLAN | 8.65 | ±9.6 |
| 10729 | AAC | IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle) | WLAN | 8.64 | ±9.6 |
| 10730 | AAC | IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle) | WLAN | 8.67 | ±9.6 |
| 10731 | AAC | IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 10732 | AAC | IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle) | WLAN | 8.46 | ±9.6 |
| 10733 | AAC | IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle) | WLAN | 8.40 | ±9.6 |
| 10734 | AAC | IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle) | WLAN | 8.25 | ±9.6 |
| 10735 | AAC | IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle) | WLAN | 8.33 | ±9.6 |
| 10736 | AAC | IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle) | WLAN | 8.27 | ±9.6 |
| 10737 | AAC | IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10738 | AAC | IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 10739 | AAC | IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10740 | AAC | IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle) | WLAN | 8.48 | ±9.6 |
| 10741 | AAC | IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle) | WLAN | 8.40 | ±9.6 |
| 10742 | AAC | IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle) | WLAN | 8.43 | ±9.6 |
| 10743 | AAC | IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 10744 | AAC | IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle) | WLAN | 9.16 | ±9.6 |
| 10745 | AAC | IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle) | WLAN | 8.93 | ±9.6 |
| 10746 | AAC | IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle) | WLAN | 9.11 | ±9.6 |
| 10747 | AAC | IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle) | WLAN | 9.04 | ±9.6 |
| 10748 | AAC | IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle) | WLAN | 8.93 | ±9.6 |
| 10749 | AAC | IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle) | WLAN | 8.90 | ±9.6 |
| 10750 | AAC | IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 10751 | AAC | IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10752 | AAC | IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|----------------|-----|---|---------------|----------|------------------------|
| 10753 | AAC | IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle) | WLAN | 9.00 | ±9.6 |
| 10754 | AAC | IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 10755 | AAC | IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle) | WLAN | 8.64 | ±9.6 |
| 10756 | AAC | IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10757 | AAC | IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10758 | AAC | IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle) | WLAN | 8.69 | ±9.6 |
| 10759 | AAC | IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 10760 | AAC | IEEE 802.11ax (160 MHz, MCS5, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 10761 | AAC | IEEE 802.11ax (160 MHz, MCS6, 99pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 10762 | AAC | IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 10763 | AAC | IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle) | WLAN | 8.53 | ±9.6 |
| 10764 | AAC | IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 10765 | AAC | IEEE 802.11ax (160 MHz, MCS10, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 10766 | AAC | IEEE 802.11ax (160 MHz, MCS11, 99pc duty cycle) | WLAN | 8.51 | ±9.6 |
| 10767 | AAE | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 7.99 | ±9.6 |
| 10768 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10769 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10770 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10771 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10772 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.23 | ±9.6 |
| 0773 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.03 | ±9.6 |
| 10774 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 0775 | AAD | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 0776 | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 10777 | AAC | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 0778 | AAD | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10779 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.42 | ±9.6 |
| 0780 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 10781 | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 0782 | AAD | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.43 | ±9.6 |
| 10783 | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 0784 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.29 | ±9.6 |
| 10785 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 10786 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 10787 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.44 | ±9.6 |
| 10788 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 0789 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10790 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 0791 | AAE | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.83 | ±9.6 |
| 10792 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.92 | ±9.6 |
| 10793 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.95 | ±9.6 |
| 10794 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 10795 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.84 | ±9.6 |
| 10796 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 10797 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10798 10799 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| | | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.6 |
| 0801 | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| 0802 | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.87 | ±9.6 |
| 10803 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.6 |
| 0805 | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0806 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 0809 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| | | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0812 | AAD | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 0817 0818 | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 0819 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0819 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.33 | ±9.6 |
| 0820 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| | | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10822 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0823 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 0824 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 0825 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0827 | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.42 | ±9.6 |
| | AAD | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.43 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = |
|-------|-----|---|---------------|----------|----------------------|
| 10829 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 10830 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.63 | ±9.6 |
| 10831 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.73 | |
| 10832 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.74 | ±9.6 |
| 10833 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | | ±9.6 |
| 10834 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz) | | 7.70 | ±9.6 |
| 10835 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.75 | ±9.6 |
| 10836 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 10837 | AAD | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.66 | ±9.6 |
| 10839 | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.68 | ±9.6 |
| 10840 | AAD | | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 10841 | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.67 | ±9.6 |
| 10843 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.71 | ±9.6 |
| 0844 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.49 | ±9.6 |
| | | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0846 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0854 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0855 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 0856 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 0857 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 0858 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 0859 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10860 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0861 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 0863 | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10864 | AAD | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10865 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10866 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | |
| 10868 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.89 | ±9.6 |
| 0869 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | | ±9.6 |
| 0870 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | | 5.75 | ±9.6 |
| 0871 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 KHz) | 5G NR FR2 TDD | 5.86 | ±9.6 |
| 0872 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 0873 | AAE | | 5G NR FR2 TDD | 6.52 | ±9.6 |
| 0874 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| | | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 0875 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 0876 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.39 | ±9.6 |
| 0877 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 7.95 | ±9.6 |
| 0878 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 0879 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.12 | ±9.6 |
| 0880 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.38 | ±9.6 |
| 0881 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 0882 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.96 | ±9.6 |
| 0883 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.57 | ±9.6 |
| 0884 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.53 | ±9.6 |
| 0885 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 0886 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 0887 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 0888 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.35 | |
| 0889 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 KHz) | 5G NR FR2 TDD | | ±9.6 |
| 0890 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | | 8.02 | ±9.6 |
| 0891 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 KHz) | 5G NR FR2 TDD | 8.40 | ±9.6 |
| 0892 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.13 | ±9.6 |
| 0897 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 04QAM, 120 KHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 0898 | AAB | 5G NR (DF1-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.66 | ±9.6 |
| 0899 | AAB | | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 0900 | | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| | AAB | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0901 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0902 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0903 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0904 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0905 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0906 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0907 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.78 | ±9.6 |
| 0908 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 0909 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.96 | ±9.6 |
| | AAB | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 0.00 | 19.0 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|----------------|-----|---|--------------------------------|----------|------------------------|
| 10911 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 10912 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | |
| 10913 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10914 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.85 | ±9.6 |
| 10915 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |
| 10916 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |
| 10917 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | | ±9.6 |
| 10918 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz) | | 5.94 | ±9.6 |
| 10919 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD 5G NR FR1 TDD | 5.86 | ±9.6 |
| 10920 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | | 5.86 | ±9.6 |
| 10921 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10922 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10923 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.82 | ±9.6 |
| 10924 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10925 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | | 5.84 | ±9.6 |
| 10926 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.95 | ±9.6 |
| 10927 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10928 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 5MHz, QPSK, 15kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10929 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10930 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10931 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10932 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10933 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10934 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10935 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10936 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10937 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10938 | AAC | | 5G NR FR1 FDD | 5.77 | ±9.6 |
| 10939 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10939 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.82 | ±9.6 |
| 10940 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.89 | ±9.6 |
| | | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.83 | ±9.6 |
| 10942 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.85 | ±9.6 |
| 10943 | | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.95 | ±9.6 |
| 10944 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.81 | ±9.6 |
| 10945 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.85 | ±9.6 |
| 10946 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.83 | ±9.6 |
| 10947 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10948 10949 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10950 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10951 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.92 | ±9.6 |
| 10952 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.25 | ±9.6 |
| 10953 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.15 | ±9.6 |
| 10954 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.23 | ±9.6 |
| 10955 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.42 | ±9.6 |
| 10956 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.14 | ±9.6 |
| 10957 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.31 | ±9.6 |
| 10958 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.61 | ±9.6 |
| 10959 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.33 | ±9.6 |
| 10960 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.32 | ±9.6 |
| 10961 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.36 | ±9.6 |
| 10962 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.40 | ±9.6 |
| 10963 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 10964 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.29 | ±9.6 |
| 10965 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.37 | ±9.6 |
| 10966 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 10967 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.42 | ±9.6 |
| 10968 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.49 | ±9.6 |
| 10972 | AAB | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 11.59 | ±9.6 |
| 10973 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 9.06 | ±9.6 |
| 10974 | AAB | 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz) | 5G NR FR1 TDD | 10.28 | ±9.6 |
| 10978 | AAA | ULLA BDR | ULLA | 1.16 | ±9.6 |
| 10979 | AAA | ULLA HDR4 | ULLA | 8.58 | ±9.6 |
| 10980 | AAA | ULLA HDR8 | ULLA | 10.32 | ±9.6 |
| 10981 | AAA | ULLA HDRp4 | ULLA | 3.19 | ±9.6 |
| 10982 | AAA | ULLA HDRp8 | ULLA | 3.43 | ±9.6 |

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| UID | Rev | Communication System Name | Group | DAD (dD) | U.F. |
|-------|-----|--|--------------------------------|----------|------------------------|
| 10983 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | PAR (dB) | Unc ^E k = 2 |
| 10984 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.31 | ±9.6 |
| 10985 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.42 | ±9.6 |
| 10986 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | | 9.54 | ±9.6 |
| 10987 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD 5G NR FR1 TDD | 9.50 | ±9.6 |
| 10988 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.53 | ±9.6 |
| 10989 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz) | | 9.38 | ±9.6 |
| 10990 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.33 | ±9.6 |
| 11003 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.52 | ±9.6 |
| 11004 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 10.24 | ±9.6 |
| 11005 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 10.73 | ±9.6 |
| 11006 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.70 | ±9.6 |
| 11007 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.55 | ±9.6 |
| 11008 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.46 | ±9.6 |
| 11009 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.51 | ±9.6 |
| 11010 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.76 | ±9.6 |
| 11011 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 KHz) | 5G NR FR1 FDD | 8.95 | ±9.6 |
| 11012 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.96 | ±9.6 |
| 11013 | AAA | IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle) | 5G NR FR1 FDD | 8.68 | ±9.6 |
| 11014 | AAA | IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 11015 | AAA | IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 11016 | AAA | IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11017 | AAA | IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11018 | AAA | IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle) | WLAN | 8.41 | ±9.6 |
| 11019 | AAA | IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle) | WLAN | 8.40 | ±9.6 |
| 11020 | AAA | IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 11021 | AAA | IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle) | WLAN | 8.27 | ±9.6 |
| 11022 | AAA | IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle) | WLAN | 8.46 | ±9.6 |
| 1023 | AAA | IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle) IEEE 802.11be (320 MHz, MCS11, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 11024 | AAA | IEEE 802 11be (320 MHz, MOS11, 99pc duty cycle) | WLAN | 8.09 | ±9.6 |
| 1025 | AAA | IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 1026 | AAA | IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 1020 | AAA | IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle) | WLAN | 8.39 | ±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.

Certificate No: EF-4060_May23

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ANNEX E DIPOLE CALIBRATION CERTIFICATE

Dipole 835 MHz

| | Soprice (SAS) | Ac | creditation No.: SCS 0108 |
|---|--|--|---|
| credited by the Swiss Accreditation e Swiss Accreditation Service is | | | |
| ultilateral Agreement for the reco | | | |
| ient CTTL (Auden) | | Certificate No: | CD835V3-1023_Aug22 |
| | | | |
| CALIBRATION CI | ERTIFICATE | | |
| | | | AND THE SUCKEY CREATER |
| Dbject | CD835V3 - SN: 1 | 023 | |
| Calibration procedure(s) | QA CAL-20.v7 | | |
| Jailoration procedure(s) | Calibration Proce | dure for Validation Sources in air | r |
| | | | |
| | | | |
| Calibration date: | August 25, 2022 | | |
| | | | its of meansurements (CI) |
| | | onal standards, which realize the physical uni obability are given on the following pages an | |
| The measurements and the uncerta | anties with connuence pr | obability are given on the following pages an | a are part of the continents. |
| All calibrations have been conducte | ed in the closed laborator | y facility: environment temperature $(22 \pm 3)^{\circ}$ | 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-22 (No. 217-03525/03524) | Apr-23 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-22 (No. 217-03524) | Apr-23 |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-22 (No. 217-03525) | Apr-23 |
| Reference 20 dB Attenuator | SN: BH9394 (20k) | 04-Apr-22 (No. 217-03527) | Apr-23 |
| Type-N mismatch combination | SN: 310982 / 06327 | 04-Apr-22 (No. 217-03528) | Apr-23 |
| Probe EF3DV3 | SN: 4013 | 28-Dec-21 (No. EF3-4013_Dec21) | Dec-22 |
| | SN: 781 | 22-Dec-21 (No. DAE4-781_Dec21) | Dec-22 |
| DAE4 | | | |
| DAE4 | ID # | Check Date (in house) | Scheduled Check |
| DAE4 Secondary Standards | ID # SN: GB42420191 | Check Date (in house) 09-Oct-09 (in house check Oct-20) | Scheduled Check In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B | ID # SN: GB42420191 SN: US38485102 | 09-Oct-09 (in house check Oct-20) | |
| DAE4 Secondary Standards | SN: GB42420191 | | In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A | SN: GB42420191 SN: US38485102 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A | SN: GB42420191 SN: US38485102 SN: US37295597 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 Signature |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 Network Analyzer Agilent E8358A | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 Name | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) Function | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 Signature |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 Network Analyzer Agilent E8358A | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 Name | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) Function | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 Network Analyzer Agilent E8358A Calibrated by: | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 Name Leif Klysner | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) Function Laboratory Technician | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 Signature |
| DAE4 Secondary Standards Power meter Aglient 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 Network Analyzer Aglient E8358A Calibrated by: Approved by: | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 Name Leif Klysner | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) Function Laboratory Technician | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 Signature Signature Signature Signature Issued: August 25, 2022 |





Calibration Laboratory of Schmid & Partner

Engineering AG Zeughausstrasse 43, 8004 Zurich, Switzerland





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

Accreditation No.: SCS 0108

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

References

- [1] ANSI-C63.19-2019 (ANSI-C63.19-2011)
 - American National Standard, Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids.

Methods Applied and Interpretation of Parameters:

- Coordinate System: y-axis is in the direction of the dipole arms. z-axis is from the basis of the antenna (mounted on the table) towards its feed point between the two dipole arms. x-axis is normal to the other axes. In coincidence with the standards [1], the measurement planes (probe sensor center) are selected to be at a distance of 15 mm above the top metal edge of the dipole arms.
- Measurement Conditions: Further details are available from the hardcopies at the end of the certificate. All
 figures stated in the certificate are valid at the frequency indicated. The forward power to the dipole connector
 is set with a calibrated power meter connected and monitored with an auxiliary power meter connected to a
 directional coupler. While the dipole under test is connected, the forward power is adjusted to the same level.
- Antenna Positioning: The dipole is mounted on a HAC Test Arch phantom using the matching dipole positioner with the arms horizontal and the feeding cable coming from the floor. The measurements are performed in a shielded room with absorbers around the setup to reduce the reflections. It is verified before the mounting of the dipole under the Test Arch phantom, that its arms are perfectly in a line. It is installed on the HAC dipole positioner with its arms parallel below the dielectric reference wire and able to move elastically in vertical direction without changing its relative position to the top center of the Test Arch phantom. The vertical distance to the probe is adjusted after dipole mounting with a DASY5 Surface Check job. Before the measurement, the distance between phantom surface and probe tip is verified. The proper measurement distance is selected by choosing the matching section of the HAC Test Arch phantom with the proper device reference point (upper surface of the dipole) and the matching grid reference point (tip of the probe) considering the probe sensor offset. The vertical distance to the probe is essential for the accuracy.
- Feed Point Impedance and Return Loss: These parameters are measured using a Vector Network Analyzer. The impedance is specified at the SMA connector of the dipole. The influence of reflections was eliminating by applying the averaging function while moving the dipole in the air, at least 70cm away from any obstacles.
- E-field distribution: E field is measured in the x-y-plane with an isotropic E-field probe with 100 mW forward power to the antenna feed point. In accordance with [1], the scan area is 20mm wide, its length exceeds the dipole arm length (180 or 90mm). The sensor center is 15 mm (in z) above the metal top of the dipole arms. Two 3D maxima are available near the end of the dipole arms. Assuming the dipole arms are perfectly in one line, the average of these two maxima (in subgrid 2 and subgrid 8) is determined to compensate for any non-parallelity to the measurement plane as well as the sensor displacement. The E-field value stated as calibration value represents the maximum of the interpolated 3D-E-field, in the plane above the dipole surface.

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

Certificate No: CD835V3-1023_Aug22

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Measurement Conditions

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

| DASY Version | DASY5 | V52.10.4 |
|------------------------------------|-----------------|----------|
| Phantom | HAC Test Arch | |
| Distance Dipole Top - Probe Center | 15 mm | |
| Scan resolution | dx, dy = 5 mm | |
| Frequency | 835 MHz ± 1 MHz | |
| Input power drift | < 0.05 dB | |

Maximum Field values at 835 MHz

| E-field 15 mm above dipole surface | condition | Interpolated maximum |
|------------------------------------|--------------------|--------------------------|
| Maximum measured above high end | 100 mW input power | 112.2 V/m = 41.00 dBV/m |
| Maximum measured above low end | 100 mW input power | 108.6 V/m = 40.72 dBV/m |
| Averaged maximum above arm | 100 mW input power | 110.4 V/m ± 12.8 % (k=2) |

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters

| Frequency | Return Loss | Impedance |
|-----------|-------------|------------------|
| 800 MHz | 17.4 dB | 41.1 Ω - 8.5 jΩ |
| 835 MHz | 25.5 dB | 53.8 Ω + 4.0 jΩ |
| 880 MHz | 16.5 dB | 63.3 Ω - 10.7 jΩ |
| 900 MHz | 16.3 dB | 51.0 Ω - 15.6 jΩ |
| 945 MHz | 26.8 dB | 46.5 Ω + 2.8 jΩ |

3.2 Antenna Design and Handling

The calibration dipole has a symmetric geometry with a built-in two stub matching network, which leads to the enhanced bandwidth.

The dipole is built of standard semirigid coaxial cable. The internal matching line is open ended. The antenna is therefore open for DC signals.

Do not apply force to dipole arms, as they are liable to bend. The soldered connections near the feedpoint may be damaged. After excessive mechanical stress or overheating, check the impedance characteristics to ensure that the internal matching network is not affected.

After long term use with 40W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

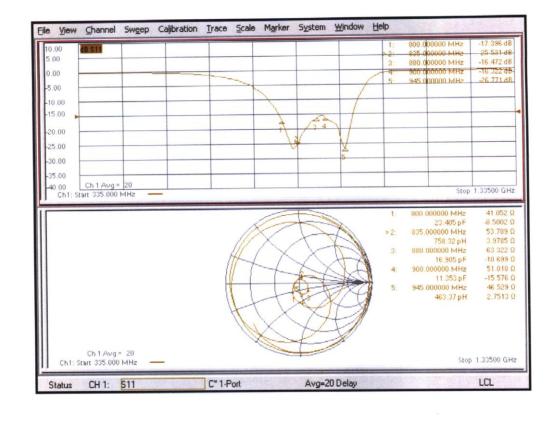
Certificate No: CD835V3-1023_Aug22

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Impedance Measurement Plot



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DASY5 E-field Result

Date: 25.08.2022

Test Laboratory: SPEAG Lab2

DUT: HAC-Dipole 835 MHz; Type: CD835V3; Serial: CD835V3 - SN: 1023

Communication System: UID 0 - CW ; Frequency: 835 MHz Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

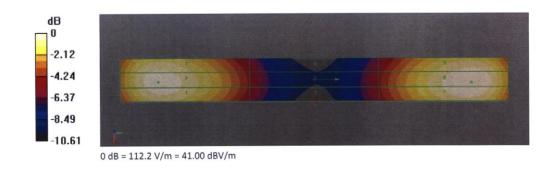
DASY52 Configuration:

- Probe: EF3DV3 SN4013; ConvF(1, 1, 1) @ 835 MHz; Calibrated: 28.12.2021
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn781; Calibrated: 22.12.2021
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1070
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole E-Field measurement @ 835MHz/E-Scan - 835MHz d=15mm/Hearing Aid Compatibility Test (41x361x1):

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm Device Reference Point: 0, 0, -6.3 mm Reference Value = 132.6 V/m; Power Drift = 0.02 dB Applied MIF = 0.00 dB RF audio interference level = 41.00 dBV/m Emission category: M3

| | Grid 2 M3 40.72 dBV/m | Grid 3 M3 40.44 dBV/m |
|--------------------------|--------------------------|---------------------------------|
| | Grid 5 M4 35.88 dBV/m | Grid 6 M4 35.61 dBV/m |
| Grid 7 M3 40.95 dBV/m | Grid 8 M3 41 dBV/m | Grid 9 M3 40.62 dBV/m |



Certificate No: CD835V3-1023_Aug22

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Dipole 1880 MHz

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



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

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Certificate No: CD1880V3-1018_Aug22

Accreditation No.: SCS 0108

| | RTIFICATE | | |
|---|--|---|---|
| Dbject | CD1880V3 - SN: | 1018 | |
| Calibration procedure(s) | QA CAL-20.v7 Calibration Proce | dure for Validation Sources in air | |
| Calibration date: | August 25, 2022 | | |
| The measurements and the uncertainal calibrations have been conducted | inties with confidence pr | anal standards, which realize the physical unit obability are given on the following pages and y facility: environment temperature $(22 \pm 3)^{\circ}$ C | d are part of the certificate. |
| Calibration Equipment used (M&TE | 1 | Col Data (Contiliante Mal) | Scheduled Calibration |
| Primary Standards | ID # | Cal Date (Certificate No.) | Apr-23 |
| Power meter NRP | SN: 104778 | 04-Apr-22 (No. 217-03525/03524) | Apr-23 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-22 (No. 217-03524) | Section and Section |
| Power sensor NRP-Z91 | SN: 103245 | 04-Apr-22 (No. 217-03525) | Apr-23 |
| Reference 20 dB Attenuator | SN: BH9394 (20k) | 04-Apr-22 (No. 217-03527) | Apr-23 |
| Type-N mismatch combination | SN: 310982 / 06327 | 04-Apr-22 (No. 217-03528) | Apr-23 |
| Probe EF3DV3 | SN: 4013 | 28-Dec-21 (No. EF3-4013_Dec21) | Dec-22 |
| | SN: 781 | 22-Dec-21 (No. DAE4-781_Dec21) | Dec-22 |
| DAE4 | | | |
| DAE4 | ID # | Check Date (in house) | Scheduled Check |
| DAE4 Secondary Standards | ID # SN: GB42420191 | 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B | 1 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A | SN: GB42420191 | 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A | SN: GB42420191 SN: US38485102 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 | SN: GB42420191 SN: US38485102 SN: US37295597 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 Name | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) Function | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 Signature |
| | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 Signature |
| DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 Network Analyzer Agilent E8358A | SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 Name | 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) Function | In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-22 |

Certificate No: CD1880V3-1018_Aug22

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Calibration Laboratory of

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



S S S

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

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS) The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

References

- [1] ANSI-C63.19-2019 (ANSI-C63.19-2011)
 - American National Standard, Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids.

Methods Applied and Interpretation of Parameters:

- Coordinate System: y-axis is in the direction of the dipole arms. z-axis is from the basis of the antenna (mounted on the table) towards its feed point between the two dipole arms. x-axis is normal to the other axes. In coincidence with the standards [1], the measurement planes (probe sensor center) are selected to be at a distance of 15 mm above the top metal edge of the dipole arms.
- Measurement Conditions: Further details are available from the hardcopies at the end of the certificate. All
 figures stated in the certificate are valid at the frequency indicated. The forward power to the dipole connector
 is set with a calibrated power meter connected and monitored with an auxiliary power meter connected to a
 directional coupler. While the dipole under test is connected, the forward power is adjusted to the same level.
- Antenna Positioning: The dipole is mounted on a HAC Test Arch phantom using the matching dipole positioner with the arms horizontal and the feeding cable coming from the floor. The measurements are performed in a shielded room with absorbers around the setup to reduce the reflections. It is verified before the mounting of the dipole under the Test Arch phantom, that its arms are perfectly in a line. It is installed on the HAC dipole positioner with its arms parallel below the dielectric reference wire and able to move elastically in vertical direction without changing its relative position to the top center of the Test Arch phantom. The vertical distance to the probe is adjusted after dipole mounting with a DASY5 Surface Check job. Before the measurement, the distance between phantom surface and probe tip is verified. The proper measurement distance is selected by choosing the matching section of the HAC Test Arch phantom with the proper device reference point (upper surface of the dipole) and the matching grid reference point (tip of the probe) considering the probe sensor offset. The vertical distance to the probe is essential for the accuracy.
- Feed Point Impedance and Return Loss: These parameters are measured using a Vector Network Analyzer. The impedance is specified at the SMA connector of the dipole. The influence of reflections was eliminating by applying the averaging function while moving the dipole in the air, at least 70cm away from any obstacles.
- E-field distribution: E field is measured in the x-y-plane with an isotropic E-field probe with 100 mW forward
 power to the antenna feed point. In accordance with [1], the scan area is 20mm wide, its length exceeds the
 dipole arm length (180 or 90mm). The sensor center is 15 mm (in z) above the metal top of the dipole arms.
 Two 3D maxima are available near the end of the dipole arms. Assuming the dipole arms are perfectly in one
 line, the average of these two maxima (in subgrid 2 and subgrid 8) is determined to compensate for any nonparallelity to the measurement plane as well as the sensor displacement. The E-field value stated as
 calibration value represents the maximum of the interpolated 3D-E-field, in the plane above the dipole surface.

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

Certificate No: CD1880V3-1018_Aug22

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Measurement Conditions

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

| DASY Version | DASY5 | V52.10.4 |
|------------------------------------|------------------|----------|
| Phantom | HAC Test Arch | |
| Distance Dipole Top - Probe Center | 15 mm | |
| Scan resolution | dx, dy = 5 mm | |
| Frequency | 1880 MHz ± 1 MHz | |
| Input power drift | < 0.05 dB | |

Maximum Field values at 1880 MHz

| E-field 15 mm above dipole surface | condition | Interpolated maximum |
|------------------------------------|--------------------|-------------------------|
| Maximum measured above high end | 100 mW input power | 86.9 V/m = 38.78 dBV/m |
| Maximum measured above low end | 100 mW input power | 86.5 V/m = 38.74 dBV/m |
| Averaged maximum above arm | 100 mW input power | 86.7 V/m ± 12.8 % (k=2) |

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters

| Frequency | Return Loss | Impedance |
|-----------|-------------|------------------|
| 1730 MHz | 27.8 dB | 54.2 Ω + 0.7 jΩ |
| 1880 MHz | 22.1 dB | 54.7 Ω + 6.7 jΩ |
| 1900 MHz | 23.0 dB | 55.8 Ω + 4.8 jΩ |
| 1950 MHz | 32.4 dB | 52.4 Ω + 0.1 jΩ |
| 2000 MHz | 19.5 dB | 47.5 Ω + 10.0 jΩ |

3.2 Antenna Design and Handling

The calibration dipole has a symmetric geometry with a built-in two stub matching network, which leads to the enhanced bandwidth.

The dipole is built of standard semirigid coaxial cable. The internal matching line is open ended. The antenna is therefore open for DC signals.

Do not apply force to dipole arms, as they are liable to bend. The soldered connections near the feedpoint may be damaged. After excessive mechanical stress or overheating, check the impedance characteristics to ensure that the internal matching network is not affected.

After long term use with 40W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

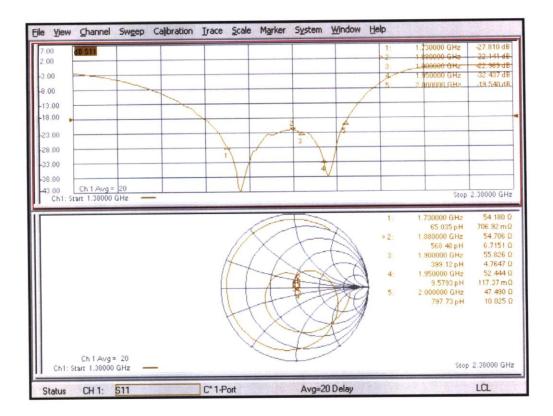
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Impedance Measurement Plot



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DASY5 E-field Result

Date: 25.08.2022

Test Laboratory: SPEAG Lab2

DUT: HAC Dipole 1880 MHz; Type: CD1880V3; Serial: CD1880V3 - SN: 1018

Communication System: UID 0 - CW ; Frequency: 1880 MHz Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³ Phantom section: RF Section Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

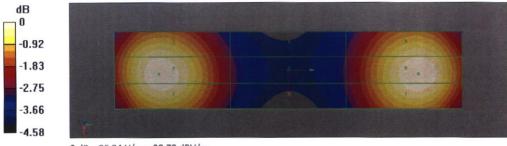
- Probe: EF3DV3 SN4013; ConvF(1, 1, 1) @ 1880 MHz; Calibrated: 28.12.2021
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn781; Calibrated: 22.12.2021
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1070
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole E-Field measurement @ 1880MHz/E-Scan - 1880MHz d=15mm/Hearing Aid Compatibility Test (41x181x1): Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm Reference Value = 157.1 V/m; Power Drift = 0.01 dB Applied MIF = 0.00 dB RF audio interference level = 38.78 dBV/m Emission category: M2

| MIF scaled E- | field | |
|---------------|-----------|-----------|
| Grid 1 M2 | Grid 2 M2 | Grid 3 M2 |
| | | |

| 38.66 dBV/m | 38.74 dBV/m | 38.45 dBV/m |
|--------------------------|-------------|--------------------------|
| Grid 4 M2 36.05 dBV/m | | Grid 6 M2 35.87 dBV/m |
| Grid 7 M2 | Grid 8 M2 | Grid 9 M2 |
| 38.7 dBV/m | 38.78 dBV/m | 38.49 dBV/m |



0 dB = 86.94 V/m = 38.78 dBV/m

Certificate No: CD1880V3-1018_Aug22

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Dipole 2450 MHz

| Engineering AG eughausstrasse 43, 8004 Zurich, S | Df witzerland | S C S | Schweizerischer Kalibrierdienst Service suisse d'étalonnage Servizio svizzero di taratura Swiss Calibration Service |
|--|--|---|---|
| ccredited by the Swiss Accreditation ne Swiss Accreditation Service is ultilateral Agreement for the recog | one of the signatories | to the EA | creditation No.: SCS 0108 |
| lient CTTL (Auden) | | | CD2450V3-1021_Aug22 |
| CALIBRATION CE | RTIFICATE | | |
| | CD2450V3 - SN: | | |
| | QA CAL-20.v7 Calibration Proce | dure for Validation Sources in air | r |
| Calibration date: | August 25, 2022 | | |
| All calibrations have been conducte | | v tacility: environment temperature (22 ± 3)* | c and humidity $< 70\%$. |
| Calibration Equipment used (M&TE | | y facility: environment temperature (22 ± 3)°C Cal Date (Certificate No.) | Scheduled Calibration |
| Calibration Equipment used (M&TE Primary Standards | critical for calibration) | | |
| Calibration Equipment used (M&TE | critical for calibration) | Cal Date (Certificate No.) | Scheduled Calibration |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP | critical for calibration) ID # SN: 104778 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) | Scheduled Calibration Apr-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 | critical for calibration) ID # SN: 104778 SN: 103244 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) | Scheduled Calibration Apr-23 Apr-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) | Scheduled Calibration Apr-23 Apr-23 Apr-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 4013 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: 8H9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) Check Date (in house) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # ID # SN: GB42420191 SN: US38485102 SN: US37295597 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) Check Date (in house) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # SN: GB42420191 SN: US38485102 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) Check Date (in house) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # ID # SN: GB42420191 SN: US38485102 SN: US37295597 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) Check Date (in house) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) Check Date (in house) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 In house check: Oct-23 |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: 8H9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) Check Date (in house) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-22 Signature |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 Network Analyzer Agilent E8358A | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: 8H9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # SN: GB42420191 SN: US37295597 SN: US37295597 SN: US37295597 SN: US41080477 Name | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. EF3-4013_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) Check Date (in house) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-22 Signature |
| Calibration Equipment used (M&TE Primary Standards Power meter NRP Power sensor NRP-Z91 Power sensor NRP-Z91 Reference 20 dB Attenuator Type-N mismatch combination Probe EF3DV3 DAE4 Secondary Standards Power meter Agilent 4419B Power sensor HP E4412A Power sensor HP 8482A RF generator R&S SMT-06 Network Analyzer Agilent E8358A Calibrated by: | critical for calibration) ID # SN: 104778 SN: 103244 SN: 103245 SN: BH9394 (20k) SN: 310982 / 06327 SN: 4013 SN: 781 ID # SN: GB42420191 SN: US38485102 SN: US37295597 SN: 837633/005 SN: US41080477 Name Leif Klysner | Cal Date (Certificate No.) 04-Apr-22 (No. 217-03525/03524) 04-Apr-22 (No. 217-03524) 04-Apr-22 (No. 217-03525) 04-Apr-22 (No. 217-03527) 04-Apr-22 (No. 217-03528) 28-Dec-21 (No. 217-03528) 28-Dec-21 (No. DAE4-781_Dec21) 22-Dec-21 (No. DAE4-781_Dec21) 09-Oct-09 (in house check Oct-20) 05-Jan-10 (in house check Oct-20) 09-Oct-09 (in house check Oct-20) 10-Jan-19 (in house check Oct-20) 31-Mar-14 (in house check Oct-20) Function Laboratory Technician | Scheduled Calibration Apr-23 Apr-23 Apr-23 Apr-23 Dec-22 Dec-22 Dec-22 Scheduled Check In house check: Oct-23 In house check: Oct-23 |

Certificate No: CD2450V3-1021_Aug22

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