



EX3DV4 - SN:7464 January 28, 2025

| UID | Rev | Communication System Name | Group | PAR (dB) | |
|-------|-------|--|---------------|---------------|------|
| 10911 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 10912 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10913 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 0914 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.85 | ±9.6 |
| 0915 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9,6 |
| 0916 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10917 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10918 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.86 | ±9.6 |
| 10919 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.86 | ±9.6 |
| 10920 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10921 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10922 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.82 | ±9.6 |
| 10923 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10924 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10925 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.95 | ±9.6 |
| 10926 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10927 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10928 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10929 | AAD | 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 | 5.51 | ±9.6 |
| 10932 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10933 | 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 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10937 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.77 | ±9.6 |
| 10938 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 15MHz, QPSK, 15kHz) | 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 |
| 10941 | AAC | 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 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.95 | ±9.6 |
| 10943 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.81 | ±9.6 |
| 10945 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.85 | ±9.6 |
| 10945 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 15MHz, QPSK, 15kHz) | 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 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10949 | 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, 5 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, 13 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, 5 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.31 | ±9.6 |
| 10957 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.61 | ±9.6 |
| 10959 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.33 | ±9.6 |
| 10960 | AAE | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.32 | ±9.6 |
| 10961 | AAC | 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 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 15KHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 10964 | AAE | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.29 | ±9.6 |
| 10965 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.37 | ±9.6 |
| 10966 | 10000 | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 10967 | | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 KHz) | 5G NR FR1 TDD | 9.42 | ±9.6 |
| 10967 | AAD | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 KHz) | 5G NR FR1 TDD | 9.42 | - |
| 10972 | - | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | | ±9.6 |
| 10972 | - | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 11.59 9.06 | ±9.6 |
| 10973 | - | 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz) | 5G NR FR1 TDD | 10.28 | ±9.6 |
| 10974 | AAA | ULLA BDR | ULLA | 1.16 | ±9.6 |
| 10978 | _ | ULLA HDR4 | ULLA | 8.58 | ±9.6 |
| 10979 | AAA | ULLA HDR8 | ULLA | 10.32 | ±9.6 |
| 10300 | TVVA | The second secon | ULLA | 3.19 | ±9.6 |
| 10981 | AAA | ULLA HDRp4 | | | |

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| UID | Rev | Communication System Name | Group | PAR (dB) | $Unc^{E} k = 2$ |
|-------|-----|--|---------------|----------|-----------------|
| 10983 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.31 | ±9.6 |
| 10984 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.42 | ±9.6 |
| 10985 | AAC | 5G NR DL (CP-OFDM, TM 3,1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.54 | ±9.6 |
| 10986 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.50 | ±9.6 |
| 10987 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.53 | ±9.6 |
| 10988 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.38 | ±9.6 |
| 10989 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.33 | ±9.6 |
| 10990 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.52 | ±9.6 |
| 11003 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 10.24 | ±9.6 |
| 11004 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 10.73 | ±9.6 |
| 11005 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.70 | ±9.6 |
| 11006 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.55 | ±9.6 |
| 11007 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.46 | ±9.6 |
| 11008 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.51 | ±9.6 |
| 11009 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.76 | ±9.6 |
| 11010 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.95 | ±9.6 |
| 11011 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.96 | ±9.6 |
| 11012 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.68 | ±9.6 |
| 11013 | AAB | IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 11014 | AAB | IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 11015 | AAB | IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11016 | AAB | IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11017 | AAB | IEEE 802,11be (320 MHz, MCS5, 99pc duty cycle) | WLAN | 8.41 | ±9.6 |
| 11018 | AAB | IEEE 802,11be (320 MHz, MCS6, 99pc duty cycle) | WLAN | 8.40 | ±9.6 |
| 11019 | AAB | IEEE 802,11be (320 MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | 19.6 |
| 11020 | AAB | IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle) | WLAN | 8.27 | ±9.6 |
| 11021 | AAB | IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle) | WLAN | 8.46 | ±9.6 |
| 11022 | AAB | IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 11023 | AAB | IEEE 802.11be (320 MHz, MCS11, 99pc duty cycle) | WLAN | 8.09 | ±9.6 |
| 11024 | AAB | IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 11025 | AAB | IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 11026 | AAB | IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle) | WLAN | 8.39 | ±9.6 |

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





Probe 9640 Calibration Certificate

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

Client

CTTL Beijing

Certificate No.

EUmm-9640_Jan25

CALIBRATION CERTIFICATE

Object

EUmmWV4 - SN:9640

Calibration procedure(s)

QA CAL-02.v9, QA CAL-25.v8, QA CAL-42.v3

Calibration procedure for E-field probes optimized for close near field

evaluations in air

Calibration date

January 10, 2025

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Calibration Date (Certificate No.) | Sched, Cal. |
|-------------------------|------------|------------------------------------|-------------|
| Power sensor NRP33T | SN: 100967 | 28-Mar-24 (No. 217-04038) | Mar-25 |
| Power sensor NRP110T | SN: 101244 | 04-Apr-24 (No. 0001A300740056) | Apr-25 |
| Spectrum analyzer FSV40 | SN: 101832 | 25-Jan-24 (No. 4030-315007551) | Jan-25 |
| Harmonic mixer FS-Z75 | SN: 101566 | 11-Apr-24 (No. 0001A300740054) | Apr-25 |
| Harmonic mixer FS-Z110 | SN: 101633 | 05-Apr-24 (No. 0001A300740055) | Apr-25 |
| Ref. Probe EUmmWV3 | SN: 9374 | 28-Aug-24 (No. EUmm-9374 Aug24) | Aug-25 |
| DAE4ip | SN: 1662 | 05-Nov-24 (No. DAE4ip-1662 Nov24) | Nov-25 |

| Secondary Standards | ID | Check Date (in house) | Sched. Check |
|----------------------|------------|-----------------------------------|------------------------|
| Generator APSIN26G | SN: 2023 | 30-Nov-21 (in house check Jun-24) | In house check: Jun-25 |
| Power sensor NRP40T | SN: 101439 | 08-Nov-21 (in house check Jun-24) | In house check: Jun-25 |
| Power sensor NRP110T | SN: 101226 | 15-Nov-21 (in house check Jun-24) | In house check: Jun-25 |

Name Function Calibrated by Leif Klysner Laboratory Technician Approved by Sven Kühn Technical Manager Issued: January 19, 2025 This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

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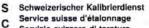
Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

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Servizio svizzero di taratura
S Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA

Multilateral Agreement for the recognition of calibration certificates

Glossary

NORMx,y sensitivity in free space DCP diode compression point

CF crest factor (1/duty_cycle) of the RF signal A, B, C, D modulation dependent linearization parameters

Polarization φ φ rotation around probe axis

Polarization θ or rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is

normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system Sensor Angles sensor deviation from the probe axis, used to calculate the field orientation and polarization

k is the wave propagation direction

Calibration is Performed According to the Following Standards:

 a) IEEE Std 1309-2005, "IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", December 2005

Methods Applied and Interpretation of Parameters:

- NORMx,y: Assessed for E-field polarization ∂ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). For frequencies > 6 GHz, the far field in front of waveguide horn antennas is measured for a set of frequencies in various waveguide bands up to 110 GHz.
- DCPx,y: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- Note: As the field is measured with a diode detector sensor, it is warrantied that the probe response is linear (E^2) below the documented lowest calibrated value.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- The frequency sensor model parameters are determined prior to calibration based on a frequency sweep (sensor model involving resistors R, R_p, inductance L and capacitors C, C_p).
- Ax.y; Bx.y; Cx.y; Dx.y; VRx.y: 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.
- 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).
- Equivalent Sensor Angle: The two probe sensors are mounted in the same plane at different angles. The angles are
 assessed using the information gained by determining the NORMx (no uncertainty required).
- Spherical isotropy (3D deviation from isotropy): in a locally homogeneous field realized using an open waveguide / horn setup.

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Parameters of Probe: EUmmWV4 - SN:9640

Basic Calibration Parameters

| | Sensor X | Sensor Y | Unc (k = 2) |
|-------------------------|----------|----------|-------------|
| Norm $(\mu V/(V/m)^2)$ | 0.01973 | 0.02152 | ±10.1% |
| DCP (mV) B | 105.0 | 105.0 | ±4.7% |
| Equivalent Sensor Angle | -51.6 | 35.4 | |

Calibration Results for Frequency Response (750 MHz - 110 GHz)

| Frequency GHz | Target E-Field V/m | Deviation Sensor X dB | Deviation Sensor Y dB | Unc (k = 2) dB |
|------------------|--------------------------|--------------------------|--------------------------|-------------------|
| 0.75 | 77.2 | -0.28 | -0.32 | ±0.43 |
| 1.8 | 140.4 | -0.04 | -0.04 | ±0.43 |
| 2.0 | 133.0 | 0.14 | 0.17 | ±0.43 |
| 2.2 | 124.8 | -0.07 | -0.06 | ±0.43 |
| 2.5 | 123.0 | 0.09 | 0.13 | ±0.43 |
| 3.5 | 256.2 | -0.09 | -0.08 | ±0.43 |
| 3.7 | 249.8 | 0.06 | 0.06 | ±0.43 |
| 6.6 | 63.3 | -0.15 | -0.31 | ±0.98 |
| 8.0 | 58.5 | -0.06 | -0.16 | ±0.98 |
| 10.0 | 57.9 | -0.00 | 0.03 | ±0.98 |
| 15.0 | 45.6 | 0.07 | 0.15 | ±0.98 |
| 26.6 | 115.1 | 0.18 | 0.18 | ±0.98 |
| 30.0 | 125.1 | 0.01 | -0.00 | ±0.98 |
| 35.0 | 123.5 | -0.14 | -0.15 | ±0.98 |
| 40.0 | 101.8 | -0.26 | -0.25 | ±0.98 |
| 50.0 | 60.8 | 0.08 | 0.05 | ±0.98 |
| 55.0 | 73.7 | -0.02 | -0.04 | ±0.98 |
| 60.0 | 76.4 | -0.01 | 0.01 | ±0.98 |
| 65.0 | 72.0 | 0.11 | 0.14 | ±0.98 |
| 70.0 | 68.5 | 0.14 | 0.10 | ±0.98 |
| 75.0 | 67.9 | -0.00 | -0.06 | ±0.98 |
| 75.0 | 89.9 | -0.02 | -0.05 | ±0.98 |
| 80.0 | 88.2 | -0.13 | -0.11 | ±0.98 |
| 85.0 | 54.3 | -0.03 | -0.05 | ±0.98 |
| 90.0 | 80.6 | 0.01 | 0.02 | ±0.98 |
| 92.0 | 80.8 | 0.01 | 0.02 | ±0.98 |
| 95.0 | 73.2 | -0.01 | -0.03 | ±0.98 |
| 97.0 | 65.9 | -0.01 | -0.05 | ±0.98 |
| 100.0 | 63,4 | 0.05 | 0.05 | ±0.98 |
| 105.0 | 63.2 | -0.14 | -0.10 | ±0.98 |
| 110.0 | 72.1 | 0.09 | 0.06 | ±0.98 |

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

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^B Linearization parameter uncertainty for maximum specified field strength.



Parameters of Probe: EUmmWV4 - SN:9640

Calibration Results for Modulation Response

| UID | Communication System Name | | A dB | B dB√μV | С | D dB | VR mV | Max dev. | Max Unc ^E k = 2 |
|----------------|--|---|---------|------------|-------|---------|----------|-------------|----------------------------------|
| 0 | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 137.6 | ±3.8% | ±4.7% |
| | | Y | 0.00 | 0.00 | 1.00 | | 71.3 | 0.000 | |
| 10352 | Pulse Waveform (200Hz, 10%) | X | 3.54 | 60.33 | 15.23 | 10.00 | 6.0 | ±1.5% | ±9.6% |
| | | Y | 3.16 | 60.00 | 15.93 | | 6.0 | 1 | |
| 10353 | Pulse Waveform (200Hz, 20%) | X | 2.87 | 62.01 | 14.69 | 6.99 | 12.0 | ±1.2% | ±9.6% |
| | | Y | 2.19 | 60.00 | 14.88 | | 12.0 | | |
| 10354 Pulse Wa | Pulse Waveform (200Hz, 40%) | X | 1.84 | 62.70 | 13.70 | 3.98 | 23.0 | ±1.9% | ±9.6% |
| | | Y | 1.34 | 60.00 | 13.64 | | 23.0 | | |
| 10355 Pulse W | Pulse Waveform (200Hz, 60%) | X | 0.87 | 60.00 | 11.83 | 2.22 | 27.0 | ±1.4% | ±9.6% |
| | | Y | 0.87 | 60.00 | 12.68 | | 27.0 | | |
| 10387 | QPSK Waveform, 1 MHz | X | 1.33 | 60.00 | 12.50 | 1.00 | 22.0 | ±1.2% | ±9.6% |
| | | Y | 1.41 | 60.00 | 12.32 | | 22.0 | | |
| 10388 | QPSK Waveform, 10 MHz | X | 1.29 | 60.00 | 12.04 | 0.00 | 22.0 | ±1.1% | ±9.6% |
| | | Y | 1.46 | 60.00 | 11.82 | 100 | 22.0 | 2.1494.2 | -/ |
| 10396 | 64-QAM Waveform, 100 kHz | X | 3.61 | 65.80 | 16.11 | 3.01 | 17.0 | ±0.8% | ±9.6% |
| | | Y | 12.73 | 80.20 | 20.72 | | 17.0 | | |
| 10399 | 64-QAM Waveform, 40 MHz | X | 2.11 | 60.00 | 12.49 | 0.00 | 19.0 | ±0.9% | ±9.6% |
| | | Y | 2.21 | 60.00 | 12.40 | | 19.0 | | |
| 10414 | WLAN CCDF, 64-QAM, 40 MHz | X | 3.31 | 60.00 | 12.90 | 0.00 | 12.0 | ±1.2% | ±9.6% |
| | A STATE OF THE STA | Y | 3.35 | 60.00 | 12.85 | | 12.0 | | |

Note: For details on UID parameters see Appendix

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



Parameters of Probe: EUmmWV4 - SN:9640

Calibration Results for Linearity Response

| Frequency GHz | Target E-Field V/m | Deviation Sensor X dB | Deviation Sensor Y dB | Unc (k = 2) dB |
|------------------|-----------------------|--------------------------|--------------------------|-------------------|
| 0.9 | 50.0 | -0.00 | 0.08 | ±0.2 |
| 0.9 | 100.0 | -0.03 | 0.07 | ±0.2 |
| 0.9 | 500.0 | 0.00 | -0.03 | ±0.2 |
| 0.9 | 1000.0 | 0.01 | -0.01 | ±0.2 |
| 0.9 | 1500.0 | 0.01 | -0.01 | ±0.2 |
| 0.9 | 2100.0 | -0.03 | -0.02 | ±0.2 |

Sensor Frequency Model Parameters (750 MHz - 55 GHz)

| | Sensor X | Sensor Y |
|--------------------|----------|----------|
| R (Ω) | 84.64 | 97.21 |
| R _p (Ω) | 116.86 | 130.10 |
| L (nH) | 0.07997 | 0.08165 |
| C (pF) | 0.1880 | 0.2262 |
| Cp (pF) | 0.0770 | 0.0717 |

Sensor Frequency Model Parameters (55 GHz - 110 GHz)

| | Sensor X | Sensor Y |
|---------------|----------|----------|
| R (Ω) | 37.55 | 29.36 |
| $R_p(\Omega)$ | 221.96 | 161.67 |
| L (nH) | 0.12329 | 0.08954 |
| C (pF) | 0.0330 | 0.0480 |
| Cp (pF) | 0.0423 | 0.0592 |

Sensor Model Parameters

| | C1 fF | C2 fF | ν-1 | T1 ms V ⁻² | T2 ms V ⁻¹ | T3 ms | T4 V ⁻² | T5 V ⁻¹ | T6 |
|---|----------|----------|-------|--------------------------|--------------------------|----------|-----------------------|-----------------------|------|
| X | 73.6 | 535.93 | 33.95 | 0.00 | 10.00 | 5.00 | 0.00 | 2.00 | 1.01 |
| У | 66.2 | 472.29 | 32.78 | 0.00 | 10.00 | 5.04 | 2.00 | 2.00 | 1.01 |

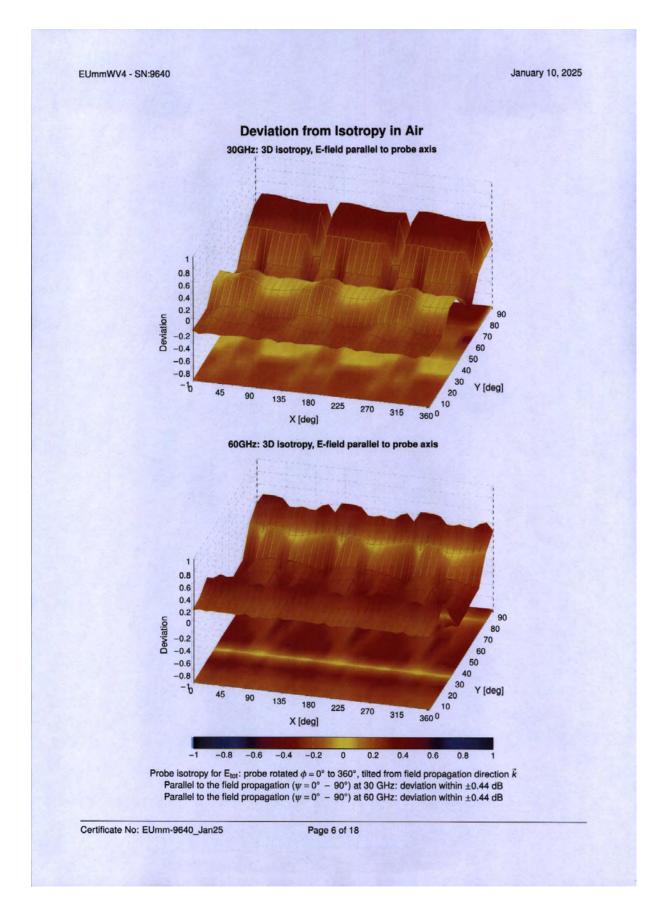
Other Probe Parameters

| Sensor Arrangement | Rectangular |
|---|-------------|
| Connector Angle | 7.9° |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 320 mm |
| Probe Body Diameter | 8 mm |
| Tip Length | 23 mm |
| Tip Diameter | 8.0 mm |
| Probe Tip to Sensor X Calibration Point | 1.5 mm |
| Probe Tip to Sensor Y Calibration Point | 1.5 mm |

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Appendix: Modulation Calibration Parameters

| UID | Rev | Communication System Name | Group | PAR (dB) | UncE k = 2 |
|-------|-----|---|-----------|----------|------------|
| 0 | | CW | CW | 0.00 | ±4.7 |
| 0010 | CAB | SAR Validation (Square, 100 ms, 10 ms) | Test | 10.00 | ±9.6 |
| 0011 | CAC | UMTS-FDD (WCDMA) | WCDMA | 2.91 | ±9.6 |
| 0012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | WLAN | 1.87 | ±9.6 |
| 0013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | WLAN | 9.46 | ±9.6 |
| 0021 | DAC | GSM-FDD (TDMA, GMSK) | GSM | 9.39 | ±9.6 |
| 0023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0) | GSM | 9.57 | ±9.6 |
| 0024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1) | GSM | 6.56 | ±9.6 |
| 0025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0) | GSM | 12.62 | ±9.6 |
| 0026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1) | GSM | 9.55 | ±9.6 |
| 0027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | GSM | 4.80 | ±9.6 |
| 0027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | GSM | 3.55 | ±9.6 |
| 0029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | GSM | 7.78 | ±9.6 |
| 0029 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1) | Bluetooth | 5.30 | ±9.6 |
| _ | _ | | Bluetooth | 1.87 | ±9.6 |
| 0031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3) | Bluetooth | 1.16 | ±9.6 |
| 0032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5) | | 7.74 | _ |
| 0033 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | Bluetooth | | ±9.6 |
| 0034 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | Bluetooth | 4.53 | ±9.6 |
| 0035 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5) | Bluetooth | 3.83 | ±9.6 |
| 0036 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | Bluetooth | 8.01 | ±9.6 |
| 0037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | Bluetooth | 4.77 | ±9.6 |
| 0038 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5) | Bluetooth | 4.10 | ±9.6 |
| 10039 | CAB | CDMA2000 (1xRTT, RC1) | CDMA2000 | 4.57 | ±9.6 |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate) | AMPS | 7.78 | ±9.6 |
| 10044 | CAA | IS-91/EIA/TIA-553 FDD (FDMA, FM) | AMPS | 0.00 | ±9.6 |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24) | DECT | 13.80 | ±9.6 |
| 10049 | CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12) | DECT | 10.79 | ±9.6 |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mcps) | TD-SCDMA | 11.01 | ±9.6 |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | GSM | 6.52 | ±9.6 |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | WLAN | 2.12 | ±9.6 |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | WLAN | 2.83 | ±9.6 |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | WLAN | 3.60 | ±9.6 |
| 10062 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | WLAN | 8.68 | ±9.6 |
| 10063 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | WLAN | 8.63 | ±9.6 |
| 10064 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | WLAN | 9.09 | ±9.6 |
| | | | WLAN | 9.00 | |
| 10065 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps) | WLAN | | ±9.6 |
| 10066 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps) | | 9.38 | ±9.6 |
| 10067 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps) | WLAN | 10.12 | ±9.6 |
| 10068 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | WLAN | 10.24 | ±9.6 |
| 10069 | CAE | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps) | WLAN | 10.56 | ±9.6 |
| 10071 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps) | WLAN | 9.83 | ±9.6 |
| 10072 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps) | WLAN | 9.62 | ±9.6 |
| 10073 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps) | WLAN | 9.94 | ±9.6 |
| 10074 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps) | WLAN | 10.30 | ±9.6 |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps) | WLAN | 10.77 | ±9.6 |
| 10076 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps) | WLAN | 10.94 | ±9.6 |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps) | WLAN | 11.00 | ±9.6 |
| 10081 | CAB | CDMA2000 (1xRTT, RC3) | CDMA2000 | 3.97 | ±9.6 |
| 10082 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate) | AMPS | 4.77 | ±9.6 |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4) | GSM | 6.56 | ±9.6 |
| 10097 | CAC | UMTS-FDD (HSDPA) | WCDMA | 3.98 | ±9.6 |
| 10098 | CAC | UMTS-FDD (HSUPA, Subtest 2) | WCDMA | 3.98 | ±9.6 |
| 10099 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | GSM | 9.55 | ±9.6 |
| 10100 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | LTE-FDD | 5.67 | ±9.6 |
| 10101 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | LTE-FDD | 6.42 | ±9.6 |
| 10102 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | LTE-FDD | 6.60 | ±9.6 |
| 10102 | CAH | | LTE-TDD | 9.29 | |
| 10104 | CAH | | LTE-TOD | | ±9.6 |
| | | | | 9.97 | ±9.6 |
| 10105 | CAH | | LTE-TDD | 10.01 | ±9.6 |
| 10108 | CAH | | LTE-FDD | 5.80 | ±9.6 |
| 10109 | CAH | | LTE-FDD | 6.43 | ±9.6 |
| 10110 | CAH | | LTE-FDD | 5.75 | ±9.6 |
| 10111 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5MHz, 16-QAM) | LTE-FDD | 6.44 | ±9.6 |

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| 0112 | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = |
|----------------------------------|-----|--|---------|--------------|----------------------|
| | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | LTE-FDD | 6.59 | ±9.6 |
| 0113 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | LTE-FDD | 6.62 | ±9.6 |
| 0114 | CAE | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 0115 | CAE | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM) | WLAN | 8.46 | ±9.6 |
| 0116 | CAE | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN | 8.15 | ±9.6 |
| 0117 | CAE | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK) | WLAN | 8.07 | ±9.6 |
| 0118 | CAE | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM) | WLAN | 8.59 | ±9.6 |
| 0119 | CAE | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM) | WLAN | 8.13 | ±9.6 |
| 0140 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10141 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | LTE-FDD | 6.53 | ±9.6 |
| 10142 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10143 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | LTE-FDD | 6.35 | ±9.6 |
| 10144 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | LTE-FDD | 6.65 | ±9.6 |
| 10145 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | LTE-FDD | 5.76 | ±9.6 |
| 10146 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-FDD | 6.41 | ±9.6 |
| 10147 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.72 | ±9.6 |
| 10149 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | LTE-FDD | 6.42 | ±9.6 |
| 10150 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | LTE-FDD | 6.60 | ±9.6 |
| 10151 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | LTE-TDD | 9.28 | ±9.6 |
| 10152 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | LTE-TDD | 9.92 | ±9.6 |
| 10153 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | LTE-TDD | 10.05 | ±9.6 |
| 0154 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | LTE-FDD | 5.75 | ±9.6 |
| 10155 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10156 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | LTE-FDD | 5.79 | ±9.6 |
| 10157 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10158 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | LTE-FDD | 6.62 | ±9.6 |
| 10159 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | LTE-FDD | 6.56 | ±9.6 |
| 0160 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | LTE-FDD | 5.82 | ±9.6 |
| 10161 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 0162 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | LTE-FDD | 6.58 | ±9.6 |
| 10166 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | LTE-FDD | 5.46 | ±9.6 |
| 10167 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | LTE-FDD | 6.21 | ±9.6 |
| 10168 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.79 | ±9.6 |
| 10169 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10170 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10171 | AAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10172 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10173 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10174 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10175 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 0176 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | LTE-FDD | 6.52 | 19.6 |
| 10177 | CAJ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-FDD | 5.73 | - |
| 0178 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 0179 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10180 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | LTE-FDD | _ | - |
| 10181 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-FDD | 6.50 | ±9.0 |
| 10182 | CAF | | | 5.72 | ±9.6 |
| | - | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10183 | AAE | LTE-FDD (SC-FDMA, 1 RB, 15MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.0 |
| 10184 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | ±9.0 |
| 10185 | AAF | LTE-FDD (SC-FDMA, 1 RB, 3MHz, 16-QAM) | LTE-FDD | 6.51 | ±9. |
| | | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9. |
| 10187 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4MHz, QPSK) | LTE-FDD | 5.73 | ±9. |
| 10188 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 0189 | AAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9. |
| 10193 | CAE | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK) | WLAN | 8.09 | ±9.0 |
| 0194 | CAE | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | WLAN | 8.12 | ±9.6 |
| 10195 | CAE | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | WLAN | 8.21 | ±9.6 |
| 10196 | CAE | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 10197 | CAE | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM) | WLAN | 8.13 | ±9.6 |
| | CAE | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM) | WLAN | 8.27 | ±9.6 |
| 10198 | CAE | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | WLAN | 8.03 | ±9.6 |
| 10198 10219 | - | | 140.441 | | ±9.6 |
| 10198 10219 10220 | CAE | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM) | WLAN | 8.13 | 10.0 |
| 10198 10219 10220 10221 | CAE | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM) | WLAN | 8.13 8.27 | ±9.0 |
| | | Control of the contro | | | - |

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| UID | Rev | Communication System Name | Group | PAR (dB) | $Unc^E k = 2$ |
|-------|-----|--|----------|----------|---------------|
| 10225 | CAC | UMTS-FDD (HSPA+) | WCDMA | 5.97 | ±9.6 |
| 10226 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.49 | ±9.6 |
| 10227 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-TDD | 10.26 | ±9.6 |
| 10228 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | LTE-TDD | 9.22 | ±9.6 |
| 10229 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10230 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10231 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | LTE-TDD | 9.19 | ±9.6 |
| 10232 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10233 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10234 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10235 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10236 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10237 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10238 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10239 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10240 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10241 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.82 | ±9.6 |
| 10242 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | LTE-TDD | 9.86 | ±9.6 |
| 10243 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | LTE-TDD | 9.46 | ±9.6 |
| 10244 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10245 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10246 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | LTE-TDD | 9.30 | ±9.6 |
| 10247 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | LTE-TDD | 9.91 | ±9.6 |
| 10248 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | LTE-TDD | 10.09 | ±9.6 |
| 10249 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | LTE-TDD | 9.29 | ±9.6 |
| 10250 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | LTE-TDD | 9.81 | ±9.6 |
| 10251 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | LTE-TDD | 10,17 | ±9.6 |
| 10252 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | LTE-TDD | 9.24 | ±9.6 |
| 10253 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | LTE-TDD | 9.90 | ±9.6 |
| 10254 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | LTE-TDD | 10.14 | ±9.6 |
| 10255 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK) | LTE-TDD | 9.20 | ±9.6 |
| 10256 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.96 | ±9.6 |
| 10257 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-TDD | 10.08 | ±9.6 |
| 10258 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | LTE-TDD | 9.34 | ±9.6 |
| 10259 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | LTE-TDD | 9.98 | ±9.6 |
| 10260 | CAE | LTE-TDD (\$C-FDMA, 100% RB, 3 MHz, 64-QAM) | LTE-TDD | 9.97 | ±9.6 |
| 10261 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | LTE-TDD | 9.24 | ±9.6 |
| 10262 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | LTE-TDD | 9.83 | ±9.6 |
| 10263 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | LTE-TDD | 10.16 | ±9.6 |
| 10264 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5MHz, QPSK) | LTE-TDD | 9.23 | ±9.6 |
| 10265 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | LTE-TDD | 9.92 | ±9.6 |
| 10266 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | LTE-TDD | 10.07 | ±9.6 |
| 10267 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | LTE-TDD | 9.30 | ±9.6 |
| 10268 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10269 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | LTE-TDD | 10.13 | ±9.6 |
| 10270 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | LTE-TDD | 9.58 | ±9.6 |
| 10274 | - | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | WCDMA | 4.87 | ±9.6 |
| 10275 | - | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | WCDMA | 3.96 | ±9.6 |
| 10277 | CAA | PHS (QPSK) | PHS | 11.81 | ±9.6 |
| 10278 | | PHS (QPSK, BW 884 MHz, Rolloff 0.5) | PHS | 11.81 | ±9.6 |
| 10279 | CAA | PHS (QPSK, BW 884 MHz, Rolloff 0.38) | PHS | 12.18 | ±9.6 |
| 10290 | _ | CDMA2000, RC1, SO55, Full Rate | CDMA2000 | 3.91 | ±9.6 |
| 10291 | AAB | CDMA2000, RC3, SO55, Full Rate | CDMA2000 | 3.46 | ±9.6 |
| 10292 | | CDMA2000, RC3, SO32, Full Rate | CDMA2000 | 3.39 | ±9.6 |
| 10293 | | CDMA2000, RC3, SO3, Full Rate | CDMA2000 | 3.50 | ±9.6 |
| 10295 | - | CDMA2000, RC1, SO3, 1/8th Rate 25 fr. | CDMA2000 | 12.49 | ±9.6 |
| 10297 | AAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | LTE-FDD | 5.81 | ±9.6 |
| 10298 | | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10299 | | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | LTE-FDD | 6.39 | ±9.6 |
| 10300 | | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | LTE-FDD | 6.60 | ±9.6 |
| 10301 | AAA | IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC) | WIMAX | 12.03 | ±9.6 |
| 10302 | _ | IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | WiMAX | 12.57 | ±9.6 |
| 10303 | | IEEE 802.16e WIMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC) | WiMAX | 12.52 | ±9.6 |
| 10304 | | IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 11.86 | ±9.6 |
| 10305 | _ | IEEE 802.16e WIMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols) | WiMAX | 15.24 | ±9.6 |
| 10306 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols) | WIMAX | 14.67 | ±9.6 |
| | | | | | |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = |
|--------------|----------|--|--------------------|----------------------|----------------------|
| 0307 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols) | WiMAX | 14.49 | ±9.6 |
| 0308 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC) | WiMAX | 14.46 | ±9.6 |
| 0309 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols) | WIMAX | 14.58 | ±9.6 |
| 0310 | AAA | IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols) | WiMAX | 14.57 | ±9.6 |
| 0311 | AAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | LTE-FDD | 6.06 | ±9.6 |
| 0313 | AAA | iDEN 1:3 | iDEN | 10.51 | ±9.6 |
| 0314 | AAA | iDEN 1:6 | IDEN | 13.48 | ±9.6 |
| 0315 | AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle) | WLAN | 1.71 | ±9.6 |
| 0316 | AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 0317 | AAE | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 0352 | AAA | Pulse Waveform (200Hz. 10%) | Generic | 10.00 | |
| 353 | AAA | Pulse Waveform (200Hz, 20%) | Generic | 6.99 | ±9.6 |
| 0354 | AAA | Pulse Waveform (200Hz, 40%) | Generic | _ | ±9.6 |
| 355 | AAA | Pulse Waveform (200Hz, 60%) | | 3.98 | ±9.6 |
| 356 | AAA | | Generic | 2.22 | ±9.6 |
| | | Pulse Waveform (200Hz, 80%) | Generic | 0.97 | ±9.6 |
| 1387 | AAA | QPSK Waveform, 1 MHz | Generic | 5.10 | ±9.6 |
| 388 | AAA | QPSK Waveform, 10 MHz | Generic | 5.22 | ±9.6 |
| 396 | AAA | 64-QAM Waveform, 100 kHz | Generic | 6.27 | ±9.6 |
| 399 | AAA | 64-QAM Waveform, 40 MHz | Generic | 6.27 | ±9.6 |
| 400 | AAF | IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 401 | AAF | IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.60 | ±9.6 |
| 1402 | AAF | IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.53 | ±9.6 |
| 403 | AAB | CDMA2000 (1xEV-DO, Rev. 0) | CDMA2000 | 3.76 | ±9.6 |
| 404 | AAB | CDMA2000 (1xEV-DO, Rev. A) | CDMA2000 | 3.77 | ±9.6 |
| 1406 | AAB | CDMA2000, RC3, SO32, SCH0, Full Rate | CDMA2000 | 5.22 | ±9.6 |
| 1410 | AAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4) | LTE-TDD | 7.82 | ±9.6 |
| 1414 | AAA | WLAN CCDF, 64-QAM, 40 MHz | Generic | 8.54 | ±9.6 |
| 415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | WLAN | 1.54 | |
| 416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle) | WLAN | | ±9.6 |
| | 2.5.1.5. | | | 8.23 | ±9.6 |
| 1417 | AAD | IEEE 802.11a/h WiFl 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | WLAN | 8.23 | ±9.6 |
| 1418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule) | WLAN | 8.14 | ±9.6 |
|)419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule) | WLAN | 8.19 | ±9.6 |
| 1422 | AAD | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | WLAN | 8.32 | ±9.6 |
| 1423 | AAD | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | WLAN | 8.47 | ±9.6 |
| 1424 | AAD | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | WLAN | 8.40 | ±9.6 |
| 1425 | AAD | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK) | WLAN | 8.41 | ±9.6 |
| 1426 | AAD | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM) | WLAN | 8.45 | ±9.6 |
| 1427 | AAD | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | WLAN | 8.41 | ±9.6 |
| 1430 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) | LTE-FDD | 8.28 | ±9.6 |
| 431 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) | LTE-FDD | 8.38 | ±9.6 |
| 1432 | AAD | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
| 1433 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
|)434 | AAB | W-CDMA (BS Test Model 1, 64 DPCH) | WCDMA | 8.60 | ±9.6 |
| 435 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 1447 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.56 | ±9.6 |
| 1448 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.53 | |
| | AAD | | | | ±9.6 |
| 449 | | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%) | LTE-FDD | 7.51 | ±9.6 |
| 450 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.48 | ±9.6 |
| 1451 | AAB | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) | WCDMA | 7.59 | ±9.6 |
| 453 | AAE | Validation (Square, 10 ms, 1 ms) | Test | 10.00 | ±9.6 |
| 456 | AAD | IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.63 | ±9.6 |
| 457 | AAB | UMTS-FDD (DC-HSDPA) | WCDMA | 6.62 | ±9.6 |
| 458 | AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers) | CDMA2000 | 6.55 | ±9.6 |
| 459 | AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | CDMA2000 | 8.25 | ±9.6 |
| 460 | AAB | UMTS-FDD (WCDMA, AMR) | WCDMA | 2.39 | ±9.6 |
| 461 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 462 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.30 | ±9.6 |
| 463 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.56 | ±9.6 |
| 464 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 1465 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TOD | 8.32 | ±9.6 |
| | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TOD | _ | |
| 1466 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | - | 8.57 | ±9.6 |
| | | | LTE-TDD | 7.82 | ±9.6 |
| 0466 0467 | | | | | |
|)467)468 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.32 | ±9.6 |
| 467 | | LTE-TDD (SC-FDMA, 1 R8, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD LTE-TDD | 8.32 8.56 7.82 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | UncE k = |
|-------|-------|--|---------|--------------|----------|
| 10472 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.57 | ±9.6 |
| 10473 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 0474 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.32 | ±9.6 |
| 0475 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.57 | ±9.6 |
| 0477 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.32 | ±9.6 |
| 0478 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.57 | ±9.6 |
| 0479 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 0480 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.18 | ±9.6 |
| 0481 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.45 | ±9.6 |
| 0482 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.71 | |
| 0483 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | | | ±9.6 |
| 0484 | AAD | | LTE-TOD | 8.39 8.47 | ±9.6 |
| | | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TOD | -2.0 | ±9.6 |
| 0485 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.59 | ±9.6 |
| 0486 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.38 | ±9.6 |
| 0487 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.60 | ±9.6 |
| 1488 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.70 | ±9.6 |
| 1489 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.31 | ±9.6 |
| 0490 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.54 | ±9.6 |
| 1491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 1492 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.41 | ±9.6 |
| 1493 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.55 | ±9.6 |
| 1494 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 1495 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.37 | ±9.6 |
| 1496 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.54 | ±9.6 |
| 0497 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TOD | 7.67 | ±9.6 |
| 0498 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TOD | 8.40 | ±9.6 |
| | | | LTE-TOD | | |
| 1499 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | | 8.68 | ±9.6 |
| 0500 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.67 | ±9.6 |
| 0501 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.44 | ±9.6 |
| 0502 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.52 | ±9.6 |
| 0503 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.72 | ±9.6 |
| 0504 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.31 | ±9.6 |
| 0505 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.54 | ±9.6 |
| 0506 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 0507 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.36 | ±9.6 |
| 0508 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.55 | ±9.6 |
| 0509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.99 | ±9.6 |
| 0510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.49 | ±9.6 |
| 0511 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.51 | ±9.6 |
| 0512 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 0513 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.42 | ±9.6 |
| | AAG | | LTE-TDD | 8.45 | ±9.6 |
| 0514 | 10000 | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | | | 10000 |
| 0515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | WLAN | 1.58 | ±9.6 |
| 0516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | WLAN | 1.57 | ±9.6 |
| 0517 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | WLAN | 1.58 | ±9.6 |
| 0518 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | WLAN | 8.23 | ±9.6 |
| 0519 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | WLAN | 8.39 | ±9.6 |
| 0520 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | WLAN | 8.12 | ±9.6 |
| 0521 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | WLAN | 7.97 | ±9.6 |
| 0522 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 0523 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | WLAN | 8.08 | ±9.6 |
| 0524 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | WLAN | 8.27 | ±9.6 |
| 0525 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 0526 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 0527 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle) | WLAN | 8.21 | ±9.6 |
| 0528 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 0529 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 0531 | AAD | IEEE 802.11ac WiFI (20 MHz, MCS4, 99pc duty cycle) | WLAN | 8.43 | ±9.6 |
| | AAD | IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle) | WLAN | | _ |
| 0532 | | | | 8.29 | ±9.6 |
| 0533 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle) | WLAN | 8.38 | ±9.6 |
| 0534 | AAD | IEEE 802.11ac WiFI (40 MHz, MCS0, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 0535 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 0536 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle) | WLAN | 8.32 | ±9.6 |
| 0537 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 0538 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 0540 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle) | WLAN | 8.39 | ±9.6 |

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

| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = |
|--------------|-----|---|--------------|--------------|----------------------|
| 0541 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle) | WLAN | 8.46 | ±9.6 |
| 0542 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle) | WLAN | 8.65 | ±9.6 |
| 0543 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle) | WLAN | 8.65 | ±9.6 |
| 0544 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 0545 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle) | WLAN | 8.55 | ±9.6 |
| 0546 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle) | WLAN | 8.35 | ±9.6 |
| 0547 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 0548 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 0550 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle) | WLAN | 8.38 | ±9.6 |
| 0551 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc duty cycle) | WLAN | 8.50 | ±9.6 |
| 0552 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 0553 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 0554 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc duty cycle) | WLAN | 8.48 | ±9.6 |
| 0555 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 0556 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle) | WLAN | 8.50 | ±9.6 |
| 0557 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle) | WLAN | 8.52 | ±9.6 |
| 0558 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle) | WLAN | 8.61 | ±9.6 |
| 0560 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle) | WLAN | 8.73 | ±9.6 |
| 0561 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle) | WLAN | 8.56 | ±9.6 |
| 0562 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle) | WLAN | 8.69 | ±9.6 |
| 563 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 0564 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle) | WLAN | 8.25 | ±9.6 |
| 0565 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 0566 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | WLAN | 8.13 | ±9.6 |
| 0567 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | WLAN | 8.00 | ±9.6 |
| 0568 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 0569 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | WLAN | 8.10 | ±9.6 |
| 0570 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | WLAN | 8.30 | ±9.6 |
| 0571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | WLAN | 1.99 | ±9.6 |
| 0572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | WLAN | 1.99 | ±9.6 |
| 0573 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | WLAN | 1.98 | ±9.6 |
| 0574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | WLAN | 1.98 | ±9.6 |
| 0575 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) | WLAN | 8.59 | ±9.6 |
| 0576 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle) | WLAN | 8.60 | ±9.6 |
| 0577 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 0578 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 0579 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 0580 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | WLAN | 8.76 | ±9.6 |
| 0581 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | WLAN | 8.35 | ±9.6 |
| 0582 0583 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | WLAN | 8.67 | ±9.6 |
| 0584 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | WLAN | 8.59 | ±9.6 |
| 0585 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | WLAN WLAN | 8.60 8.70 | ±9.6 |
| 0586 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | WLAN | | ±9.6 |
| | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | | 8.49 | ±9.6 |
| 0587 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | WLAN WLAN | 8.36 8.76 | ±9.6 |
| 0589 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | WLAN | 8.35 | ±9.6 |
| 0590 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 46 Mbps, 90pc duty cycle) | WLAN | 8.67 | ±9.6 |
| 0591 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle) | WLAN | 8.63 | ±9.6 |
| 592 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 0593 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 0594 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 0595 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 0596 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 0597 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle) | WLAN | _ | |
| 598 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle) | WLAN | 8.72 8.50 | ±9.6 |
| 0599 | AAD | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 0600 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle) | WLAN | 8.88 | ±9.6 |
| 0601 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.82 | |
| 0602 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 0603 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle) | WLAN | 9.03 | ±9.6 |
| 0604 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) | WLAN | 8.76 | ±9.6 |
| 0605 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle) | WLAN | 8.97 | ±9.6 |
| 0606 | AAD | IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 0607 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle) | WLAN | 8.64 | ±9.6 |
| | | IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle) | WLAN | 0.04 | 19.0 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = |
|---|--|---|--|--|--|
| 0609 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle) | WLAN | 8.57 | ±9.6 |
| 0610 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 0611 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 0612 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 0613 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 0614 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle) | WLAN | 8.59 | ±9.6 |
| 0615 | AAD | IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 0616 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 0617 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 0618 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 0619 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle) | WLAN | 8.86 | ±9.6 |
| 0620 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle) | WLAN | 8.87 | ±9.6 |
| 0621 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 0622 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle) | WLAN | 8.68 | ±9.6 |
| 0623 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 0624 | AAD | IEEE 802.11ac WIFI (40 MHz, MCS8, 90pc duty cycle) | WLAN | 8.96 | ±9.6 |
| 0625 | AAD | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle) | WLAN | 8.96 | ±9.6 |
| 10626 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10627 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle) | WLAN | 8.88 | ±9.6 |
| 0628 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle) | WLAN | 8.71 | ±9.6 |
| 10629 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | ±9.6 |
| 10630 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle) | WLAN | 8.72 | ±9.6 |
| 10631 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10632 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10633 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10634 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle) | WLAN | 8.80 | ±9.6 |
| 10635 | AAD | IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10636 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 0637 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 0638 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle) | WLAN | 8.86 | ±9.6 |
| 0639 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | ±9.6 |
| 0640 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle) | WLAN | 8.98 | ±9.6 |
| 10641 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle) | WLAN | 9.06 | ±9.6 |
| 10642 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle) | WLAN | 9.06 | ±9.6 |
| 10643 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle) | WLAN | 8.89 | ±9.6 |
| 10644 | AAE | IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle) | WLAN | 9.05 | ±9.6 |
| 10645 | AAE | 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 |
| 0652 | 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 |
| 0655 | AAF | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.21 | ±9.6 |
| 0658 | 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 |
| 0662 | AAB | Pulse Waveform (200Hz, 80%) | Test | 0.97 | ±9.6 |
| 0670 | AAA | Bluetooth Low Energy | Bluetooth | 2.19 | ±9.6 |
| 0671 | AAC | IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle) | WLAN | 9.09 | ±9.6 |
| 0672 | AAC | IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle) | WLAN | 8.57 | ±9.6 |
| | AAC | IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 0673 | _ | IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 0673 0674 | AAC | | | | ±9.6 |
| 0673 0674 0675 | AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duly cycle) | WLAN | 8.90 | _ |
| 0673 0674 0675 0676 | AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 0673 0674 0675 0676 0677 | AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) | WLAN WLAN | 8.77 8.73 | ±9.6 |
| 0673 0674 0675 0676 0677 | AAC AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) | WLAN WLAN WLAN | 8.77 8.73 8.78 | ±9.6 ±9.6 |
| 0673 0674 0675 0676 0677 0678 0679 | AAC AAC AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) | WLAN WLAN WLAN WLAN | 8.77 8.73 8.78 8.89 | ±9.6 ±9.6 ±9.6 |
| 10673 10674 10675 10676 10677 10678 10679 | AAC AAC AAC AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) | WLAN WLAN WLAN WLAN WLAN | 8.77 8.73 8.78 8.89 8.80 | ±9.6 ±9.6 ±9.6 ±9.6 |
| 10673 10674 10675 10676 10677 10678 10679 10680 | AAC AAC AAC AAC AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) | WLAN WLAN WLAN WLAN WLAN WLAN | 8.77 8.73 8.78 8.89 8.80 8.62 | ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 |
| 10673 10674 10675 10676 10677 10678 10679 10680 10681 | AAC AAC AAC AAC AAC AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle) | WLAN WLAN WLAN WLAN WLAN WLAN | 8.77 8.73 8.78 8.89 8.80 8.62 8.63 | ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 |
| 0673 0674 0675 0676 0677 0678 0679 0680 0681 0682 | AAC AAC AAC AAC AAC AAC AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) | WLAN WLAN WLAN WLAN WLAN WLAN WLAN WLAN | 8.77 8.73 8.78 8.89 8.80 8.62 8.83 8.42 | ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 |
| 0673 0674 0675 0676 0677 0678 0679 0680 | AAC AAC AAC AAC AAC AAC AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle) | WLAN WLAN WLAN WLAN WLAN WLAN | 8.77 8.73 8.78 8.89 8.80 8.62 8.63 | ±9.6 ±9.6 ±9.6 ±9.6 ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | UncE k = |
|--------|-----|--|-------|----------|----------|
| 10687 | AAC | IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 0688 | AAC | IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 0689 | AAC | IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle) | WLAN | 8.55 | ±9.6 |
| 0690 | AAC | IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 0691 | AAC | IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle) | WLAN | 8.25 | ±9.6 |
| 0692 | AAC | IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 0693 | AAC | IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle) | WLAN | 8.25 | ±9.6 |
| 0694 | AAC | IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle) | WLAN | 8.57 | ±9.6 |
| 0695 | AAC | IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle) | WLAN | 8.78 | |
| 0696 | AAC | | | | ±9.6 |
| | | IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle) | WLAN | 8.91 | ±9.6 |
| 0697 | AAC | IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.61 | ±9.6 |
| 0698 | AAC | IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle) | WLAN | 8.89 | ±9.6 |
| 0699 | AAC | IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 0700 | AAC | IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle) | WLAN | 8.73 | ±9.6 |
| 0701 | 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 |
| 0704 | AAC | IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle) | WLAN | 8.56 | ±9.6 |
| 0705 | AAC | IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle) | WLAN | 8.69 | ±9.6 |
| 0706 | AAC | IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle) | WLAN | 8.66 | ±9.6 |
| 0707 | AAC | IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle) | WLAN | 8.32 | ±9.6 |
| 0708 | AAC | IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle) | WLAN | 8.55 | ±9.6 |
| 0709 | 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 |
| 10.730 | 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) | | | _ |
| 10742 | AAC | | WLAN | 8.43 | ±9.6 |
| | | 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 |
| | 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) | UncE k = 2 |
|------|-----|---|---------------|----------|------------|
| 0753 | AAC | IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle) | WLAN | 9.00 | ±9.6 |
| 0754 | AAC | IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 0755 | AAC | IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle) | WLAN | 8.64 | ±9.6 |
| 0756 | AAC | IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 0757 | AAC | IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 0758 | AAC | IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle) | WLAN | 8.69 | ±9.6 |
| 0759 | AAC | IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 0760 | AAC | IEEE 802.11ax (160 MHz, MCS5, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 0761 | AAC | IEEE 802.11ax (160 MHz, MCS6, 99pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 0762 | AAC | IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 0763 | AAC | IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle) | WLAN | 8.53 | ±9.6 |
| 0764 | AAC | IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 0765 | AAC | IEEE 802.11ax (160 MHz, MCS10, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 0766 | AAC | IEEE 802.11ax (160 MHz, MCS11, 99pc duty cycle) | WLAN | 8.51 | ±9.6 |
| 0767 | AAG | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 7.99 | ±9.6 |
| 0768 | AAE | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 0769 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 0770 | AAE | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 0771 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 0772 | AAE | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.23 | ±9.6 |
| 0773 | AAF | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.03 | ±9.6 |
| 0774 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 0775 | AAF | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 0776 | AAE | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 0777 | AAC | 5G NR (CP-OFDM, 50% RB, 15MHz, QPSK, 15kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 0778 | AAE | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0779 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.42 | ±9.6 |
| 0780 | AAE | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 0781 | AAF | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 0782 | AAE | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.43 | ±9.6 |
| 0783 | AAG | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 0784 | AAE | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.29 | ±9.6 |
| 0785 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 0786 | AAE | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 0787 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.44 | ±9.6 |
| 0788 | AAE | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 0789 | AAF | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 0790 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 0791 | AAG | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.83 | ±9.6 |
| 0792 | AAE | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.92 | ±9.6 |
| 0793 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.95 | ±9.6 |
| 0794 | AAE | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 0795 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.84 | ±9.6 |
| 0796 | AAE | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 0797 | AAF | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 0798 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| 0799 | AAF | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.6 |
| 0801 | AAF | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| 0802 | AAE | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.87 | ±9.6 |
| 0803 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.6 |
| 0805 | AAE | 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 | AAE | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0810 | AAF | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0812 | | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 0817 | AAG | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 0818 | AAE | 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 | AAE | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 0821 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0822 | AAE | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0823 | AAF | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 0824 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 0825 | AAF | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0827 | AAF | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.42 | ±9.6 |
| | | | | | 20.0 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | UncE k = |
|--------|-----|--|---------------|----------|----------|
| 10829 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 0830 | AAE | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.63 | ±9.6 |
| 0831 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.73 | ±9.6 |
| 0832 | AAE | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.74 | ±9.6 |
| 0833 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 0834 | AAE | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.75 | ±9.6 |
| 0835 | AAF | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 0836 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.66 | ±9.6 |
| 0837 | AAF | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.68 | ±9.6 |
| 0839 | AAF | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 0840 | AAE | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.67 | ±9.6 |
| 0841 | AAF | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.71 | ±9.6 |
| | AAD | 5G NR (CP-OFDM, 1 NB, 100 MHz, QPSK, 60 kHz) | | 8.49 | |
| 0843 | | | 5G NR FR1 TDD | | ±9.6 |
| 0844 | AAE | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0846 | AAE | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0854 | AAE | 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 | AAE | 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 | AAE | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 0859 | AAF | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 0860 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0861 | AAF | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 0863 | AAF | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0864 | AAE | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 0865 | AAF | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 0866 | AAF | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 0868 | AAF | 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-8-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 0870 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.86 | ±9.6 |
| 0871 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 0872 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.52 | |
| 0873 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | | | ±9.6 |
| 0874 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 0875 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 KHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 0876 | AAE | 5G NR (CP-OFDM, 1 NB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 117.00 | | | 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 |
| 888 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.35 | ±9.6 |
| 889 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.02 | ±9.6 |
| 0890 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.40 | ±9.6 |
| 891 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.13 | ±9.6 |
| 0892 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 897 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.66 | ±9.6 |
| 898 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 899 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 900 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | |
| 901 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | | | ±9.6 |
| 902 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 903 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 KHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| _ | | | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 904 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 905 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 906 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 907 | AAE | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.78 | ±9.6 |
| 908 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 909 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.96 | ±9.6 |
| 910 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |

Certificate No: EUmm-9640_Jan25

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| EUmmWV4 - SN:9640 | January 10, 2025 |
|-------------------|--------------------|
| | Outloal y 10, 2020 |

| UID | Rev | Communication System Name | Group | PAR (dB) | UncE k = |
|-------|-----|---|---------------|--------------|----------|
| 10911 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 0912 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 0913 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 0914 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.85 | ±9.6 |
| 0915 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |
| 10916 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10917 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10918 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 30kHz) | 5G NR FR1 TDD | 5.86 | ±9.6 |
| 10919 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.86 | ±9.6 |
| 10920 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10921 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10922 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.82 | ±9.6 |
| 10923 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10924 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10925 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.95 | ±9.6 |
| 10926 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10927 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10928 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10929 | AAD | 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 | 5.51 | ±9.6 |
| 10932 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 0933 | 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 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 15kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10937 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.77 | ±9.6 |
| 10938 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10939 | | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.82 | ±9.6 |
| 0940 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.89 | ±9.6 |
| 0941 | AAC | 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 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.95 | ±9.6 |
| 10944 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 15kHz) | 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 (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.83 | ±9.6 |
| 10948 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10949 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10950 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10951 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10952 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 5.92 | ±9.6 |
| 10953 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.25 | ±9.6 |
| 10954 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | | 8.15 | ±9.6 |
| 0955 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.23 | ±9.6 |
| 10956 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 10 kHz) | | 8.42 | ±9.6 |
| 10957 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.14 8.31 | ±9.6 |
| 0958 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.61 | ±9.6 |
| 0959 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.83 | ±9.6 |
| 0960 | AAE | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.32 | |
| 0961 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.36 | ±9.6 |
| 0962 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.40 | ±9.6 |
| 0963 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.40 | |
| 0964 | AAE | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 0965 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.29 | ±9.6 |
| 0966 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.55 | |
| 0967 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 0968 | AAD | 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.42 | |
| 0972 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 11.59 | ±9.6 |
| 0973 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 9.06 | ±9.6 |
| 0974 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz) | 5G NR FR1 TDD | 10.28 | ±9.6 |
| 0978 | AAA | ULLA BDR | ULLA | 1.16 | ±9.6 |
| 0979 | AAA | ULLA HDR4 | ULLA | | ±9.6 |
| 0980 | AAA | ULLA HDR8 | ULLA | 8.58 | ±9.6 |
| 0981 | AAA | ULLA HDRp4 | ULLA | 10.32 | ±9.6 |
| | | ULLA HDRp8 | ULLA | 3.19 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | UncE k = 2 |
|--|-----|--|---------------|----------|------------|
| 10983 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.31 | ±9.6 |
| 10984 AAB 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.42 | ±9.6 |
| 10985 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.54 | ±9.6 |
| 10986 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.50 | ±9.6 |
| 10987 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.53 | ±9.6 |
| 10988 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.38 | ±9.6 |
| 10989 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.33 | ±9.6 |
| 10990 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.52 | ±9.6 |
| 11003 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 10.24 | ±9.6 |
| 11004 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 10.73 | ±9.6 |
| 11005 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.70 | ±9.6 |
| 11006 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.55 | ±9.6 |
| 11007 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.46 | ±9.6 |
| 11008 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.51 | ±9.6 |
| 11009 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.76 | ±9.6 |
| 11010 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.95 | ±9.6 |
| 11011 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.96 | ±9.6 |
| 11012 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.68 | ±9.6 |
| 11013 | AAB | IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 11014 | AAB | IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 11015 | AAB | IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11016 | AAB | IEEE 802.11be (320 MHz, MGS4, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11017 | AAB | IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle) | WLAN | 8.41 | ±9.6 |
| 11018 | AAB | IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle) | WLAN | 8.40 | ±9.6 |
| 11019 | AAB | IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 11020 | AAB | IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle) | WLAN | 8.27 | ±9.6 |
| 11021 | AAB | IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle) | WLAN | 8.46 | ±9.6 |
| 11022 | AAB | IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 11023 | AAB | IEEE 802.11be (320 MHz, MCS11, 99pc duty cycle) | WLAN | 8.09 | ±9.6 |
| 11024 | AAB | IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 11025 | AAB | IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 11026 | AAB | IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle) | WLAN | 8.39 | ±9.6 |

 $^{^{\}rm E}$ 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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ANNEX H Dipole Calibration Certificate

750 MHz Dipole Calibration Certificate

Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland





Schweizerischer Kalibrierdienst Service sulsse 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

Client

CTTL Beijing Certificate No.

D750V3-1017_Jul24

CALIBRATION CERTIFICATE

Object D750V3 - SN: 1017

Calibration procedure(s) QA CAL-05.v12

Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date July 9, 2024

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Cal |
|--|------------|---------------------------------------|---------------|
| Power Sensor R&S NRP-33T | SN: 100967 | 28-Mar-24 (No. 217-04038) | Mar-25 |
| Power Sensor R&S NRP18A | SN: 101859 | 21-Mar-24 (No. 4030A315007801) | Mar-25 |
| Spectrum Analyzer R&S FSV40 | SN: 101832 | 25-Jan-24 (No. 4030-315007551) | Jan-25 |
| Mismatch; Short [S4188] Attenuator [S4423] | SN: 1152 | 28-Mar-24 (No. 217-04050) | Mar-25 |
| OCP DAK-12 | SN: 1016 | 05-Oct-23 (No. OCP-DAK12-1016_Oct23) | Oct-24 |
| OCP DAK-3.5 | SN: 1249 | 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) | Oct-24 |
| Reference Probe EX3DV4 | SN: 7349 | 03-Jun-24 (No. EX3-7349_Jun24) | Jun-25 |
| DAE4ip | SN: 1836 | 10-Jan-24 (No. DAE4ip-1836 Jan24) | Jan-25 |

| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
|------------------------------|------------|--|-----------------|
| ACAD Source Box | SN: 1000 | 28-May-24 (No. 675-ACAD_Source_Box-240528) | May-25 |
| Signal Generator R&S SMB100A | SN: 182081 | 28-May-24 (No. 0001-300719404) | May-25 |
| Mismatch; SMA | SN: 1102 | 22-May-24 (No. 675-Mismatch_SMA-240522) | May-25 |

Name Function Signature
Calibrated by Paulo Pina Laboratory Technician

Approved by Sven Kühn Technical Manager

Issued: July 9, 2024
This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D750V3-1017_Jul24

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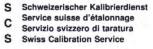


Calibration Laboratory of Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland







Accreditation No.: SCS 0108

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

Glossary

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

Calibration is Performed According to the Following Standards

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

Additional Documentation

· DASY System Handbook

Methods Applied and Interpretation of Parameters

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

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

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Measurement Conditions

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

| DASY Version | DASY8 Module SAR | 16.4.0 |
|------------------------------|-------------------------------|-------------------------------------|
| Extrapolation | Advanced Extrapolation | |
| Phantom | Modular Flat Phantom | |
| Distance Dipole Center - TSL | 15 mm | with spacer |
| Zoom Scan Resolution | dx, $dy = 6mm$, $dz = 1.5mm$ | Graded Ratio = 1.5 mm (Z direction) |
| Frequency | 750MHz ±1MHz | |

Head TSL parameters at 750 MHz

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---------------|--------------|-----------------|
| Nominal Head TSL parameters | 22.0 °C | 41.9 | 0.890 mho/m |
| Measured Head TSL parameters | (22.0 ±0.2)°C | 42.5 ±6% | 0.910 mho/m ±6% |
| Head TSL temperature change during test | < 0.5 °C | | |

SAR result with Head TSL at 750 MHz

| SAR averaged over 1 cm ³ (1 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 2.14 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 8.52 W/kg ±17.0% (k = 2) |

| SAR averaged over 10 cm ³ (10 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 1.39 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 5.53 W/kg ±16.5% (k = 2) |

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 750 MHz

| Impedance | 53.2 Ω – 0.7 jΩ |
|-------------|-----------------|
| Return Loss | -30.1 dB |

General Antenna Parameters and Design

| Electrical Delay (one direction) | 1.034 ns |
|----------------------------------|----------|
|----------------------------------|----------|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

| Manufactured by | SPEAG |
|-----------------|-------|
| Manufactured by | SPEAG |

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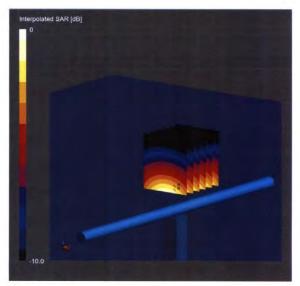


System Performance Check Report

| Summary | | | | | | | |
|----------------------|--------------------|------|---------------|---------------------------------|-------------------|------------------------|------------------|
| Dipole | | Fre | equency [MHz] | TSL | Power [dBm] | | |
| D750V3 - SN1017 | | 75 | 0 | HSL | 24 | | |
| Exposure Condition | s | | | | | | |
| Phantom Section, TSL | Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat | 15 | | CW, 0 | 750, 0 | 9.9 | 0.91 | 42.5 |
| Hardware Setup | | | | | | | |
| Phantom | TSL, Measured Dat | e | Prol | be, Calibration Date | DAE, | Calibration Date | |
| Flat V4.9 mod | HSL, 2024-07-09 | | EX3 | DV4 - SN7349, 2024-06-03 | DAE4 | p Sn1836, 2024-01-10 | |

| | Zoom Scan |
|---------------------|-----------------|
| Grid Extents [mm] | 30 × 30 × 30 |
| Grid Steps [mm] | 6.0 x 6.0 x 1.5 |
| Sensor Surface [mm] | 1.4 |
| Graded Grid | Yes |
| Grading Ratio | 1.5 |
| MAIA | N/A |
| Surface Detection | VMS + 6p |
| Scan Method | Measured |

| | Zoom Scan |
|---------------------|---------------------|
| Date | 2024-07-09 |
| psSAR1g [W/Kg] | 2.14 |
| psSAR10g [W/Kg] | 1.39 |
| Power Drift [dB] | 0.00 |
| Power Scaling | Disabled |
| Scaling Factor [dB] | |
| TSL Correction | Positive / Negative |



0 dB = 3.48 W/Kg

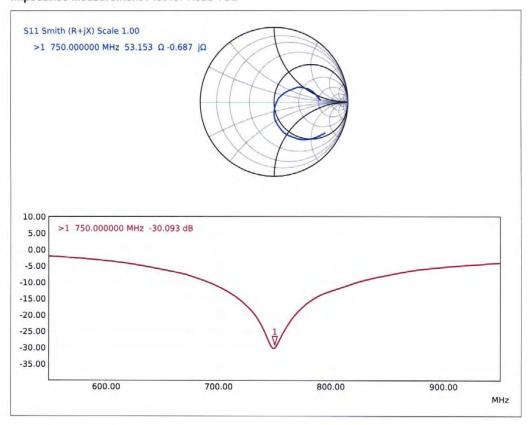
Certificate No: D750V3-1017_Jul24

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Impedance Measurement Plot for Head TSL



Certificate No: D750V3-1017_Jul24 Page 6 of 6

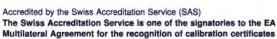




835 MHz Dipole Calibration Certificate

Calibration Laboratory of Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland





S C S

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

Accreditation No.: SCS 0108

Client

CTTL Beijing Certificate No.

D835V2-4d069_Jul24

CALIBRATION CERTIFICATE

Object D835V2 - SN: 4d069

Calibration procedure(s) QA CAL-05.v12

Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date July 9, 2024

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Cal |
|--|------------|---------------------------------------|---------------|
| Power Sensor R&S NRP-33T | SN: 100967 | 28-Mar-24 (No. 217-04038) | Mar-25 |
| Power Sensor R&S NRP18A | SN: 101859 | 21-Mar-24 (No. 4030A315007801) | Mar-25 |
| Spectrum Analyzer R&S FSV40 | SN: 101832 | 25-Jan-24 (No. 4030-315007551) | Jan-25 |
| Mismatch; Short [S4188] Attenuator [S4423] | SN: 1152 | 28-Mar-24 (No. 217-04050) | Mar-25 |
| OCP DAK-12 | SN: 1016 | 05-Oct-23 (No. OCP-DAK12-1016_Oct23) | Oct-24 |
| OCP DAK-3.5 | SN: 1249 | 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) | Oct-24 |
| Reference Probe EX3DV4 | SN: 7349 | 03-Jun-24 (No. EX3-7349_Jun24) | Jun-25 |
| DAE4ip | SN: 1836 | 10-Jan-24 (No. DAE4ip-1836_Jan24) | Jan-25 |

| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
|------------------------------|------------|--|-----------------|
| ACAD Source Box | SN: 1000 | 28-May-24 (No. 675-ACAD_Source_Box-240528) | May-25 |
| Signal Generator R&S SMB100A | SN: 182081 | 28-May-24 (No. 0001-300719404) | May-25 |
| Mismatch; SMA | SN: 1102 | 22-May-24 (No. 675-Mismatch_SMA-240522) | May-25 |

Name Function Signature

Calibrated by Paulo Pina Laboratory Technician

Approved by Sven Kühn Technical Manager

Issued: July 9, 2024

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Certificate No: D835V2-4d069_Jul24

Page 1 of 6





Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

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

Accreditation No.: SCS 0108

Glossary

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

Calibration is Performed According to the Following Standards

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

Additional Documentation

· DASY System Handbook

Methods Applied and Interpretation of Parameters

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

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

Certificate No: D835V2-4d069_Jul24

Page 2 of 6



Measurement Conditions

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

| DASY Version | DASY8 Module SAR | 16.4.0 | |
|------------------------------|-------------------------------|-------------------------------------|--|
| Extrapolation | Advanced Extrapolation | | |
| Phantom | Modular Flat Phantom | | |
| Distance Dipole Center - TSL | 15 mm | with spacer | |
| Zoom Scan Resolution | dx, $dy = 6mm$, $dz = 1.5mm$ | Graded Ratio = 1.5 mm (Z direction) | |
| Frequency | 835MHz ±1MHz | | |

Head TSL parameters at 835 MHz

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---------------|--------------|-----------------|
| Nominal Head TSL parameters | 22.0 °C | 41.5 | 0.900 mho/m |
| Measured Head TSL parameters | (22.0 ±0.2)°C | 42.3 ±6% | 0.930 mho/m ±6% |
| Head TSL temperature change during test | < 0.5 °C | | |

SAR result with Head TSL at 835 MHz

| SAR averaged over 1 cm3 (1 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 2.38 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 9.47 W/kg ±17.0% (k = 2) |

| SAR averaged over 10 cm ³ (10 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 1.53 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 6.09 W/kg ±16.5% (k = 2) |

Certificate No: D835V2-4d069_Jul24

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 835 MHz

| Impedance | 51.1 Ω – 4.5 jΩ | |
|-------------|-----------------|--|
| Return Loss | -26.8 dB | |

General Antenna Parameters and Design

| Electrical Delay (one direction) | 1.393 ns |
|----------------------------------|----------|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

| Manufactured by | SPEAG |
|---|-------|
| 3. W. | |

Certificate No: D835V2-4d069_Jul24

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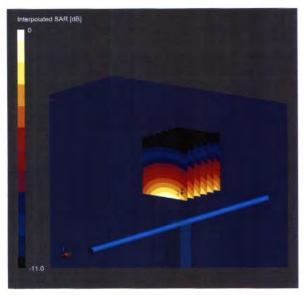


System Performance Check Report

| | F | requency [MH | z] TSL | Power [dBm] | | |
|--------------------|--------------------|---|--|-------------------|------------------------|---|
| | 8 | 335 | HSL | 24 | | |
| s | | | | | | |
| Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| 15 | | CW, 0 | 835, 0 | 9.61 | 0.93 | 42.3 |
| | | | | | | |
| TSL, Measured Date | ė | Proi | be, Calibration Date | DAE, 0 | Calibration Date | |
| HSL, 2024-07-09 | | EX3 | DV4 - SN7349, 2024-06-03 | DAE4i | p Sn1836, 2024-01-10 | |
| | TSL, Measured Date | S Test Distance [mm] Band 15 TSL, Measured Date | ### 15 ### | | S | 835 HSL 24 S Test Distance [mm] Band Group, UID Frequency [MHz], Channel Number Conversion Factor TSL Conductivity [S/m] 15 CW, 0 835, 0 9.61 0.93 TSL, Measured Date Probe, Calibration Date DAE, Calibration Date |

| cans Setup | | |
|---------------------|-----------------|--|
| | Zoom Scan | |
| Grid Extents [mm] | 30 x 30 x 30 | |
| Grid Steps [mm] | 6.0 × 6.0 × 1.5 | |
| Sensor Surface [mm] | 1.4 | |
| Graded Grid | Yes | |
| Grading Ratio | 1.: | |
| MAIA | N/A | |
| Surface Detection | VMS + 6 | |
| Scan Method | Measured | |

| | Zoom Scan |
|---------------------|---------------------|
| Date | 2024-07-09 |
| psSAR1g [W/Kg] | 2.38 |
| psSAR10g [W/Kg] | 1.53 |
| Power Drift [dB] | 0.00 |
| Power Scaling | Dişabled |
| Scaling Factor [d8] | |
| TSL Correction | Positive / Negative |



0 dB = 3.85 W/Kg

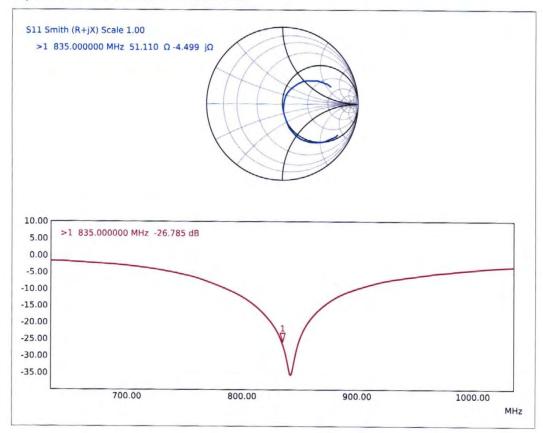
Certificate No: D835V2-4d069_Jul24

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Impedance Measurement Plot for Head TSL



Certificate No: D835V2-4d069_Jul24

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1800 MHz Dipole Calibration Certificate

Calibration Laboratory of Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland





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

Accreditation No.: SCS 0108

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Multilateral Agreement for the recognition of calibration certificates

Client

CTTL Beijing Certificate No.

D1800V2-2d145 Jul24

CALIBRATION CERTIFICATE

Object D1800V2 - SN: 2d145

Calibration procedure(s) QA CAL-05.v12

Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date July 11, 2024

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Cal |
|--|------------|---------------------------------------|---------------|
| Power Sensor R&S NRP-33T | SN: 100967 | 28-Mar-24 (No. 217-04038) | Mar-25 |
| Power Sensor R&S NRP18A | SN: 101859 | 21-Mar-24 (No. 4030A315007801) | Mar-25 |
| Spectrum Analyzer R&S FSV40 | SN: 101832 | 25-Jan-24 (No. 4030-315007551) | Jan-25 |
| Mismatch; Short [S4188] Attenuator [S4423] | SN: 1152 | 28-Mar-24 (No. 217-04050) | Mar-25 |
| OCP DAK-12 | SN: 1016 | 05-Oct-23 (No. OCP-DAK12-1016 Oct23) | Oct-24 |
| OCP DAK-3.5 | SN: 1249 | 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) | Oct-24 |
| Reference Probe EX3DV4 | SN: 7349 | 03-Jun-24 (No. EX3-7349_Jun24) | Jun-25 |
| DAE4ip | SN: 1836 | 10-Jan-24 (No. DAE4ip-1836 Jan24) | Jan-25 |

| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
|------------------------------|------------|--|-----------------|
| ACAD Source Box | SN: 1000 | 28-May-24 (No. 675-ACAD_Source_Box-240528) | May-25 |
| Signal Generator R&S SMB100A | SN: 182081 | 28-May-24 (No. 0001-300719404) | May-25 |
| Mismatch; SMA | SN: 1102 | 22-May-24 (No. 675-Mismatch_SMA-240522) | May-25 |

Technical Manager

Name Signature Calibrated by

Laboratory Technician

Paulo Pina

Sven Kühn

Issued: July 11, 2024

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Certificate No: D1800V2-2d145_Jul24

Approved by

Page 1 of 6





Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland

Ilac MRA



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Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)

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

Glossary

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

Calibration is Performed According to the Following Standards

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

Additional Documentation

· DASY System Handbook

Methods Applied and Interpretation of Parameters

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

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

Certificate No: D1800V2-2d145_Jul24

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D1800V2 - SN: 2d145 July 11, 2024

Measurement Conditions

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

| DASY Version | DASY8 Module SAR | 16.4.0 |
|------------------------------|-------------------------------|-------------------------------------|
| Extrapolation | Advanced Extrapolation | |
| Phantom | Modular Flat Phantom | |
| Distance Dipole Center - TSL | 10 mm | with spacer |
| Zoom Scan Resolution | dx, $dy = 6mm$, $dz = 1.5mm$ | Graded Ratio = 1.5 mm (Z direction) |
| Frequency | 1800MHz ±1MHz | |

Head TSL parameters at 1800 MHz

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---------------|--------------|----------------|
| Nominal Head TSL parameters | 22.0 °C | 40.0 | 1.40 mho/m |
| Measured Head TSL parameters | (22.0 ±0.2)°C | 40.5 ±6% | 1.38 mho/m ±6% |
| Head TSL temperature change during test | < 0.5 °C | | |

SAR result with Head TSL at 1800 MHz

| SAR averaged over 1 cm ³ (1 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 9.83 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 39.1 W/kg ±17.0% (k = 2) |

| SAR averaged over 10 cm ³ (10 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 5.17 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 20.6 W/kg ±16.5% (k = 2) |

Certificate No: D1800V2-2d145_Jul24

Page 3 of 6





D1800V2 - SN: 2d145

July 11, 2024

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 1800 MHz

| Impedance | 46.9 Ω – 2.4 jΩ | |
|-------------|-----------------|--|
| Return Loss | -27.7 dB | |

General Antenna Parameters and Design

| Electrical Delay (one direction) | 1.213 ns |
|----------------------------------|----------|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

| Manufactured by | SPEAG |
|-----------------|-------|
| | |

Certificate No: D1800V2-2d145_Jul24

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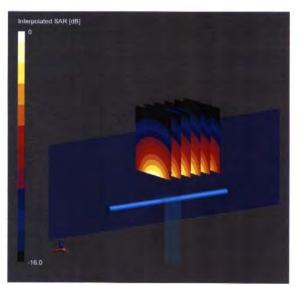
D1800V2 - SN: 2d145 July 11, 2024

System Performance Check Report

| Dipole | | Frequency [M | MHz] TSL | Power [dBm] | | |
|----------------------|-------------------------|--------------|---------------------------------|-------------------|------------------------|------------------|
| D1800V2 - SN2d145 | | 1800 | HSL | 24 | | |
| Exposure Condition | s | | | | | |
| Phantom Section, TSL | Test Distance [mm] Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat | 10 | CW, 0 | 1800, 0 | 7.95 | 1.38 | 40.5 |
| Hardware Setup | | | | | | |
| Phantom | TSL, Measured Date | Pro | obe, Calibration Date | DAE, C | Calibration Date | |
| MFP V8.0 Right | HSL, 2024-07-11 | EX | 3DV4 - SN7349, 2024-06-03 | DAE4i | p Sn1836, 2024-01-10 | |

| | Zoom Scan |
|---------------------|-----------------|
| Grid Extents [mm] | 30 x 30 x 30 |
| Grid Steps [mm] | 6.0 x 6.0 x 1.5 |
| Sensor Surface [mm] | 1.4 |
| Craded Crid | Yes |
| Grading Ratio | 1.5 |
| MAIA | N/A |
| Surface Detection | All points |
| Scan Method | Measured |

| | Zoom Scan |
|---------------------|---------------------|
| Date | 2024-07-11 |
| psSAR1g [W/Kg] | 9.83 |
| psSAR10g [W/Kg] | 5.17 |
| Power Drift [dB] | 0.01 |
| Power Scaling | Disabled |
| Scaling Factor [dB] | |
| TSL Correction | Positive / Negative |



0 dB = 17.6 W/Kg

Certificate No: D1800V2-2d145_Jul24

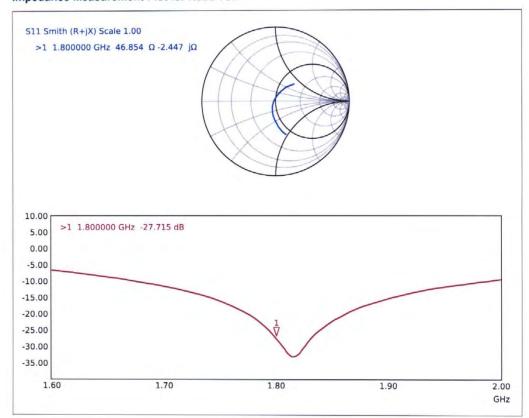
Page 5 of 6





D1800V2 - SN: 2d145 July 11, 2024

Impedance Measurement Plot for Head TSL



Certificate No: D1800V2-2d145_Jul24

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1900 MHz Dipole Calibration Certificate

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





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Accreditation No.: SCS 0108

Client

CTTL Beijing Certificate No.

D1900V2-5d101_Jul24

CALIBRATION CERTIFICATE

Object

D1900V2 - SN: 5d101

Calibration procedure(s)

QA CAL-05.v12

Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date

July 8, 2024

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Cal |
|--|------------|---------------------------------------|---------------|
| Power Sensor R&S NRP-33T | SN: 100967 | 28-Mar-24 (No. 217-04038) | Mar-25 |
| Power Sensor R&S NRP18A | SN: 101859 | 21-Mar-24 (No. 4030A315007801) | Mar-25 |
| Spectrum Analyzer R&S FSV40 | SN: 101832 | 25-Jan-24 (No. 4030-315007551) | Jan-25 |
| Mismatch; Short [S4188] Attenuator [S4423] | SN: 1152 | 28-Mar-24 (No. 217-04050) | Mar-25 |
| OCP DAK-12 | SN: 1016 | 05-Oct-23 (No. OCP-DAK12-1016_Oct23) | Oct-24 |
| OCP DAK-3,5 | SN: 1249 | 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) | Oct-24 |
| Reference Probe EX3DV4 | SN: 7349 | 03-Jun-24 (No. EX3-7349_Jun24) | Jun-25 |
| DAE4ip | SN: 1836 | 10-Jan-24 (No. DAE4ip-1836 Jan24) | Jan-25 |

| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
|------------------------------|------------|--|-----------------|
| ACAD Source Box | SN: 1000 | 28-May-24 (No. 675-ACAD_Source_Box-240528) | May-25 |
| Signal Generator R&S SMB100A | SN: 182081 | 28-May-24 (No. 0001-300719404) | May-25 |
| Mismatch; SMA | SN: 1102 | 22-May-24 (No. 675-Mismatch_SMA-240522) | May-25 |

Name Function Signature
Calibrated by Paulo Pina Laboratory Technician

Approved by Sven Kühn Technical Manager

Issued: July 8, 2024

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Certificate No: D1900V2-5d101_Jul24

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Accreditation No.: SCS 0108

Glossary

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

Calibration is Performed According to the Following Standards

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

Additional Documentation

· DASY System Handbook

Methods Applied and Interpretation of Parameters

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

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

Certificate No: D1900V2-5d101_Jul24

Page 2 of 6



Measurement Conditions

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

| DASY Version | DASY8 Module SAR | 16.4.0 |
|------------------------------|-------------------------------|-------------------------------------|
| Extrapolation | Advanced Extrapolation | |
| Phantom | Modular Flat Phantom | |
| Distance Dipole Center - TSL | 10 mm | with spacer |
| Zoom Scan Resolution | dx, $dy = 6mm$, $dz = 1.5mm$ | Graded Ratio = 1.5 mm (Z direction) |
| Frequency | 1900MHz ±1MHz | |

Head TSL parameters at 1900 MHz

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|---------------|--------------|----------------|
| Nominal Head TSL parameters | 22.0 °C | 40.0 | 1.40 mho/m |
| Measured Head TSL parameters | (22.0 ±0.2)°C | 41.3 ±6% | 1.38 mho/m ±6% |
| Head TSL temperature change during test | < 0.5 °C | | |

SAR result with Head TSL at 1900 MHz

| SAR averaged over 1 cm ³ (1 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 9.83 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 39.1 W/kg ±17.0% (k = 2) |

| SAR averaged over 10 cm ³ (10 g) of Head TSL | Condition | |
|---|--------------------|--------------------------|
| SAR for nominal Head TSL parameters | 24 dBm input power | 5.18 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 20.6 W/kg ±16.5% (k = 2) |

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Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters with Head TSL at 1900 MHz

| Impedance | 49.4 Ω + 4.2 jΩ | |
|-------------|-----------------|--|
| Return Loss | -27.3 dB | |

General Antenna Parameters and Design

| Electrical Delay (one direction) | 1.203 ns |
|----------------------------------|----------|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured. The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

| Manufactured by | SPEAG |
|-----------------|-------|

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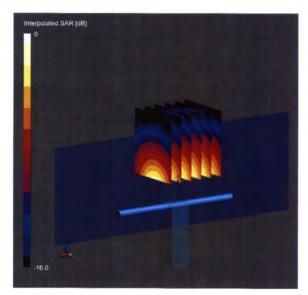


System Performance Check Report

| Summary | | | | | | |
|----------------------|-------------------------|---------------------------------------|---------------------------------|---------------------------|------------------------|------------------|
| Dipole | | Frequency [M | MHz] TSL | Power [dBm] | | |
| D1900V2 - SN5d101 | | 1900 | HSL | 24 | | |
| Exposure Condition | s | | | | | |
| Phantom Section, TSL | Test Distance [mm] Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat | 10 | CW, 0 | 1900, 0 | 7.73 | 1.38 | 41.3 |
| Hardware Setup | | | | | | |
| Phantom | TSL, Measured Date | Measured Date Probe, Calibration Date | | DAE, Calibration Date | | |
| MFP V8.0 Right | HSL, 2024-07-08 | 7-08 EX3DV4 - SN7349, 2024-06-03 | | DAE4ip Sn1836, 2024-01-10 | | |
| | | | | | | |

| cans Setup | | |
|-----------------|--|--|
| Zoom Scan | | |
| 30 x 30 x 30 | | |
| 6.0 x 6.0 x 1.5 | | |
| 1.4 | | |
| Yes | | |
| 1.5 | | |
| N/A | | |
| All points | | |
| Measured | | |
| | | |

| | Zoom Scan |
|---------------------|---------------------|
| Date | 2024-07-08 |
| psSAR1g [W/Kg] | 9.83 |
| psSAR10g [W/Kg] | 5.18 |
| Power Drift [dB] | -0.01 |
| Power Scaling | Disabled |
| Scaling Factor [dB] | |
| TSL Correction | Positive / Negative |



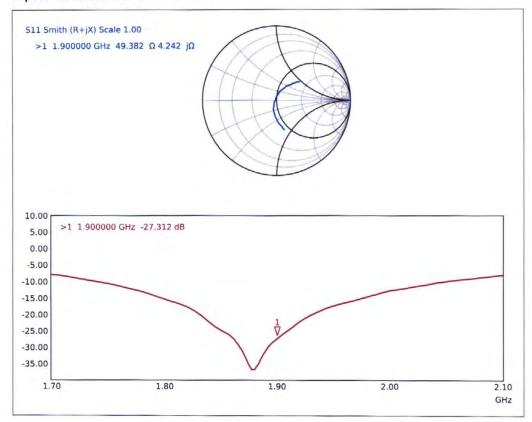
0~dB=17.3~W/Kg

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Impedance Measurement Plot for Head TSL



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2450 MHz Dipole Calibration Certificate

Calibration Laboratory of

Schmid & Partner Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland





Schweizerischer Kalibrierdienst Service sulsse d'étalonnage Servizio svizzero di taratura

S Swiss Calibration Service

Accreditation No.: SCS 0108

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

Client

CTTL Beijing Certificate No.

D2450V2-853 Jul24

CALIBRATION CERTIFICATE

Object D2450V2 - SN: 853

Calibration procedure(s) QA CAL-05.v12

Calibration Procedure for SAR Validation Sources between 0.7 - 3 GHz

Calibration date July 10, 2024

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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Cal |
|--|------------|---------------------------------------|---------------|
| Power Sensor R&S NRP-33T | SN: 100967 | 28-Mar-24 (No. 217-04038) | Mar-25 |
| Power Sensor R&S NRP18A | SN: 101859 | 21-Mar-24 (No. 4030A315007801) | Mar-25 |
| Spectrum Analyzer R&S FSV40 | SN: 101832 | 25-Jan-24 (No. 4030-315007551) | Jan-25 |
| Mismatch; Short [S4188] Attenuator [S4423] | SN: 1152 | 28-Mar-24 (No. 217-04050) | Mar-25 |
| OCP DAK-12 | SN: 1016 | 05-Oct-23 (No. OCP-DAK12-1016_Oct23) | Oct-24 |
| OCP DAK-3.5 | SN: 1249 | 05-Oct-23 (No. OCP-DAK3.5-1249_Oct23) | Oct-24 |
| Reference Probe EX3DV4 | SN: 7349 | 03-Jun-24 (No. EX3-7349_Jun24) | Jun-25 |
| DAE4ip | SN: 1836 | 10-Jan-24 (No. DAE4ip-1836_Jan24) | Jan-25 |

| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
|------------------------------|------------|--|-----------------|
| ACAD Source Box | SN: 1000 | 28-May-24 (No. 675-ACAD_Source_Box-240528) | May-25 |
| Signal Generator R&S SMB100A | SN: 182081 | 28-May-24 (No. 0001-300719404) | May-25 |
| Mismatch; SMA | SN: 1102 | 22-May-24 (No. 675-Mismatch_SMA-240522) | May-25 |

Name Function Signature
Calibrated by Paulo Pina Laboratory Technician

Sven Kühn

Issued: July 10, 2024

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

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Technical Manager

Approved by