



No. 23T04Z80961-54



HAC RF TEST REPORT

No. 23T04Z80961-54

For

Wingtech Group (Hong Kong) Limited

5G Mobile Phone

Model Name: TMRV075G

with

Hardware Version: V1.0

Software Version: TMRV075G_0.03.03

FCC ID: 2APXW-TMRV075G

HAC-2019 Compliance: PASS

Issued Date: 2024-3-14

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

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No. 23T04Z80961-54

REPORT HISTORY

| Report Number | Revision | Issue Date | Description |
|----------------------|-----------------|-------------------|---------------------------------|
| 23T04Z80961-54 | Rev.0 | 2024-03-14 | Initial creation of test report |

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1 Test Laboratory

1.1 Introduction & Accreditation

Telecommunication Technology Labs, CAICT is an ISO/IEC 17025:2017 accredited test laboratory under American Association for Laboratory Accreditation (A2LA) with lab code 7049.01, and is also an FCC accredited test laboratory (CN1349), and ISED accredited test laboratory (CAB identifier:CN0066). The detail accreditation scope can be found on A2LA website.

1.2 Testing Location

| | |
|--------------|--|
| CompanyName: | CTTL |
| Address: | No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191. |

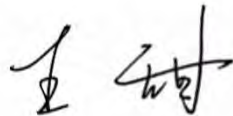
1.3 Testing Environment

| | |
|--|----------------|
| Temperature: | 18°C~25°C, |
| Relative humidity: | 30%~ 70% |
| Ground system resistance: | < 0.5 Ω |
| Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards | |

1.4 Project Data

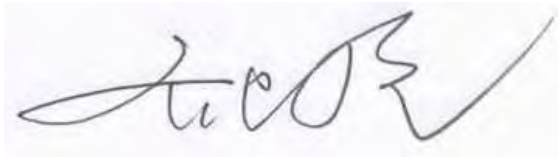
| | |
|---------------------|----------------|
| Project Leader: | Qi Dianyuan |
| Test Engineer: | Wang Tian |
| Testing Start Date: | March 10, 2024 |
| Testing End Date: | March 12, 2024 |

1.5 Signature



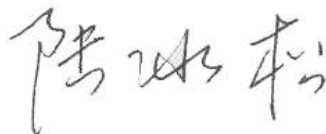
Wang Tian

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)



Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)

2 Client Information

2.1 Applicant Information

| | |
|-----------------|--|
| Company Name: | Wingtech Group (Hong Kong) Limited |
| Address/Post: | Flat/RM 1903 19/F, Podium Plaza, 5 Hanoi Road, Tsim Sha Tsui, KL, HK |
| Contact Person: | sharui |
| Contact Email: | sharui@wingtech.com |
| Telephone: | +86-21-53529900 |
| Fax | / |

2.2 Manufacturer Information

| | |
|-----------------|--|
| Company Name: | Wingtech Group (Hong Kong) Limited |
| Address/Post: | Flat/RM 1903 19/F, Podium Plaza, 5 Hanoi Road, Tsim Sha Tsui, KL, HK |
| Contact Person: | sharui |
| Contact Email: | sharui@wingtech.com |
| Telephone: | +86-21-53529900 |
| Fax | / |

3 Equipment Under Test (EUT) and Ancillary Equipment (AE)

3.1 About EUT

| | |
|--------------------|---|
| Description: | 5G Mobile Phone |
| Model name: | TMRV075G |
| Operating mode(s): | GSM850/900/18001900, WCDMA B2/4/5 LTE Band:2/4/5/7/12/25/26/41/66/71 5G NR N25/41/66/71/77 BT, Wi-Fi(2.4G), Wi-Fi(5G),NFC |

3.2 Internal Identification of EUT used during the test

| EUT ID* | IMEI | HW Version | SW Version |
|---------|-----------------|------------|------------------|
| EUT1 | 862503070027289 | V1.0 | TMRV075G_0.03.03 |

*EUT ID: is used to identify the test sample in the lab internally.

3.3 Internal Identification of AE used during the test

| AE ID* | Description | Model | SN | Manufacturer |
|--------|-------------|-------|----|-------------------------------------|
| AE1 | Battery | TM002 | / | SCUD (FUJIAN) Electronics Co., Ltd. |

*AE ID: is used to identify the test sample in the lab internally.

3.4 Air Interfaces / Bands Indicating Operating Modes

| Air-interface | Band(MHz) | Type | C63.19/test ed | Simultaneous Transmissions Not Tested ⁽¹⁾ | Name of Voice Service |
|---------------|----------------------------|------|----------------|--|-----------------------|
| GSM | 850 | VO | Yes | BT, WLAN | CMRS Voice |
| | 1900 | | | | |
| GPRS/EDGE | 850 | DT | Yes | BT, WLAN | MEET |
| | 1900 | | | | |
| WCDMA (UMTS) | 850 | VO | Yes | BT, WLAN | CMRS Voice |
| | 1700 | | | | |
| | 1900 | | | | |
| | HSPA | DT | Yes | | MEET |
| LTE TDD | Band41 | V/D | Yes | BT, WLAN | VoLTE, MEET |
| LTE FDD | Band2/4/5/7/12/25/26/66/71 | V/D | Yes | BT, WLAN | VoLTE, MEET |
| NR | N25/41/66/71/77 | DT | Yes | BT, WLAN | VoNR, MEET |
| BT | 2450 | DT | NA | WWAN | NA |
| WLAN | 2450 | V/D | Yes | WWAN | VoWiFi, MEET |
| WLAN | 5G | V/D | Yes | WWAN | VoWiFi, MEET |

NA: Not Applicable VO: Voice Only V/D: CMRS and IP Voice Service over Digital Transport

DT: Digital Transport

Note1: According to KDB285076 D01, clause 2 d), for the Interference Level, the single transmission scenario of each frequency band is higher than or equal to the simultaneous transmission scenario, so the frequency band that has evaluated the single will not evaluate the simultaneous.

4 Maximum Output Power

| Bands | Conducted Power (dBm) |
|-------------|-----------------------|
| GSM 850 | 34 |
| GSM 1900 | 31 |
| WCDMA 850 | 25.5 |
| WCDMA 1700 | 25.5 |
| WCDMA 1900 | 25.5 |
| LTE Band2 | 25 |
| LTE Band4 | 25 |
| LTE Band5 | 25 |
| LTE Band7 | 24 |
| LTE Band12 | 25 |
| LTE Band25 | 25 |
| LTE Band26 | 25 |
| LTE Band41 | 26.5 |
| LTE Band66 | 25 |
| LTE Band71 | 25 |
| NR n25 | 25 |
| NR n41 | 26.5 |
| NR n66 | 25 |
| NR n71 | 25 |
| NR n77 | 27 |
| WLAN 2.4GHz | 22 |
| WLAN 5GHz | 20 |

5 Reference Documents

5.1 Reference Documents for testing

The following document listed in this section is referred for testing.

| Reference | Title | Version |
|--------------------------|--|--------------|
| ANSI C63.19-2019 | American National Standard for Methods of Measurement of Compatibility Between Wireless Communication Devices and Hearing Aids | 2019 Edition |
| FCC 47 CFR §20.19 | Hearing Aid Compatible Mobile Headsets | 2024 Edition |
| KDB285076 D01 v06r04. | Equipment Authorization Guidance for Hearing Aid Compatibility | 2023 Edition |

6 Operational Conditions During Test

6.1 HAC MEASUREMENT SET-UP

These measurements are performed using the DASY6/8 automated dosimetric assessment system. It is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland. It consists of high precision robotics system (Stäubli), robot controller, Intel Core2 computer, near-field probe, probe alignment sensor. The robot is a six-axis industrial robot performing precise movements. A cell controller system contains the power supply, robot controller, teach pendant (Joystick), and remote control, is used to drive the robot motors. The PC consists of the HP Intel Core2 1.86 GHz computer with Windows 10 system and HAC Measurement Software DASY6/8, A/D interface card, monitor, mouse, and keyboard. The Stäubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC plug-in card.

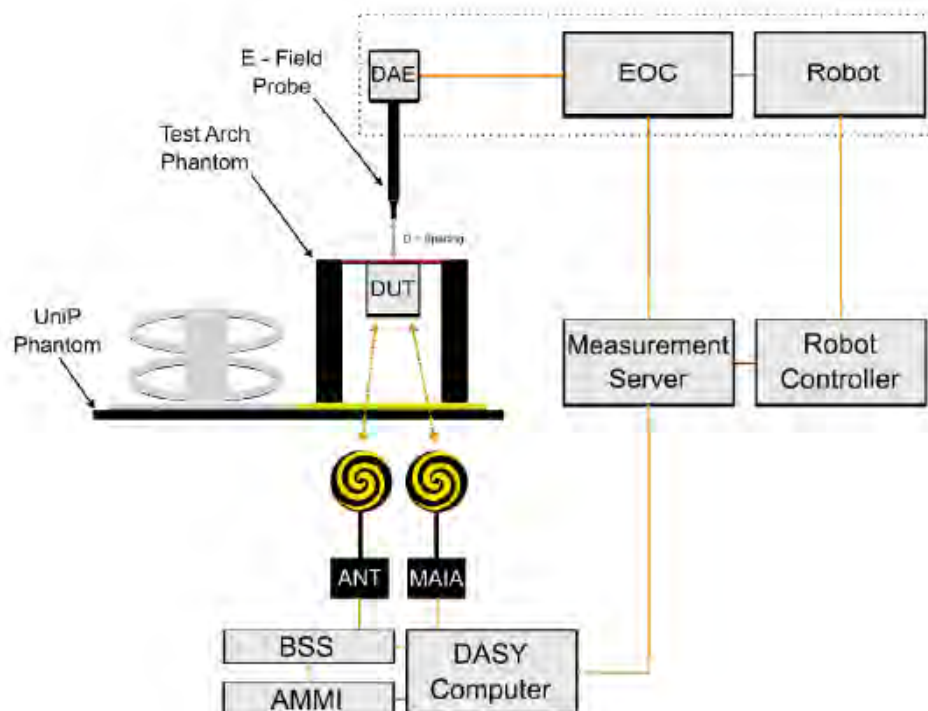


Fig. 1 HAC Test Measurement Set-up

The DAE4 consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the PC-card is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe collision detection. The robot uses its own controller with a built in VME-bus computer.

6.2 Probe Specification

E-Field Probe Description

| | |
|---------------|--|
| Construction | One dipole parallel, two dipoles normal to probe axis Built-in shielding against static charges |
| Calibration | In air from 30 MHz to 6.0 GHz (absolute accuracy $\pm 6.0\%$, $k=2$) |
| Frequency | 30 MHz to 6 GHz Linearity: ± 0.2 dB (100 MHz to 3 GHz) |
| Directivity | ± 0.2 dB in air (rotation around probe axis) ± 0.4 dB in air (rotation normal to probe axis) |
| Dynamic Range | 2 V/m to 1000 V/m; Linearity: ± 0.2 dB |
| Dimensions | Overall length: 337 mm (Tip: 20 mm) Tip diameter: 4 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.5 mm |
| Application | General near-field measurements up to 6 GHz Field component measurements Fast automatic scanning in phantoms |



[EF3DV3]

6.3 Test Arch Phantom & Phone Positioner

The Test Arch phantom should be positioned horizontally on a stable surface. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. It enables easy and well defined positioning of the phone and validation dipoles as well as simple teaching of the robot (Dimensions: 370 x 370 x 370 mm).

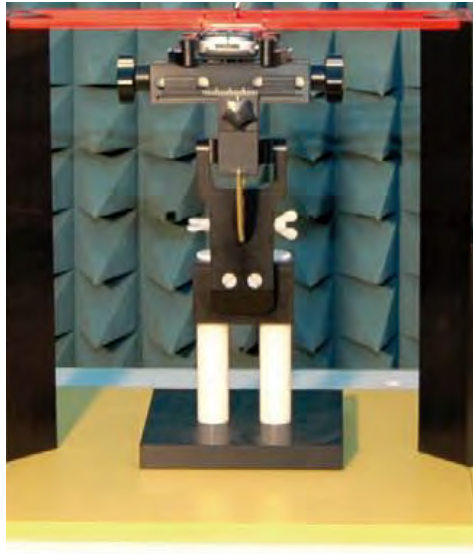


Fig. 2 HAC Phantom & Device Holder

6.4 Robotic System Specifications

Specifications

Positioner: Stäubli Unimation Corp. Robot Model: RX160L

Repeatability: ± 0.02 mm

No. of Axis: 6

Data Acquisition Electronic (DAE) System

Cell Controller

Processor: Intel Core2

Clock Speed: 1.86GHz

Operating System: Windows 10

Data Converter

Features: Signal Amplifier, multiplexer, A/D converter, and control logic

Software: DASY6/8 cD6 HAC

Connecting Lines: Optical downlink for data and status info.

Optical uplink for commands and clock

7 EUT Arrangement

7.1 WD RF Emission Measurements Reference and Plane

Figure 3 illustrates the references and reference plane that shall be used in the WD emissions measurement.

- The measurement area is 50.0 mm by 50.0 mm.
- The measurement area is centered on the audio frequency output transducer of the WD (speaker or T-Coil signal).
- The measurement area is in a reference plane, which is defined as the planar area tangent to the highest point in the area of the phone that normally rests against the user's ear. It is parallel to the centerline of the receiver area of the phone and is defined by the points of the receiver-end of the WD handset, which, in normal handset use, rest against the ear.
- The measurement plane is parallel to, and 15.0 mm in front of, the reference plane.

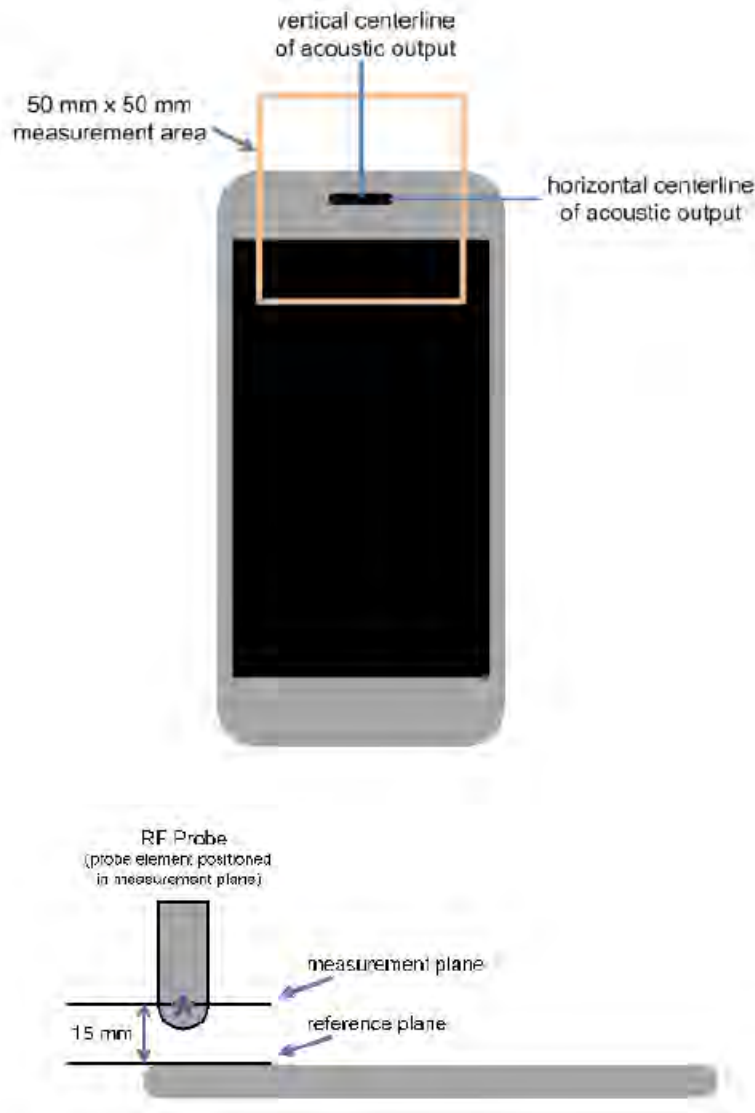


Fig. 3 WD measurement and reference planes for RF emission measurements

8 System Validation

8.1 Validation Procedure

Place a dipole antenna meeting the requirements given in ANSI C63.19 in the position normally occupied by the WD. The dipole antenna serves as a known source for an electrical output. Position the E-field probes so that:

- The probes and their cables are parallel to the coaxial feed of the dipole antenna
- The probe cables and the coaxial feed of the dipole antenna approach the measurement area from opposite directions
- The center point of the probe element(s) are 15 mm from the closest surface of the dipole elements.

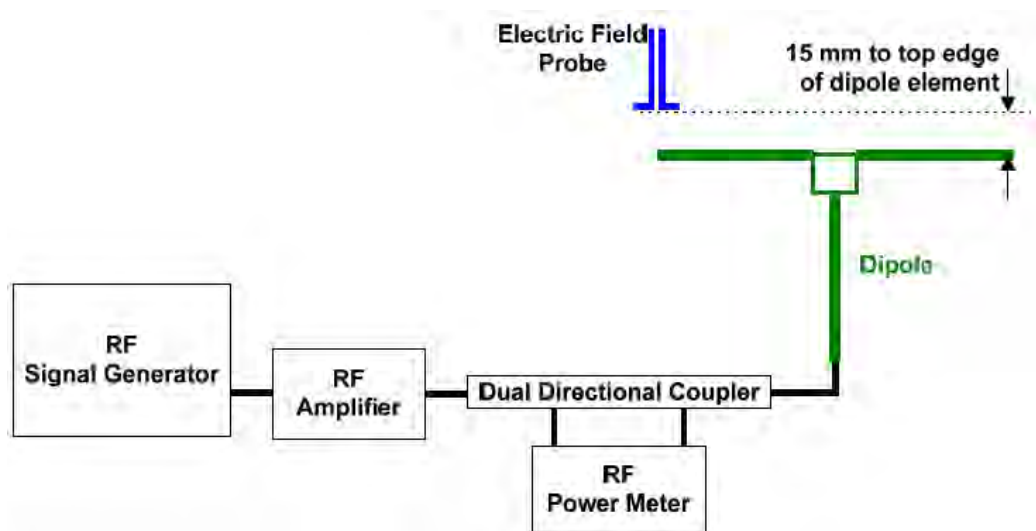


Fig. 4 Dipole Validation Setup

8.2 Validation Result

| E-Field Scan | | | | | | |
|--------------|-----------------|------------------|----------------------------------|--------------------------------|----------------------------|------------------------|
| Mode | Frequency (MHz) | Input Power (mW) | Measured ¹ Value(V/m) | Target ² Value(V/m) | Deviation ³ (%) | Limit ⁴ (%) |
| CW | 835 | 100 | 112.00 | 113.40 | -1.23 | ± 18 |
| CW | 1880 | 100 | 90.40 | 87.20 | 3.67 | ± 18 |
| CW | 3500 | 100 | 77.10 | 84.10 | -8.32 | ± 18 |

Notes:

1. Please refer to the attachment for detailed measurement data and plot.
2. Target value is provided by SPEAG in the calibration certificate of specific dipoles.
3. Deviation (%) = $100 \times (\text{Measured value minus Target value}) \div \text{Target value}$.
4. ANSI C63.19 requires values within ± 18% are acceptable, of which 12% is deviation and 13% is measurement uncertainty. Values independently validated for the dipole actually used in the measurements should be used, when available.

9 Evaluation of MIF

9.1 Introduction

The HAC Standard ANSI C63.19-2019 defines the MIF as a scaling factor to evaluate the Radio Frequency Audio Interference Level (RFail). It is applicable to any modulation scheme. The MIF (in dB) is added to the measured averaged E-field (in dBV /m) to obtain the RFail (also in dBV/m) which defines the audible amplitude of the measured RF signal strength. The RFail is then compared to the associated qualification level.

The MIF is defined in section D.7 of the ANSI C63.19-2019 as the interference potential of a signal to its steady state RMS signal level or average power level. This factor is a function only of the audio frequency amplitude modulation characteristics of the signal and is the same for field strength or conducted power measurements. The modulated signal is processed as described below:

- The full signal bandwidth is presented to a wideband square law detector which demodulates the signal.
- The baseband signal (after demodulation) is presented to a spectral weighting filter which is normalized to 1 kHz. The filter frequency response is shown in Section D.4 of the ANSI C63.19-2019 standard.
- The spectral weighted signal is presented to a temporal weighting filter consisting of rapid Root Mean Square (RMS) level detection followed by peak detection with a 550 ms decay time.

- The MIF is calculated as
$$\frac{10 \cdot \log_{10}(\text{filtered signal})}{1.154 \cdot \text{RMS of demodulated signal}}$$

Measurements of the MIF value are conducted using the MAIA designed by SPEAG. The resulting deviations from the simulated values are within the requirements of the HAC standard.

MAIA is a hardware interface for evaluating the modulation and audio interference characteristics of RF signals in the frequency range 698–6000 MHz. It uses USB-powered active electronics to identify the modulation of the DUT. It can be operated with the over-the-air interface using the built-in ultra-broadband planar log spiral antenna (698–6000 MHz) or in the conducted mode using the coaxial SMA 50W connector (300–6000 MHz).



Fig. 5 MAIA View

9.2 DUT MIF results

Based on the KDB285076D01v06r02, the handset can also use the MIF values predetermined by the test equipment manufacturer. MIF values applied in this test report were provided by the HAC equipment provider of SPEAG, and the worst values for all air interface are listed below.

| Typical MIF levels in ANSI C63.19-2019 | |
|---|--------------------------------|
| Transmission protocol | Modulation interference factor |
| GSM-FDD (TDMA, GMSK) | +3.63 dB |
| EDGE-FDD (TDMA, 8PSK, TN 0-1) | +1.23dB |
| EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | -0.52dB |
| EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | -1.82dB |
| UMTS-FDD(WCDMA, AMR) | -25.43dB |
| UMTS-FDD (HSPA+) | -20.39dB |
| LTE-FDD (SC-FDMA, 1RB, 20MHz, QPSK) | -15.63 dB |
| LTE-FDD (SC-FDMA, 1RB, 20MHz, 16QAM) | -9.76 dB |
| LTE-FDD (SC-FDMA, 1RB, 20MHz, 64QAM) | -9.93 dB |
| LTE-TDD (SC-FDMA, 1RB, 20MHz, QPSK) | -1.62 dB |
| LTE-TDD (SC-FDMA, 1RB, 20MHz, 16QAM) | -1.44 dB |
| LTE-TDD (SC-FDMA, 1RB, 20MHz, 64QAM) | -1.54 dB |
| LTE-TDD(SC-FDMA,1RB,20MHz,QPSK,UL Subframe=2,3,4,7,8,9) | -3.41 dB |
| LTE-TDD(SC-FDMA,1RB,20MHz,16QAM,UL Subframe=2,3,4,7,8,9) | -3.17 dB |
| LTE-TDD(SC-FDMA,1RB,20MHz,64QAM,UL Subframe=2,3,4,7,8,9) | -3.31 dB |

| | |
|---|-----------|
| IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | -5.90 dB |
| IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps) | -5.17 dB |
| IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps) | -3.37 dB |
| IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps) | -2.02 dB |
| IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | -0.36dB |
| IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK) | -15.80 dB |
| IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | -5.82 dB |
| IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle) | -12.23dB |
| 5G NR (DFT-s-OFDM, 1RB, 100 MHz, QPSK, 30 kHz) | -1.64dB |
| 5G NR (CP-OFDM, 1RB, 20 MHz, QPSK, 15 kHz) | -1.65dB |
| 5G NR (DFT-s-OFDM, 1RB, 20 MHz, QPSK, 15 kHz) | -15.06dB |
| 5G NR (CP-OFDM, 1RB, 5 MHz, QPSK, 15 kHz) | -12.18dB |
| 5G NR (CP-OFDM, 1RB, 10 MHz, QPSK, 15 kHz) | -12.26dB |
| 5G NR (CP-OFDM, 1RB, 15 MHz, QPSK, 15 kHz) | -12.08dB |
| 5G NR (CP-OFDM, 1RB, 20 MHz, QPSK, 15 kHz) | -12.20dB |
| 5G NR (CP-OFDM, 1RB, 5 MHz, QPSK, 30 kHz) | -14.39dB |
| 5G NR (CP-OFDM, 1RB, 10 MHz, QPSK, 30 kHz) | -14.47dB |
| 5G NR (CP-OFDM, 1RB, 15 MHz, QPSK, 30 kHz) | -14.33dB |
| 5G NR (CP-OFDM, 1RB, 20 MHz, QPSK, 30 kHz) | -14.46dB |
| 5G NR (CP-OFDM, 1RB, 25 MHz, QPSK, 30 kHz) | -14.35dB |
| 5G NR (CP-OFDM, 1RB, 30 MHz, QPSK, 30 kHz) | -14.32dB |
| 5G NR (CP-OFDM, 1RB, 40 MHz, QPSK, 30 kHz) | -14.32dB |
| 5G NR (CP-OFDM, 1RB, 50 MHz, QPSK, 30 kHz) | -14.55dB |
| 5G NR (CP-OFDM, 1RB, 60 MHz, QPSK, 30 kHz) | -14.45dB |
| 5G NR (CP-OFDM, 1RB, 80 MHz, QPSK, 30 kHz) | -14.47dB |
| 5G NR (CP-OFDM, 1RB, 90 MHz, QPSK, 30 kHz) | -14.43dB |
| 5G NR (CP-OFDM, 1RB, 100 MHz, QPSK, 30 kHz) | -14.38dB |
| 5G NR (DFT-s-OFDM, 1RB, 5 MHz, QPSK, 15 kHz) | -15.06dB |
| 5G NR (DFT-s-OFDM, 1RB, 10 MHz, QPSK, 15 kHz) | -15.06dB |
| 5G NR (DFT-s-OFDM, 1RB, 15 MHz, QPSK, 15 kHz) | -15.06dB |
| 5G NR (DFT-s-OFDM, 1RB, 20 MHz, QPSK, 15 kHz) | -15.06dB |

10 Evaluation of RF Audio Interference Power Level

According to ANSIC 63.19-2019, the WD's conducted power must be at or below either the stated RF_{AIPL} (Table 13-1) or the stated peak power level (Table 13-2), or the average near-field emissions over the measurement area must be at or below the stated RF_{AIL} (Table 13-3), or the stated peak field strength (Table 13-4). The WD may demonstrate compliance by meeting any of these four requirements, but it must do so in each of its operating bands at its established worst-case normal speech-mode operating condition. This chapter will evaluate the RF audio interference power level of WD.

| Bands | Average Power _{max} (dBm) | MIF _{worst} (dB) | Power + MIF | C63.19 Lowest RF_{AIPL} (dBm) | Compliance |
|-------------|------------------------------------|---------------------------|-------------|---------------------------------|--------------|
| GSM 850 | 34 | 3.63 | 37.63 | 29 | To be tested |
| GSM 1900 | 31 | 3.63 | 34.63 | 26 | To be tested |
| WCDMA 850 | 25.5 | -20.39 | 5.11 | 29 | PASS |
| WCDMA 1700 | 25.5 | -20.39 | 5.11 | 26 | PASS |
| WCDMA 1900 | 25.5 | -20.39 | 5.11 | 26 | PASS |
| LTE Band2 | 25 | -9.76 | 15.24 | 26 | PASS |
| LTE Band4 | 25 | -9.76 | 15.24 | 26 | PASS |
| LTE Band5 | 25 | -9.76 | 15.24 | 29 | PASS |
| LTE Band7 | 24 | -9.76 | 14.24 | 25 | PASS |
| LTE Band12 | 25 | -9.76 | 15.24 | 29 | PASS |
| LTE Band25 | 25 | -9.76 | 15.24 | 26 | PASS |
| LTE Band26 | 25 | -9.76 | 15.24 | 29 | PASS |
| LTE Band41 | 26.5 | -1.62 | 24.88 | 25 | PASS |
| LTE Band66 | 25 | -9.76 | 15.24 | 26 | PASS |
| LTE Band71 | 25 | -9.76 | 15.24 | 26 | PASS |
| NR n25 | 25 | -1.64 | 23.36 | 26 | PASS |
| NR n41 | 26.5 | -1.64 | 24.86 | 25 | PASS |
| NR n66 | 25 | -1.64 | 23.36 | 26 | PASS |
| NR n71 | 25 | -1.64 | 23.36 | 29 | PASS |
| NR n77 | 27 | -1.64 | 25.36 | 25 | To be tested |
| WLAN 2.4GHz | 22 | -0.36 | 21.64 | 25 | PASS |
| WLAN 5GHz | 20 | -5.82 | 14.18 | 25 | PASS |

According to the above table, the RF_{AIPL} for WCDMA, LTE, WIFI and NR FDD are less than the stated RF_{AIPL} (Table 13.1). Near field emission testing is required for the GSM and NR TDD bands.

11 Near-field Emission Test Procedures

The evaluation was performed with the following procedure:

- 1) Confirm proper operation of the field probe, probe measurement system and other instrumentation and the positioning system.
- 2) Position the WD in its intended test position. The gauge block can simplify this positioning.
- 3) Set the WD to transmit a fixed and repeatable combination of signal power and modulation characteristic that is representative of the worst case (highest interference potential) encountered in normal use. Transiently occurring start-up, changeover, or termination conditions, or other operations likely to occur less than 1% of the time during normal operation, may be excluded from consideration.
- 4) The measurement area shall be centered on the acoustic output or the T-Coil mode measurement reference point, as appropriate. Locate the field probe at the initial test position in the 50 mm by 50 mm measurement area, which is contained in the measurement plane. If the field alignment method is used, align the probe for maximum field reception
- 5) Record the reading at the output of the measurement system.
- 6) Scan the entire 50 mm by 50 mm measurement area in equally spaced step sizes and record the reading at each measurement point.
- 7) Calculate the average of the measurements taken in Step 6)
- 8) The RF audio interference level in dB(V/m) is obtained by adding the Modulation Interference Factor (in decibels) to the average steady state rms field strength reading over the measurement area, in dB(V/m)
- 9) Compare this RF audio interference level to the limits in ANSI C63.19-2019 clause 4.7 and record the result.

12 Near-field Emission Test Results

| Bands | Frequency (MHz) | Channel | RFail (dBV/m) | Compliance |
|--------------------------|--------------------|---------|------------------|---------------------------|
| GSM 850 ANT0 | 848.8 | 251 | 33.57 | PASS |
| | 836.6 | 190 | 34.68 | PASS (see Fig B.1) |
| | 824.2 | 128 | 33.73 | PASS |
| GSM 850 ANT3 | 848.8 | 251 | 32.16 | PASS |
| | 836.6 | 190 | 32.18 | PASS |
| | 824.2 | 128 | 32.31 | PASS (see Fig B.2) |
| GSM 1900 ANT1 | 1909.8 | 810 | 25.08 | PASS |
| | 1880 | 661 | 25.54 | PASS |
| | 1850.2 | 512 | 25.91 | PASS (see Fig B.3) |
| GSM 1900 ANT3 | 1909.8 | 810 | 34.46 | PASS |
| | 1880 | 661 | 34.59 | PASS (see Fig B.4) |
| | 1850.2 | 512 | 34.57 | PASS |
| NR N77 ANT4 | 3350.01 | 623334 | 30.03 | PASS |
| | 3750 | 650000 | 34.55 | PASS (see Fig B.5) |
| | 4149.99 | 676666 | 32.41 | PASS |

13 ANSIC 63.19-2019 Limits

13-1 Wireless device RF audio interference power level

| Frequency range (MHz) | RF _{AIPL} (dBm) |
|--------------------------|-----------------------------|
| <960 | 29 |
| 960–2000 | 26 |
| >2000 | 25 |

13-2 Wireless device RF peak power level

| Frequency range (MHz) | RF _{Peak Power} (dBm) |
|--------------------------|-----------------------------------|
| <960 | 35 |
| 960–2000 | 32 |
| >2000 | 31 |

13-3 Wireless device RF audio interference level

| Frequency range (MHz) | RF _{AIL} [dB(V/m)] |
|--------------------------|--------------------------------|
| <960 | 39 |
| 960–2000 | 36 |
| >2000 | 35 |

13-4 Wireless device RF peak near-field level

| Frequency range (MHz) | RF _{Peak} [dB(V/m)] |
|--------------------------|---------------------------------|
| <960 | 45 |
| 960–2000 | 42 |
| >2000 | 41 |

14 Measurement Uncertainty

| Error Description | Uncert. value | Prob. Dist. | Div. | (ci) Eav | Std. Unc. E |
|---|---------------|-------------|------|----------|----------------|
| Measurement System | | | | | |
| Probe Calibration | ±5.1 % | N | 1 | 1 | ±5.1 % |
| Axial Isotropy | ±4.7 % | R | √3 | 1 | ±2.7 % |
| Sensor Displacement | ±7.2 % | R | √3 | 0.5 | ±2.1 % |
| Boundary Effects | ±2.4 % | R | √3 | 1 | ±1.4 % |
| Phantom Boundary Effect | ±7.2 % | R | √3 | 1 | ±4.2 % |
| Probe Linearity | ±4.7 % | R | √3 | 1 | ±2.7 % |
| Scaling to Peak Power with MIF | ±10.0 % | R | √3 | 1 | ±5.8 % |
| System Detection Limit | ±1.0 % | R | √3 | 1 | ±0.6 % |
| Readout Electronics | ±0.3 % | N | 1 | 1 | ±0.3 % |
| Response Time | ±0.8 % | R | √3 | 0 | ±0 % |
| Integration Time | ±2.6 % | R | √3 | 0 | ±0 % |
| RF Ambient Conditions | ±3.0 % | R | √3 | 1 | ±1.7 % |
| RF Reflections | ±12.0 % | R | √3 | 1 | ±6.9 % |
| Probe Positioner | ±1.2 % | R | √3 | 1 | ±0.7 % |
| Probe Positioning | ±3.0 % | R | √3 | 1 | ±1.7 % |
| Extrapolation and Interpolation | ±1.0 % | R | √3 | 1 | ±0.6 % |
| Test Sample Related | | | | | |
| Device Positioning Vertical | ±4.7 % | R | √3 | 1 | ±2.7 % |
| Device Positioning Lateral | ±1.0 % | R | √3 | 1 | ±0.6 % |
| Device Holder and Phantom | ±2.4 % | R | √3 | 1 | ±1.4 % |
| Power Drift | ±5.0 % | R | √3 | 1 | ±2.9 % |
| Phantom and Setup Related | | | | | |
| Phantom Thickness | ±2.4 % | R | √3 | 1 | ±1.4 % |
| Combined Std. Uncertainty | | | | | ±13.2 % |
| Expanded Std. Uncertainty on Power | | | | | ±26.4 % |
| Expanded Std. Uncertainty on Field | | | | | ±13.2 % |

15 Main Test Instruments

Table 1: List of Main Instruments

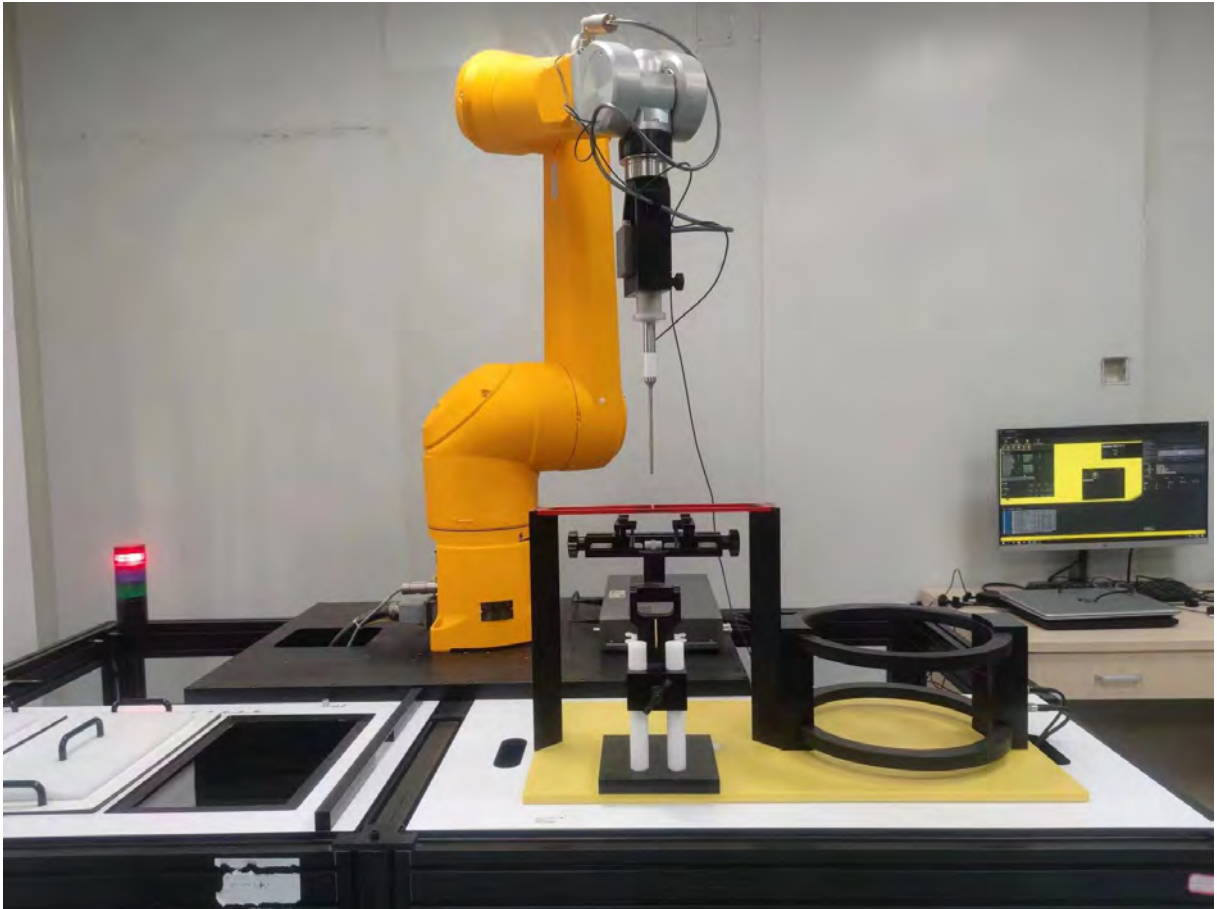
| No. | Name | Type | Serial Number | Calibration Date | Valid Period |
|-----|------------------|---------------|---------------|--------------------------|--------------|
| 01 | Signal Generator | E4483C | MY49070393 | May 15, 2023 | One Year |
| 02 | Power meter | NRP2 | 106276 | May 15, 2023 | One year |
| 03 | Power sensor | NRP6A | 101369 | | |
| 04 | Amplifier | 60S1G4 | 0331848 | No Calibration Requested | |
| 05 | E-Field Probe | EF3DV3 | 4060 | May 24, 2023 | One year |
| 06 | DAE | SPEAG DAE4 | 1524 | October 20, 2023 | One year |
| 07 | HAC Dipole | CD835V3 | 1023 | August 15, 2023 | One year |
| 08 | HAC Dipole | CD1880V3 | 1018 | August 15, 2023 | One year |
| 09 | HAC Dipole | CD3500V3 | 1008 | August 16, 2023 | One year |
| 10 | BTS | CMW500 | 166370 | July 4, 2023 | One year |
| 11 | AIA | SE UMS 170 CB | 1029 | No Calibration Requested | |

16 Conclusion

The HAC measurement indicates that the EUT complies with the HAC limits of the ANSIC63.19-2019. It is comprehensively determined as **PASS**

END OF REPORT BODY

ANNEX A TEST LAYOUT



Picture A1:HAC RF System Layout

ANNEX B TEST PLOTS

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4080 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|----------------------------|---------|-----------------|
| GSM 850 | GSM-FDD (TDMA, GMSK) | 190 | 836.6 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

Results

| E _{max} [dB(V/m)] | E _{avg50x50 max} [dB(V/m)] | MIF [dB] | R _{Fail} [dB(V/m)] |
|----------------------------|-------------------------------------|----------|-----------------------------|
| 32.36 | 31.05 | 3.63 | 34.68 |

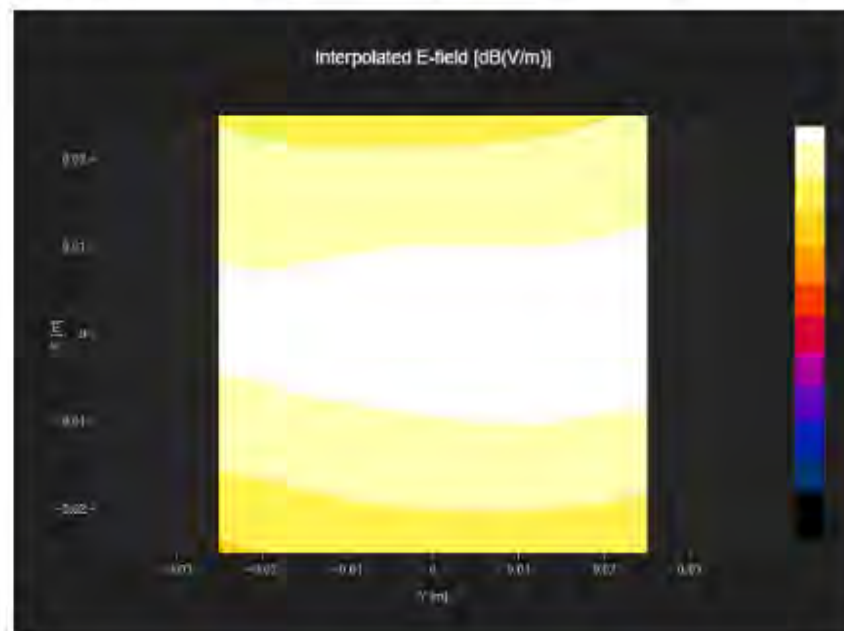


Fig B.1 GSM 850 ANT0

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4060 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|----------------------------|---------|-----------------|
| GSM 850 | GSM-FDD (TDMA, GMSK) | 128 | 824.2 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

Results

| E _{max} [dB(V/m)] | E _{avg50x50 max} [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|----------------------------|-------------------------------------|----------|-----------------|
| 32.36 | 28.68 | 3.63 | 32.31 |

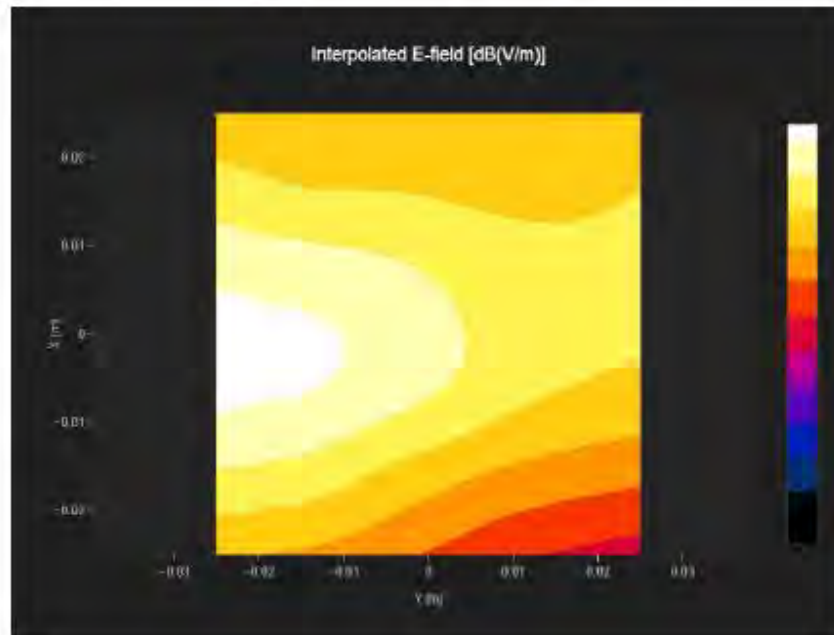


Fig B.2 GSM 850 ANT3

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4080 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|----------------------------|---------|-----------------|
| PCS 1900 | GSM-FDD (TDMA, GMSK) | 512 | 1850.2 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

Results

| E _{max} [dB(V/m)] | E _{avg50x50 max} [dB(V/m)] | MIF [dB] | R _{Fail} [dB(V/m)] |
|----------------------------|-------------------------------------|----------|-----------------------------|
| 25.37 | 22.28 | 3.63 | 25.91 |

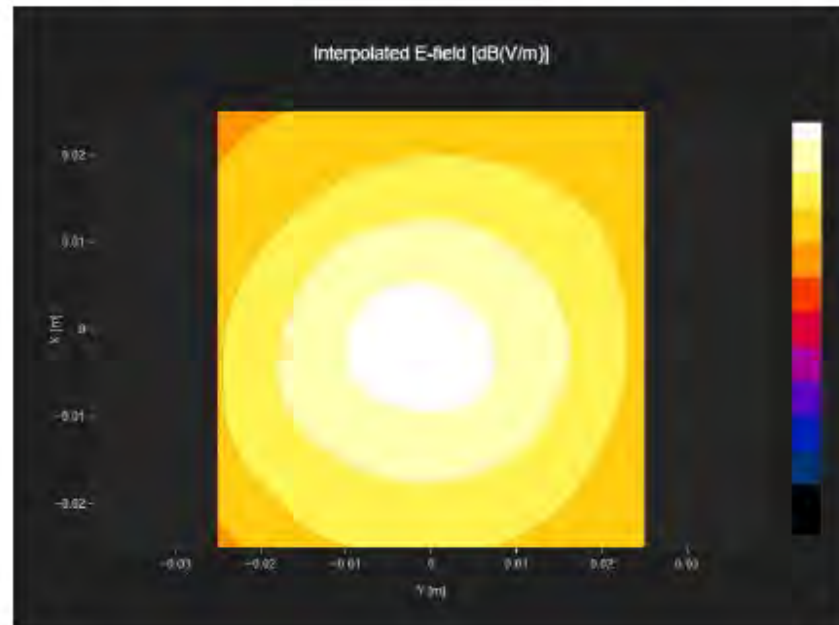


Fig B.3 GSM 1900 ANT1

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4080 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|----------------------------|---------|-----------------|
| PCS 1900 | GSM-FDD (TDMA, GMSK) | 861 | 1880.0 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

Results

| E _{max} [dB(V/m)] | E _{avg50x50 max} [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|----------------------------|-------------------------------------|----------|-----------------|
| 33.94 | 30.96 | 3.63 | 34.59 |

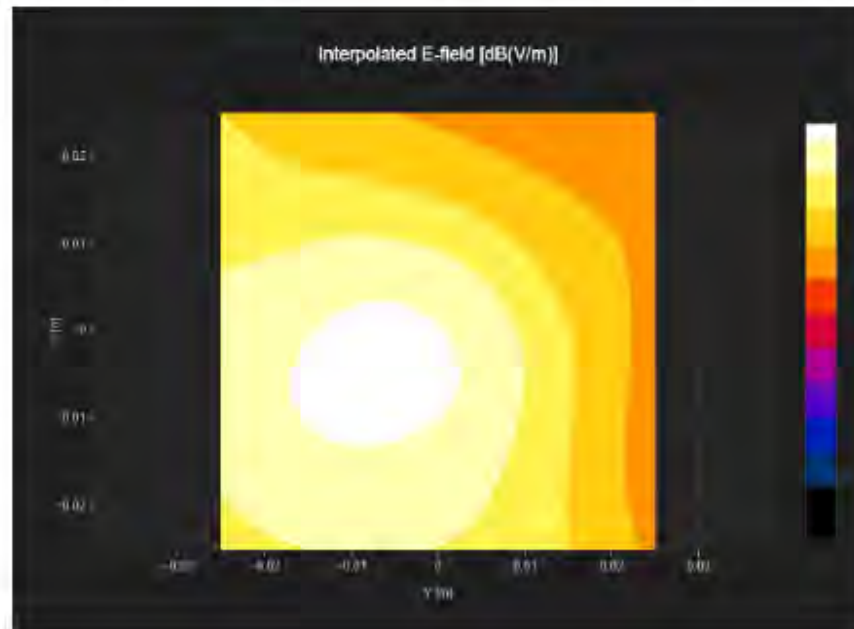


Fig B.4 GSM 1900 ANT3

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4080 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|---|---------|-----------------|
| Band n77 | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 850000 | 3750.0 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 50.0 | 50.0 | 10.0 | 10.0 | 15.0 |

Results

| E _{max} [dB(V/m)] | E _{avg50x50 max} [dB(V/m)] | MIF [dB] | RFail [dB(V/m)] |
|----------------------------|-------------------------------------|----------|-----------------|
| 40.18 | 36.19 | -1.64 | 34.55 |

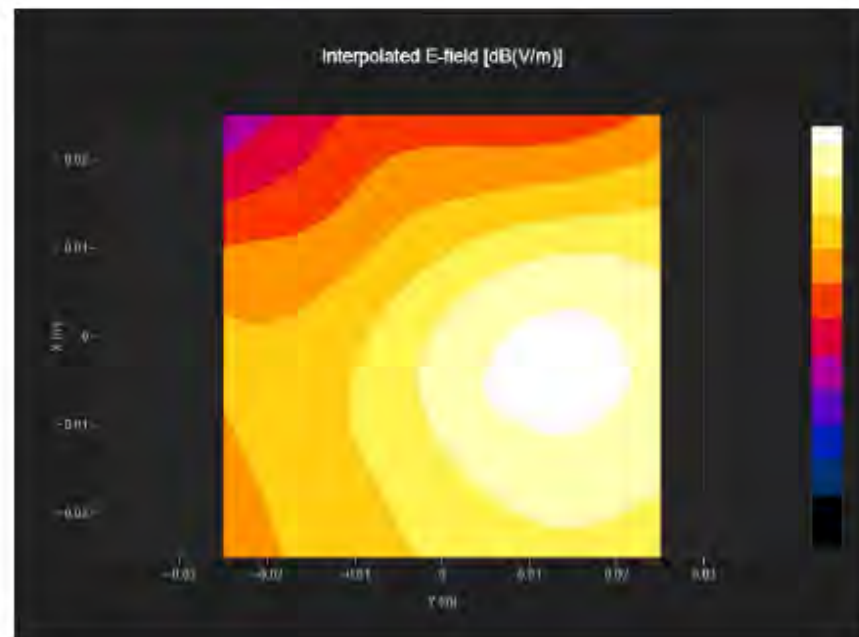


Fig B.5 NR N77 ANT4

ANNEX C SYSTEM VALIDATION RESULT

E SCAN of Dipole 835 MHz

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4060 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

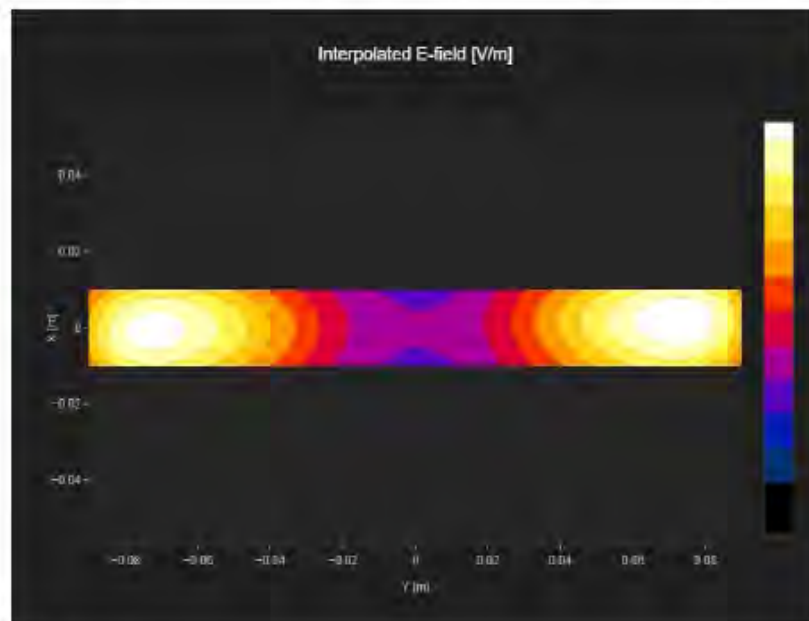
| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|----------------------------|---------|-----------------|
| CD835 | CW | 50 | 835.0 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 20.0 | 180.0 | 5.0 | 5.0 | 15.0 |

Results

| Dipole Type | Dipole Serial Number | E _{max} [V/m] | Drift [dB] |
|-------------|----------------------|------------------------|------------|
| CD835 | XXXX | 112 | 0.14 |



E SCAN of Dipole 1880 MHz

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4060 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

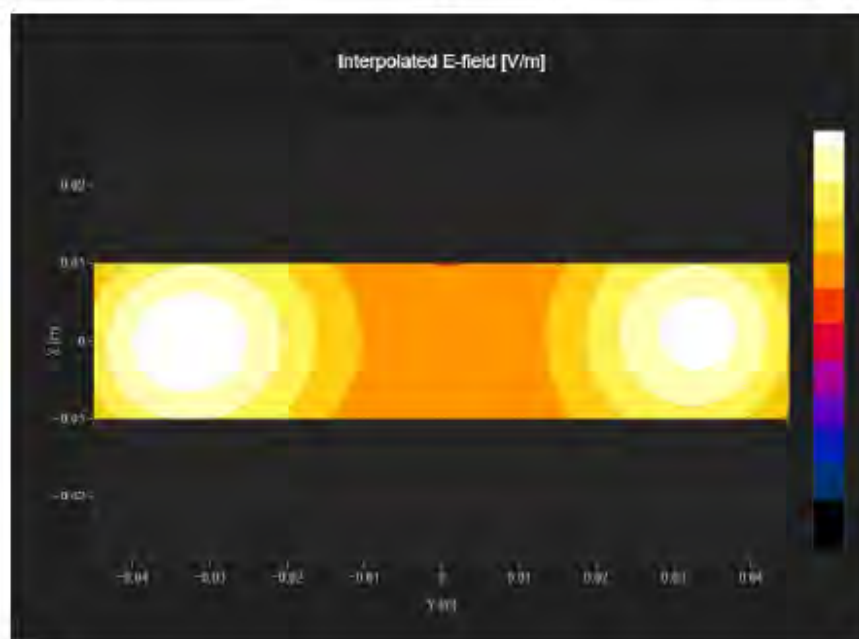
| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|----------------------------|---------|-----------------|
| CD1880 | CW | 0 | 1730.0 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 20.0 | 90.0 | 5.0 | 5.0 | 15.0 |

Results

| Dipole Type | Dipole Serial Number | E _{max} [V/m] | Drift [dB] |
|-------------|----------------------|------------------------|------------|
| CD1880 | XXXX | 90.4 | -0.0 |



E SCAN of Dipole 3500 MHz

Hardware Setup

| Probe Name | Probe Calibration Date | DAE Name | DAE Calibration Date |
|-----------------|------------------------|-------------|----------------------|
| EF3DV3 - SN4060 | May 24, 2023 | DAE4 Sn1524 | October 20, 2023 |

Communication Systems

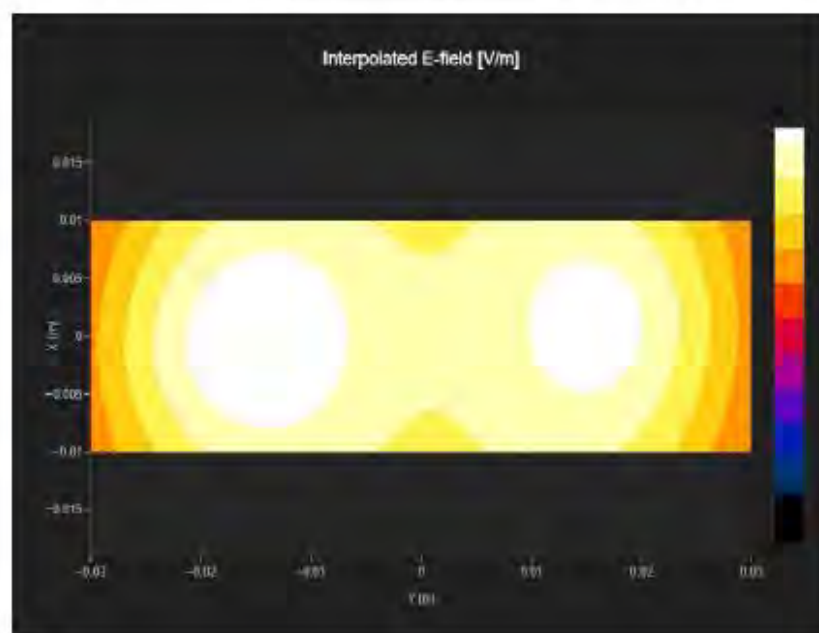
| Band Name | Communication Systems Name | Channel | Frequency [MHz] |
|-----------|----------------------------|---------|-----------------|
| CD3500V3 | CW | 50 | 3500.0 |

Grid Settings

| Extent X [mm] | Extent Y [mm] | Step X [mm] | Step Y [mm] | Distance [mm] |
|---------------|---------------|-------------|-------------|---------------|
| 20.0 | 60.0 | 5.0 | 5.0 | 15.0 |

Results

| Dipole Type | Dipole Serial Number | E _{max} [V/m] | Drift [dB] |
|-------------|----------------------|------------------------|------------|
| CD3500 | XXXX | 77.1 | -0.02 |



ANNEX D PROBE CALIBRATION CERTIFICATE

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



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

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

Accreditation No.: **SCS 0108**

Client **CTTL**
Beijing

Certificate No. **EF-4060_May23**

CALIBRATION CERTIFICATE

Object **EF3DV3 - SN:4060**

Calibration procedure(s) **QA CAL-02.v9, QA CAL-25.v8**
Calibration procedure for E-field probes optimized for close near field
evaluations in air

Calibration date **May 24, 2023**



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

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

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards | ID | Cal Date (Certificate No.) | Scheduled Calibration |
|----------------------------|------------------|---------------------------------|-----------------------|
| Power meter NRP2 | SN: 104778 | 30-Mar-23 (No. 217-03804/03805) | Mar-24 |
| Power sensor NRP-Z91 | SN: 103244 | 30-Mar-23 (No. 217-03804) | Mar-24 |
| Power sensor NRP-Z91 | SN: 103245 | 30-Mar-23 (No. 217-03805) | Mar-24 |
| Reference 20 dB Attenuator | SN: CC2552 (20x) | 30-Mar-23 (No. 217-03809) | Mar-24 |
| DAE4 | SN: 789 | 03-Jan-23 (No. DAE4-789_Jan23) | Jan-24 |
| Reference Probe ER3DV6 | SN: 2328 | 06-Oct-22 (No. ER3-2328_Oct22) | Oct-23 |

| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
|-------------------------|------------------|-----------------------------------|------------------------|
| Power meter E4419B | SN: GB41293874 | 06-Apr-16 (in house check Jun-22) | In house check: Jun-24 |
| Power sensor E4412A | SN: MY41498087 | 06-Apr-16 (in house check Jun-22) | In house check: Jun-24 |
| Power sensor E4412A | SN: 000110210 | 06-Apr-16 (in house check Jun-22) | In house check: Jun-24 |
| RF generator HP 8648C | SN: US3642U01700 | 04-Aug-99 (in house check Jun-22) | In house check: Jun-24 |
| Network Analyzer E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-22) | In house check: Oct-24 |

| | Name | Function | Signature |
|---|-----------------|-----------------------|---|
| Calibrated by | Jeffrey Katzman | Laboratory Technician |  |
| Approved by | Sven Kühn | Technical Manager |  |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. | | | |
| Issued: May 24, 2023 | | | |

Calibration Laboratory of

Schmid & Partner
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland



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

Accredited by the Swiss Accreditation Service (SAS)

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

Accreditation No.: SCS 0108

Glossary

| | |
|------------------------|--|
| NORM _{x,y,z} | 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 |
| En | incident E-field orientation normal to probe axis |
| Ep | incident E-field orientation parallel to probe axis |
| Polarization φ | φ rotation around probe axis |
| Polarization θ | θ 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 |

Calibration is Performed According to the Following Standards:

- IEEE Std 1309-2005, "IEEE Standard for calibration of electromagnetic field sensors and probes, excluding antennas, from 9 kHz to 40 GHz", December 2005
- CTIA Test Plan for Hearing Aid Compatibility, Rev 3.1.1, May 2017

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}**: Assessed for E-field polarization $\theta = 0$ for XY sensors and $\theta = 90$ for Z sensor ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz in R22 waveguide).
- NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart).
- DCP_{x,y,z}**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; D_{x,y,z}; VR_{x,y,z}**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- Spherical isotropy (3D deviation from isotropy)**: in a locally homogeneous field realized using an open waveguide setup
- 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 NORM_x (no uncertainty required).

EF3DV3 - SN:4060

May 24, 2023

Parameters of Probe: EF3DV3 - SN:4060

Basic Calibration Parameters

| | Sensor X | Sensor Y | Sensor Z | Unc (k = 2) |
|--|----------|----------|----------|--------------|
| Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) | 0.79 | 0.74 | 1.28 | $\pm 10.1\%$ |
| DCP (mV) ^B | 96.0 | 99.0 | 96.0 | $\pm 4.7\%$ |

Calibration Results for Frequency Response (30 MHz – 5.8 GHz)

| Frequency MHz | Target E-field (En) V/m | Measured E-field (En) V/m | Deviation E-field (En) | Target E-field (Ep) V/m | Measured E-field (Ep) V/m | Deviation E-field (Ep) | Unc (k = 2) |
|---------------|-------------------------|---------------------------|------------------------|-------------------------|---------------------------|------------------------|-------------|
| 30 | 77.1 | 77.2 | 0.0% | 77.1 | 76.7 | -0.5% | $\pm 5.1\%$ |
| 100 | 76.9 | 78.0 | 1.4% | 76.9 | 78.1 | 1.5% | $\pm 5.1\%$ |
| 450 | 77.2 | 78.2 | 1.3% | 77.1 | 78.2 | 1.4% | $\pm 5.1\%$ |
| 600 | 77.1 | 77.7 | 0.8% | 77.1 | 77.8 | 0.9% | $\pm 5.1\%$ |
| 750 | 77.1 | 77.5 | 0.5% | 77.1 | 77.5 | 0.4% | $\pm 5.1\%$ |
| 1800 | 143.1 | 139.9 | -2.2% | 143.2 | 139.9 | -2.3% | $\pm 5.1\%$ |
| 2000 | 135.0 | 129.5 | -4.1% | 135.0 | 129.4 | -4.2% | $\pm 5.1\%$ |
| 2200 | 127.6 | 124.5 | -2.4% | 127.6 | 125.5 | -1.6% | $\pm 5.1\%$ |
| 2500 | 125.5 | 120.2 | -4.2% | 125.4 | 120.9 | -3.6% | $\pm 5.1\%$ |
| 3000 | 79.4 | 76.2 | -4.1% | 79.4 | 77.1 | -2.9% | $\pm 5.1\%$ |
| 3500 | 256.1 | 255.1 | -0.4% | 256.2 | 251.5 | -1.8% | $\pm 5.1\%$ |
| 3700 | 250.4 | 244.0 | -2.6% | 250.6 | 241.6 | -3.6% | $\pm 5.1\%$ |
| 5200 | 50.8 | 50.8 | 0.0% | 50.8 | 51.1 | 0.7% | $\pm 5.1\%$ |
| 5500 | 49.6 | 48.8 | -1.6% | 49.6 | 49.1 | -1.0% | $\pm 5.1\%$ |
| 5800 | 48.8 | 47.9 | -1.8% | 48.8 | 47.5 | -2.7% | $\pm 5.1\%$ |

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%.

^B Linearization parameter uncertainty for maximum specified field strength.

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

EF3DV3 - SN:4060

May 24, 2023

Parameters of Probe: EF3DV3 - SN:4060

Calibration Results for Modulation Response

| UID | Communication System Name | | A dB | B dB $\sqrt{\mu V}$ | C | D dB | VR mV | Max dev. | Max Unc ^E k = 2 |
|-------|-----------------------------|---|---------|------------------------|-------|---------|----------|-------------|----------------------------------|
| 0 | CW | X | 0.00 | 0.00 | 1.00 | 0.00 | 170.4 | $\pm 3.3\%$ | $\pm 4.7\%$ |
| | | Y | 0.00 | 0.00 | 1.00 | | 163.0 | | |
| | | Z | 0.00 | 0.00 | 1.00 | | 171.2 | | |
| 10352 | Pulse Waveform (200Hz, 10%) | X | 2.09 | 63.68 | 8.65 | 10.00 | 60.0 | $\pm 3.0\%$ | $\pm 9.6\%$ |
| | | Y | 3.02 | 67.16 | 10.44 | | 60.0 | | |
| | | Z | 2.32 | 64.82 | 9.38 | | 60.0 | | |
| 10353 | Pulse Waveform (200Hz, 20%) | X | 1.37 | 63.21 | 7.37 | 6.99 | 80.0 | $\pm 1.0\%$ | $\pm 9.6\%$ |
| | | Y | 1.65 | 64.91 | 8.54 | | 80.0 | | |
| | | Z | 1.59 | 64.51 | 8.20 | | 80.0 | | |
| 10354 | Pulse Waveform (200Hz, 40%) | X | 0.59 | 61.11 | 5.39 | 3.98 | 95.0 | $\pm 0.8\%$ | $\pm 9.6\%$ |
| | | Y | 0.81 | 63.31 | 6.95 | | 95.0 | | |
| | | Z | 0.72 | 62.40 | 6.27 | | 95.0 | | |
| 10355 | Pulse Waveform (200Hz, 60%) | X | 0.33 | 60.52 | 4.33 | 2.22 | 120.0 | $\pm 0.8\%$ | $\pm 9.6\%$ |
| | | Y | 0.44 | 62.39 | 5.87 | | 120.0 | | |
| | | Z | 0.45 | 62.08 | 5.26 | | 120.0 | | |
| 10387 | QPSK Waveform, 1 MHz | X | 1.82 | 70.10 | 16.42 | 1.00 | 150.0 | $\pm 2.5\%$ | $\pm 9.6\%$ |
| | | Y | 1.64 | 68.24 | 15.36 | | 150.0 | | |
| | | Z | 1.85 | 70.86 | 16.70 | | 150.0 | | |
| 10388 | QPSK Waveform, 10 MHz | X | 2.33 | 69.87 | 16.90 | 0.00 | 150.0 | $\pm 1.0\%$ | $\pm 9.6\%$ |
| | | Y | 2.16 | 68.46 | 16.04 | | 150.0 | | |
| | | Z | 2.33 | 70.07 | 17.03 | | 150.0 | | |
| 10396 | 64-QAM Waveform, 100 kHz | X | 2.27 | 69.05 | 18.68 | 3.01 | 150.0 | $\pm 2.2\%$ | $\pm 9.6\%$ |
| | | Y | 1.80 | 65.34 | 17.49 | | 150.0 | | |
| | | Z | 2.20 | 68.34 | 18.30 | | 150.0 | | |
| 10399 | 64-QAM Waveform, 40 MHz | X | 3.49 | 67.41 | 16.17 | 0.00 | 150.0 | $\pm 1.8\%$ | $\pm 9.6\%$ |
| | | Y | 3.37 | 66.77 | 15.70 | | 150.0 | | |
| | | Z | 3.48 | 67.47 | 16.22 | | 150.0 | | |
| 10414 | WLAN CCDF, 64-QAM, 40 MHz | X | 4.74 | 65.93 | 15.90 | 0.00 | 150.0 | $\pm 3.3\%$ | $\pm 9.6\%$ |
| | | Y | 4.64 | 65.55 | 15.57 | | 150.0 | | |
| | | Z | 4.72 | 66.00 | 15.96 | | 150.0 | | |

Note: For details on UID parameters see Appendix

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

^B Linearization parameter uncertainty for maximum specified field strength.

^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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Parameters of Probe: EF3DV3 - SN:4060

Sensor Frequency Model Parameters

| | Sensor X | Sensor Y | Sensor Z |
|----------------------|----------|----------|----------|
| Frequency Corr. (LF) | 0.14 | 0.22 | 4.61 |
| Frequency Corr. (HF) | 2.82 | 2.82 | 2.82 |

Sensor Model Parameters

| | C1 fF | C2 fF | α V ⁻¹ | T1 msV ⁻² | T2 msV ⁻¹ | T3 ms | T4 V ⁻² | T5 V ⁻¹ | T6 |
|---|----------|----------|-----------------------------|-------------------------|-------------------------|----------|-----------------------|-----------------------|------|
| x | 35.5 | 238.24 | 37.85 | 6.57 | 0.07 | 4.96 | 0.76 | 0.05 | 1.00 |
| y | 35.1 | 232.38 | 36.75 | 6.91 | 0.01 | 4.99 | 0.00 | 0.02 | 1.01 |
| z | 33.6 | 225.86 | 37.95 | 6.74 | 0.08 | 4.98 | 0.49 | 0.09 | 1.00 |

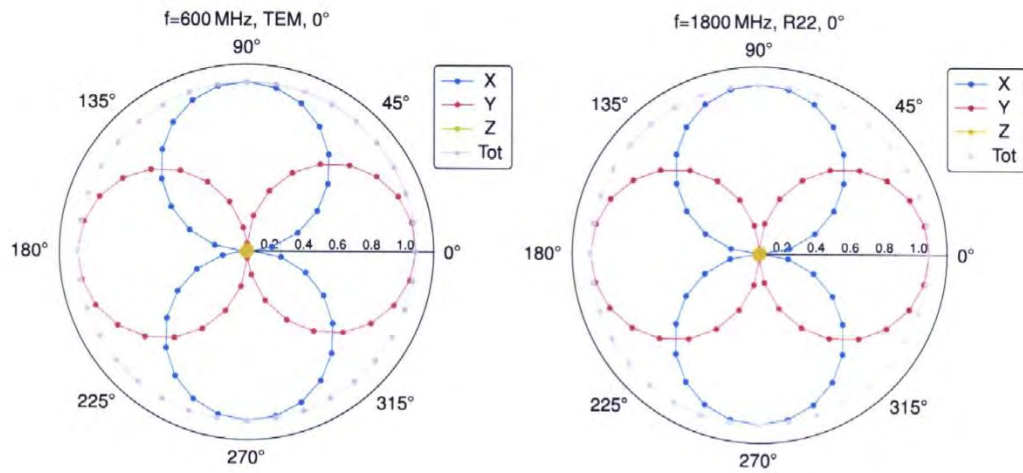
Other Probe Parameters

| | |
|---|-------------|
| Sensor Arrangement | Rectangular |
| Connector Angle | 145.2° |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 12 mm |
| Tip Length | 25 mm |
| Tip Diameter | 4 mm |
| Probe Tip to Sensor X Calibration Point | 1.5 mm |
| Probe Tip to Sensor Y Calibration Point | 1.5 mm |
| Probe Tip to Sensor Z Calibration Point | 1.5 mm |

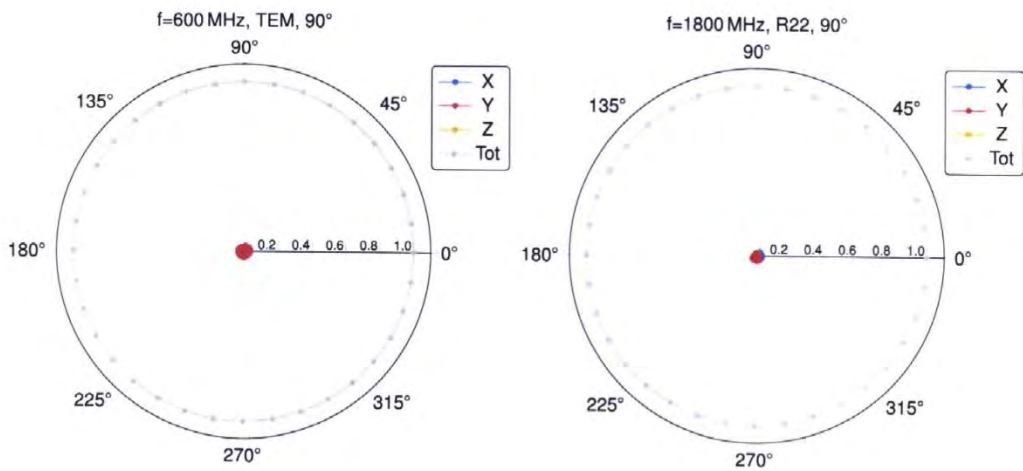
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Receiving Pattern (ϕ), $\theta = 0^\circ$



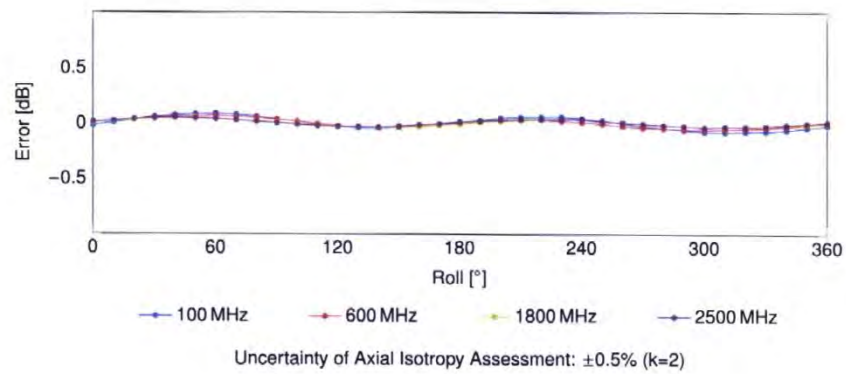
Receiving Pattern (ϕ), $\theta = 90^\circ$



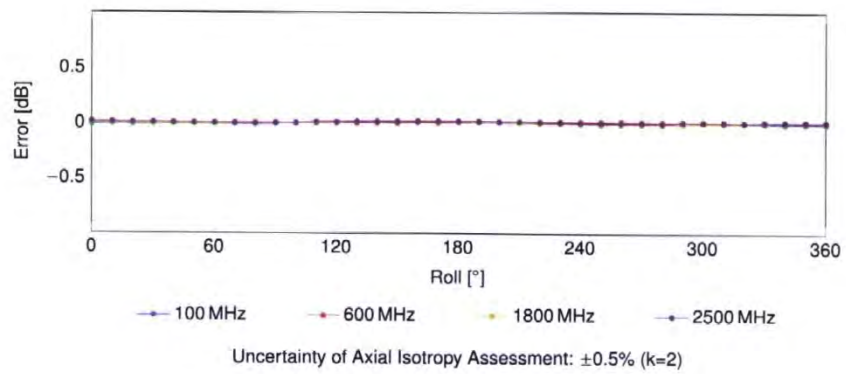
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Receiving Pattern (ϕ), $\theta = 0^\circ$



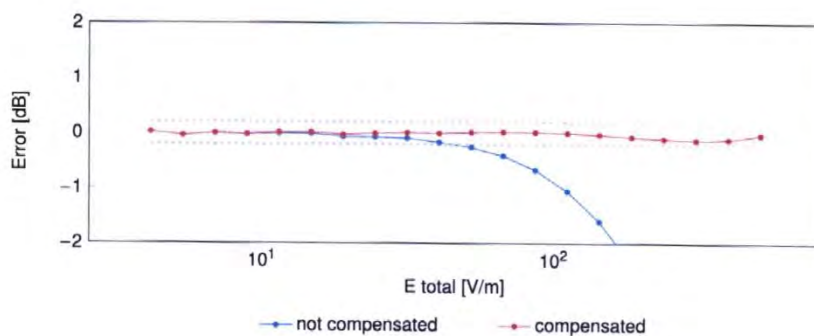
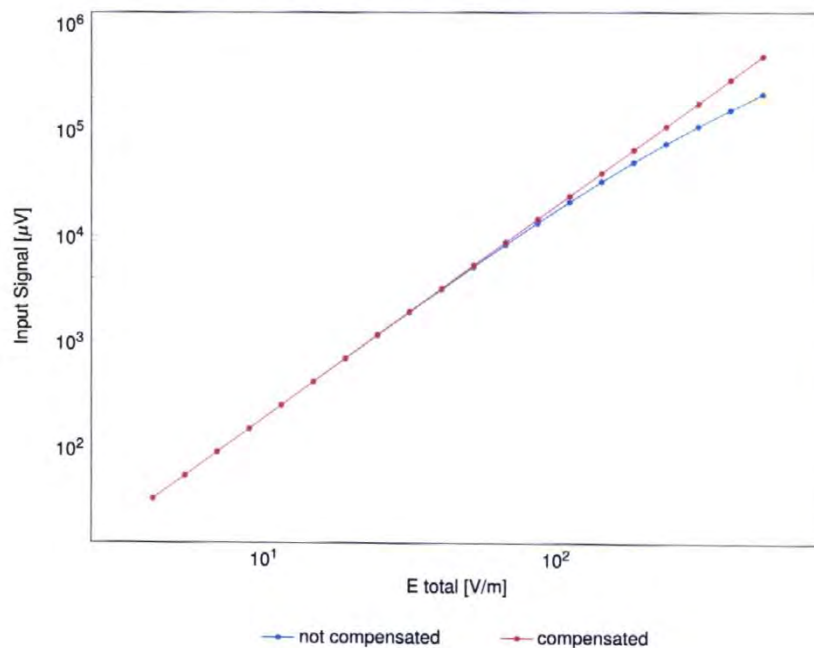
Receiving Pattern (ϕ), $\theta = 90^\circ$



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Dynamic Range f(E-field)

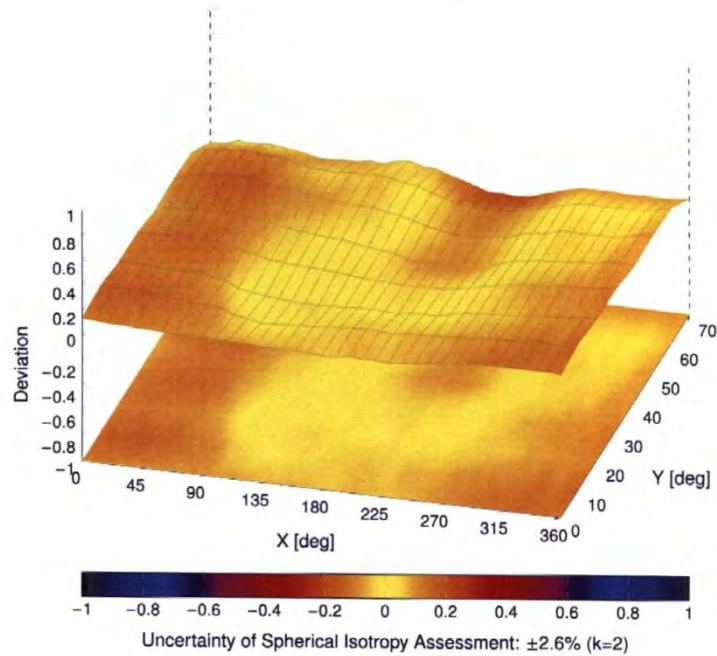
(TEM cell, $f_{eval} = 900\text{ MHz}$)

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

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Deviation from Isotropy in Air

Error (ϕ, θ), $f = 900\text{MHz}$



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Appendix: Modulation Calibration Parameters

| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|-------|-----|---|-----------|----------|------------------------|
| 0 | | CW | CW | 0.00 | ±4.7 |
| 10010 | CAB | SAR Validation (Square, 100 ms, 10 ms) | Test | 10.00 | ±9.6 |
| 10011 | CAC | UMTS-FDD (WCDMA) | WCDMA | 2.91 | ±9.6 |
| 10012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) | WLAN | 1.87 | ±9.6 |
| 10013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps) | WLAN | 9.46 | ±9.6 |
| 10021 | DAC | GSM-FDD (TDMA, GMSK) | GSM | 9.39 | ±9.6 |
| 10023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0) | GSM | 9.57 | ±9.6 |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1) | GSM | 6.56 | ±9.6 |
| 10025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0) | GSM | 12.62 | ±9.6 |
| 10026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1) | GSM | 9.55 | ±9.6 |
| 10027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2) | GSM | 4.80 | ±9.6 |
| 10028 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3) | GSM | 3.55 | ±9.6 |
| 10029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2) | GSM | 7.78 | ±9.6 |
| 10030 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1) | Bluetooth | 5.30 | ±9.6 |
| 10031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3) | Bluetooth | 1.87 | ±9.6 |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5) | Bluetooth | 1.16 | ±9.6 |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1) | Bluetooth | 7.74 | ±9.6 |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3) | Bluetooth | 4.53 | ±9.6 |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5) | Bluetooth | 3.83 | ±9.6 |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1) | Bluetooth | 8.01 | ±9.6 |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3) | Bluetooth | 4.77 | ±9.6 |
| 10038 | 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 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps) | WLAN | 8.68 | ±9.6 |
| 10063 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps) | WLAN | 8.63 | ±9.6 |
| 10064 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps) | WLAN | 9.09 | ±9.6 |
| 10065 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps) | WLAN | 9.00 | ±9.6 |
| 10066 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps) | WLAN | 9.38 | ±9.6 |
| 10067 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps) | WLAN | 10.12 | ±9.6 |
| 10068 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps) | WLAN | 10.24 | ±9.6 |
| 10069 | CAD | 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 |
| 10103 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | LTE-TDD | 9.29 | ±9.6 |
| 10104 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | LTE-TDD | 9.97 | ±9.6 |
| 10105 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | LTE-TDD | 10.01 | ±9.6 |
| 10108 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | LTE-FDD | 5.80 | ±9.6 |
| 10109 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10110 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | LTE-FDD | 5.75 | ±9.6 |
| 10111 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | LTE-FDD | 6.44 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|-------|-----|--|---------|----------|------------------------|
| 10112 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | LTE-FDD | 6.59 | ±9.6 |
| 10113 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | LTE-FDD | 6.62 | ±9.6 |
| 10114 | CAD | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 10115 | CAD | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM) | WLAN | 8.46 | ±9.6 |
| 10116 | CAD | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN | 8.15 | ±9.6 |
| 10117 | CAD | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK) | WLAN | 8.07 | ±9.6 |
| 10118 | CAD | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM) | WLAN | 8.59 | ±9.6 |
| 10119 | CAD | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM) | WLAN | 8.13 | ±9.6 |
| 10140 | 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 |
| 10154 | 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 |
| 10160 | 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 |
| 10162 | 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 |
| 10176 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10177 | CAJ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10178 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10179 | 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 | 6.50 | ±9.6 |
| 10181 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10182 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10183 | AAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10184 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10185 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | LTE-FDD | 6.51 | ±9.6 |
| 10186 | AAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10187 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10188 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10189 | AAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10193 | CAD | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK) | WLAN | 8.09 | ±9.6 |
| 10194 | CAD | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | WLAN | 8.12 | ±9.6 |
| 10195 | CAD | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | WLAN | 8.21 | ±9.6 |
| 10196 | CAD | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 10197 | CAD | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM) | WLAN | 8.13 | ±9.6 |
| 10198 | CAD | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM) | WLAN | 8.27 | ±9.6 |
| 10219 | CAD | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | WLAN | 8.03 | ±9.6 |
| 10220 | CAD | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM) | WLAN | 8.13 | ±9.6 |
| 10221 | CAD | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM) | WLAN | 8.27 | ±9.6 |
| 10222 | CAD | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK) | WLAN | 8.06 | ±9.6 |
| 10223 | CAD | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM) | WLAN | 8.48 | ±9.6 |
| 10224 | CAD | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM) | WLAN | 8.08 | ±9.6 |

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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, 15 MHz, 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 (SC-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, 5 MHz, 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 | CAC | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | WCDMA | 4.87 | ±9.6 |
| 10275 | CAC | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | WCDMA | 3.96 | ±9.6 |
| 10277 | CAA | PHS (QPSK) | PHS | 11.81 | ±9.6 |
| 10278 | CAA | 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 | AAB | CDMA2000, RC1, SO55, Full Rate | CDMA2000 | 3.91 | ±9.6 |
| 10291 | AAB | CDMA2000, RC3, SO55, Full Rate | CDMA2000 | 3.46 | ±9.6 |
| 10292 | AAB | CDMA2000, RC3, SO32, Full Rate | CDMA2000 | 3.39 | ±9.6 |
| 10293 | AAB | CDMA2000, RC3, SO3, Full Rate | CDMA2000 | 3.50 | ±9.6 |
| 10295 | AAB | 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 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10299 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | LTE-FDD | 6.39 | ±9.6 |
| 10300 | AAE | 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 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, 3 CTRL symbols) | WiMAX | 12.57 | ±9.6 |
| 10303 | AAA | IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC) | WiMAX | 12.52 | ±9.6 |
| 10304 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC) | WiMAX | 11.86 | ±9.6 |
| 10305 | AAA | 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 = 2 |
|-------|-----|---|----------|----------|------------------------|
| 10307 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols) | WiMAX | 14.49 | ±9.6 |
| 10308 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC) | WiMAX | 14.46 | ±9.6 |
| 10309 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols) | WiMAX | 14.58 | ±9.6 |
| 10310 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols) | WiMAX | 14.57 | ±9.6 |
| 10311 | AAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | LTE-FDD | 6.06 | ±9.6 |
| 10313 | AAA | IDEN 1:3 | IDEN | 10.51 | ±9.6 |
| 10314 | AAA | IDEN 1:6 | IDEN | 13.48 | ±9.6 |
| 10315 | AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle) | WLAN | 1.71 | ±9.6 |
| 10316 | AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10317 | AAD | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10352 | AAA | Pulse Waveform (200Hz, 10%) | Generic | 10.00 | ±9.6 |
| 10353 | AAA | Pulse Waveform (200Hz, 20%) | Generic | 6.99 | ±9.6 |
| 10354 | AAA | Pulse Waveform (200Hz, 40%) | Generic | 3.98 | ±9.6 |
| 10355 | AAA | Pulse Waveform (200Hz, 60%) | Generic | 2.22 | ±9.6 |
| 10356 | AAA | Pulse Waveform (200Hz, 80%) | Generic | 0.97 | ±9.6 |
| 10387 | AAA | QPSK Waveform, 1 MHz | Generic | 5.10 | ±9.6 |
| 10388 | AAA | QPSK Waveform, 10 MHz | Generic | 5.22 | ±9.6 |
| 10396 | AAA | 64-QAM Waveform, 100 kHz | Generic | 6.27 | ±9.6 |
| 10399 | AAA | 64-QAM Waveform, 40 MHz | Generic | 6.27 | ±9.6 |
| 10400 | AAE | IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 10401 | AAE | IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.60 | ±9.6 |
| 10402 | AAE | IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.53 | ±9.6 |
| 10403 | AAB | CDMA2000 (1xEV-DO, Rev. 0) | CDMA2000 | 3.76 | ±9.6 |
| 10404 | AAB | CDMA2000 (1xEV-DO, Rev. A) | CDMA2000 | 3.77 | ±9.6 |
| 10406 | AAB | CDMA2000, RC3, SO32, SCH0, Full Rate | CDMA2000 | 5.22 | ±9.6 |
| 10410 | 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 |
| 10414 | AAA | WLAN CCDF, 64-QAM, 40 MHz | Generic | 8.54 | ±9.6 |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle) | WLAN | 1.54 | ±9.6 |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle) | WLAN | 8.23 | ±9.6 |
| 10417 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle) | WLAN | 8.23 | ±9.6 |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble) | WLAN | 8.14 | ±9.6 |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble) | WLAN | 8.19 | ±9.6 |
| 10422 | AAC | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | WLAN | 8.32 | ±9.6 |
| 10423 | AAC | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | WLAN | 8.47 | ±9.6 |
| 10424 | AAC | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | WLAN | 8.40 | ±9.6 |
| 10425 | AAC | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK) | WLAN | 8.41 | ±9.6 |
| 10426 | AAC | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM) | WLAN | 8.45 | ±9.6 |
| 10427 | AAC | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | WLAN | 8.41 | ±9.6 |
| 10430 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) | LTE-FDD | 8.28 | ±9.6 |
| 10431 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) | LTE-FDD | 8.38 | ±9.6 |
| 10432 | AAD | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
| 10433 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
| 10434 | AAB | W-CDMA (BS Test Model 1, 64 DPCH) | WCDMA | 8.60 | ±9.6 |
| 10435 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 10447 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.56 | ±9.6 |
| 10448 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.53 | ±9.6 |
| 10449 | AAD | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.51 | ±9.6 |
| 10450 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.48 | ±9.6 |
| 10451 | AAB | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) | WCDMA | 7.59 | ±9.6 |
| 10453 | AAE | Validation (Square, 10 ms, 1 ms) | Test | 10.00 | ±9.6 |
| 10456 | AAC | IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle) | WLAN | 8.63 | ±9.6 |
| 10457 | AAB | UMTS-FDD (DC-HSDPA) | WCDMA | 6.62 | ±9.6 |
| 10458 | AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers) | CDMA2000 | 6.55 | ±9.6 |
| 10459 | AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | CDMA2000 | 8.25 | ±9.6 |
| 10460 | AAB | UMTS-FDD (WCDMA, AMR) | WCDMA | 2.39 | ±9.6 |
| 10461 | 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 |
| 10462 | 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 |
| 10463 | 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 |
| 10464 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 10465 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.32 | ±9.6 |
| 10466 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.57 | ±9.6 |
| 10467 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 10468 | 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 |
| 10469 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.56 | ±9.6 |
| 10470 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 10471 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.32 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|-------|-----|--|---------|----------|------------------------|
| 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 |
| 10474 | 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 |
| 10475 | 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 |
| 10477 | 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 |
| 10478 | 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 |
| 10479 | 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 |
| 10480 | 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 |
| 10481 | 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 |
| 10482 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.71 | ±9.6 |
| 10483 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.39 | ±9.6 |
| 10484 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.47 | ±9.6 |
| 10485 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.59 | ±9.6 |
| 10486 | 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 |
| 10487 | 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 |
| 10488 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.70 | ±9.6 |
| 10489 | 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 |
| 10490 | 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 |
| 10491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 10492 | 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 |
| 10493 | 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 |
| 10494 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 10495 | 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 |
| 10496 | 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 |
| 10497 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.67 | ±9.6 |
| 10498 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.40 | ±9.6 |
| 10499 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.68 | ±9.6 |
| 10500 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.67 | ±9.6 |
| 10501 | 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 |
| 10502 | 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 |
| 10503 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.72 | ±9.6 |
| 10504 | 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 |
| 10505 | 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 |
| 10506 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 10507 | 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 |
| 10508 | 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 |
| 10509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.99 | ±9.6 |
| 10510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.49 | ±9.6 |
| 10511 | 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 |
| 10512 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 7.74 | ±9.6 |
| 10513 | 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 |
| 10514 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.45 | ±9.6 |
| 10515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle) | WLAN | 1.58 | ±9.6 |
| 10516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle) | WLAN | 1.57 | ±9.6 |
| 10517 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle) | WLAN | 1.58 | ±9.6 |
| 10518 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle) | WLAN | 8.23 | ±9.6 |
| 10519 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle) | WLAN | 8.39 | ±9.6 |
| 10520 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle) | WLAN | 8.12 | ±9.6 |
| 10521 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle) | WLAN | 7.97 | ±9.6 |
| 10522 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 10523 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle) | WLAN | 8.08 | ±9.6 |
| 10524 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle) | WLAN | 8.27 | ±9.6 |
| 10525 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10526 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 10527 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle) | WLAN | 8.21 | ±9.6 |
| 10528 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10529 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10531 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle) | WLAN | 8.43 | ±9.6 |
| 10532 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 10533 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle) | WLAN | 8.38 | ±9.6 |
| 10534 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 10535 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 10536 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle) | WLAN | 8.32 | ±9.6 |
| 10537 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 10538 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 10540 | AAC | 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 $k = 2$ |
|-------|-----|---|-------|----------|--------------------------|
| 10541 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle) | WLAN | 8.46 | ±9.6 |
| 10542 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle) | WLAN | 8.65 | ±9.6 |
| 10543 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle) | WLAN | 8.65 | ±9.6 |
| 10544 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 10545 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle) | WLAN | 8.55 | ±9.6 |
| 10546 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle) | WLAN | 8.35 | ±9.6 |
| 10547 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 10548 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 10550 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle) | WLAN | 8.38 | ±9.6 |
| 10551 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc duty cycle) | WLAN | 8.50 | ±9.6 |
| 10552 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 10553 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 10554 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc duty cycle) | WLAN | 8.48 | ±9.6 |
| 10555 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 10556 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle) | WLAN | 8.50 | ±9.6 |
| 10557 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle) | WLAN | 8.52 | ±9.6 |
| 10558 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle) | WLAN | 8.61 | ±9.6 |
| 10560 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle) | WLAN | 8.73 | ±9.6 |
| 10561 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle) | WLAN | 8.56 | ±9.6 |
| 10562 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle) | WLAN | 8.69 | ±9.6 |
| 10563 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10564 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle) | WLAN | 8.25 | ±9.6 |
| 10565 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 10566 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle) | WLAN | 8.13 | ±9.6 |
| 10567 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle) | WLAN | 8.00 | ±9.6 |
| 10568 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 10569 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle) | WLAN | 8.10 | ±9.6 |
| 10570 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle) | WLAN | 8.30 | ±9.6 |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle) | WLAN | 1.99 | ±9.6 |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle) | WLAN | 1.99 | ±9.6 |
| 10573 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle) | WLAN | 1.98 | ±9.6 |
| 10574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle) | WLAN | 1.98 | ±9.6 |
| 10575 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle) | WLAN | 8.59 | ±9.6 |
| 10576 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle) | WLAN | 8.60 | ±9.6 |
| 10577 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 10578 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 10579 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10580 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle) | WLAN | 8.76 | ±9.6 |
| 10581 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle) | WLAN | 8.35 | ±9.6 |
| 10582 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle) | WLAN | 8.67 | ±9.6 |
| 10583 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle) | WLAN | 8.59 | ±9.6 |
| 10584 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle) | WLAN | 8.60 | ±9.6 |
| 10585 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 10586 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 10587 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 10588 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle) | WLAN | 8.76 | ±9.6 |
| 10589 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle) | WLAN | 8.35 | ±9.6 |
| 10590 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle) | WLAN | 8.67 | ±9.6 |
| 10591 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle) | WLAN | 8.63 | ±9.6 |
| 10592 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 10593 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle) | WLAN | 8.64 | ±9.6 |
| 10594 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10595 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10596 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.71 | ±9.6 |
| 10597 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle) | WLAN | 8.72 | ±9.6 |
| 10598 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle) | WLAN | 8.50 | ±9.6 |
| 10599 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 10600 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle) | WLAN | 8.88 | ±9.6 |
| 10601 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10602 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 10603 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle) | WLAN | 9.03 | ±9.6 |
| 10604 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle) | WLAN | 8.76 | ±9.6 |
| 10605 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle) | WLAN | 8.97 | ±9.6 |
| 10606 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10607 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle) | WLAN | 8.64 | ±9.6 |
| 10608 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^F k = 2 |
|-------|-----|--|-----------|----------|------------------------|
| 10609 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle) | WLAN | 8.57 | ±9.6 |
| 10610 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 10611 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle) | WLAN | 8.70 | ±9.6 |
| 10612 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10613 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 10614 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle) | WLAN | 8.59 | ±9.6 |
| 10615 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10616 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10617 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10618 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 10619 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle) | WLAN | 8.86 | ±9.6 |
| 10620 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle) | WLAN | 8.87 | ±9.6 |
| 10621 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10622 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle) | WLAN | 8.68 | ±9.6 |
| 10623 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle) | WLAN | 8.82 | ±9.6 |
| 10624 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle) | WLAN | 8.96 | ±9.6 |
| 10625 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle) | WLAN | 8.96 | ±9.6 |
| 10626 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10627 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle) | WLAN | 8.88 | ±9.6 |
| 10628 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle) | WLAN | 8.71 | ±9.6 |
| 10629 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | ±9.6 |
| 10630 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle) | WLAN | 8.72 | ±9.6 |
| 10631 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10632 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10633 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10634 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle) | WLAN | 8.80 | ±9.6 |
| 10635 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle) | WLAN | 8.81 | ±9.6 |
| 10636 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10637 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle) | WLAN | 8.79 | ±9.6 |
| 10638 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle) | WLAN | 8.86 | ±9.6 |
| 10639 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle) | WLAN | 8.85 | ±9.6 |
| 10640 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle) | WLAN | 8.98 | ±9.6 |
| 10641 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle) | WLAN | 9.06 | ±9.6 |
| 10642 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle) | WLAN | 9.06 | ±9.6 |
| 10643 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle) | WLAN | 8.89 | ±9.6 |
| 10644 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle) | WLAN | 9.05 | ±9.6 |
| 10645 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle) | WLAN | 9.11 | ±9.6 |
| 10646 | AAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7) | LTE-TDD | 11.96 | ±9.6 |
| 10647 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | LTE-TDD | 11.96 | ±9.6 |
| 10648 | AAA | CDMA2000 (1x Advanced) | CDMA2000 | 3.45 | ±9.6 |
| 10652 | AAF | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.91 | ±9.6 |
| 10653 | AAF | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.42 | ±9.6 |
| 10654 | AAE | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.96 | ±9.6 |
| 10655 | AAF | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.21 | ±9.6 |
| 10658 | AAB | Pulse Waveform (200Hz, 10%) | Test | 10.00 | ±9.6 |
| 10659 | AAB | Pulse Waveform (200Hz, 20%) | Test | 6.99 | ±9.6 |
| 10660 | AAB | Pulse Waveform (200Hz, 40%) | Test | 3.98 | ±9.6 |
| 10661 | AAB | Pulse Waveform (200Hz, 60%) | Test | 2.22 | ±9.6 |
| 10662 | AAB | Pulse Waveform (200Hz, 80%) | Test | 0.97 | ±9.6 |
| 10670 | AAA | Bluetooth Low Energy | Bluetooth | 2.19 | ±9.6 |
| 10671 | AAC | IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle) | WLAN | 9.09 | ±9.6 |
| 10672 | AAC | IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle) | WLAN | 8.57 | ±9.6 |
| 10673 | AAC | IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 10674 | AAC | IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle) | WLAN | 8.74 | ±9.6 |
| 10675 | AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle) | WLAN | 8.90 | ±9.6 |
| 10676 | AAC | IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10677 | AAC | IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle) | WLAN | 8.73 | ±9.6 |
| 10678 | AAC | IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle) | WLAN | 8.78 | ±9.6 |
| 10679 | AAC | IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle) | WLAN | 8.89 | ±9.6 |
| 10680 | AAC | IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle) | WLAN | 8.80 | ±9.6 |
| 10681 | AAC | IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle) | WLAN | 8.62 | ±9.6 |
| 10682 | AAC | IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle) | WLAN | 8.83 | ±9.6 |
| 10683 | AAC | IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 10684 | AAC | IEEE 802.11ax (20 MHz, MCS1, 99pc duty cycle) | WLAN | 8.26 | ±9.6 |
| 10685 | AAC | IEEE 802.11ax (20 MHz, MCS2, 99pc duty cycle) | WLAN | 8.33 | ±9.6 |
| 10686 | AAC | IEEE 802.11ax (20 MHz, MCS3, 99pc duty cycle) | WLAN | 8.28 | ±9.6 |

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

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|-------|-----|---|---------------|----------|------------------------|
| 10753 | AAC | IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle) | WLAN | 9.00 | ±9.6 |
| 10754 | AAC | IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle) | WLAN | 8.94 | ±9.6 |
| 10755 | AAC | IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle) | WLAN | 8.64 | ±9.6 |
| 10756 | AAC | IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10757 | AAC | IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle) | WLAN | 8.77 | ±9.6 |
| 10758 | AAC | IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle) | WLAN | 8.69 | ±9.6 |
| 10759 | AAC | IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 10760 | AAC | IEEE 802.11ax (160 MHz, MCS5, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 10761 | AAC | IEEE 802.11ax (160 MHz, MCS6, 99pc duty cycle) | WLAN | 8.58 | ±9.6 |
| 10762 | AAC | IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle) | WLAN | 8.49 | ±9.6 |
| 10763 | AAC | IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle) | WLAN | 8.53 | ±9.6 |
| 10764 | AAC | IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 10765 | AAC | IEEE 802.11ax (160 MHz, MCS10, 99pc duty cycle) | WLAN | 8.54 | ±9.6 |
| 10766 | AAC | IEEE 802.11ax (160 MHz, MCS11, 99pc duty cycle) | WLAN | 8.51 | ±9.6 |
| 10767 | AAE | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 7.99 | ±9.6 |
| 10768 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10769 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10770 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10771 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10772 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.23 | ±9.6 |
| 10773 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.03 | ±9.6 |
| 10774 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10775 | AAD | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 10776 | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 10777 | AAC | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 10778 | AAD | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10779 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.42 | ±9.6 |
| 10780 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 10781 | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 10782 | AAD | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.43 | ±9.6 |
| 10783 | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 10784 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.29 | ±9.6 |
| 10785 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 10786 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 10787 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.44 | ±9.6 |
| 10788 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 10789 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10790 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 10791 | AAE | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.83 | ±9.6 |
| 10792 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.92 | ±9.6 |
| 10793 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.95 | ±9.6 |
| 10794 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 10795 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.84 | ±9.6 |
| 10796 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 10797 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10798 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| 10799 | AAD | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.6 |
| 10801 | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| 10802 | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.87 | ±9.6 |
| 10803 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.6 |
| 10805 | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10806 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10809 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10810 | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10812 | AAD | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 10817 | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 10818 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10819 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.33 | ±9.6 |
| 10820 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.30 | ±9.6 |
| 10821 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10822 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10823 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 10824 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 10825 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10827 | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.42 | ±9.6 |
| 10828 | AAD | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.43 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|-------|-----|--|---------------|----------|------------------------|
| 10829 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 10830 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.63 | ±9.6 |
| 10831 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.73 | ±9.6 |
| 10832 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.74 | ±9.6 |
| 10833 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 10834 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.75 | ±9.6 |
| 10835 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 10836 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.66 | ±9.6 |
| 10837 | AAD | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.68 | ±9.6 |
| 10839 | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.70 | ±9.6 |
| 10840 | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.67 | ±9.6 |
| 10841 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 7.71 | ±9.6 |
| 10843 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.49 | ±9.6 |
| 10844 | AAD | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10846 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10854 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10855 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 10856 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10857 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 10858 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.36 | ±9.6 |
| 10859 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.34 | ±9.6 |
| 10860 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10861 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 10863 | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10864 | AAD | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10865 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10866 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10868 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.89 | ±9.6 |
| 10869 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10870 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.86 | ±9.6 |
| 10871 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10872 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.52 | ±9.6 |
| 10873 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 10874 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 10875 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 10876 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.39 | ±9.6 |
| 10877 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 7.95 | ±9.6 |
| 10878 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 10879 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.12 | ±9.6 |
| 10880 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.38 | ±9.6 |
| 10881 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10882 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.96 | ±9.6 |
| 10883 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.57 | ±9.6 |
| 10884 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.53 | ±9.6 |
| 10885 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 10886 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 10887 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 10888 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.35 | ±9.6 |
| 10889 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.02 | ±9.6 |
| 10890 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.40 | ±9.6 |
| 10891 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.13 | ±9.6 |
| 10892 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 10897 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.66 | ±9.6 |
| 10898 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 10899 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 10900 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10901 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10902 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10903 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10904 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10905 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10906 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10907 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.78 | ±9.6 |
| 10908 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 10909 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.96 | ±9.6 |
| 10910 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |

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May 24, 2023

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

Certificate No: EF-4060_May23

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EF3DV3 - SN:4060

May 24, 2023

| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E $k = 2$ |
|-------|-----|--|---------------|----------|--------------------------|
| 10983 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.31 | ±9.6 |
| 10984 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.42 | ±9.6 |
| 10985 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.54 | ±9.6 |
| 10986 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.50 | ±9.6 |
| 10987 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.53 | ±9.6 |
| 10988 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.38 | ±9.6 |
| 10989 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.33 | ±9.6 |
| 10990 | AAA | 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 | AAA | IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle) | WLAN | 8.47 | ±9.6 |
| 11014 | AAA | IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle) | WLAN | 8.45 | ±9.6 |
| 11015 | AAA | IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11016 | AAA | IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle) | WLAN | 8.44 | ±9.6 |
| 11017 | AAA | IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle) | WLAN | 8.41 | ±9.6 |
| 11018 | AAA | IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle) | WLAN | 8.40 | ±9.6 |
| 11019 | AAA | IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle) | WLAN | 8.29 | ±9.6 |
| 11020 | AAA | IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle) | WLAN | 8.27 | ±9.6 |
| 11021 | AAA | IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle) | WLAN | 8.46 | ±9.6 |
| 11022 | AAA | IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle) | WLAN | 8.36 | ±9.6 |
| 11023 | AAA | IEEE 802.11be (320 MHz, MCS11, 99pc duty cycle) | WLAN | 8.09 | ±9.6 |
| 11024 | AAA | IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle) | WLAN | 8.42 | ±9.6 |
| 11025 | AAA | IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle) | WLAN | 8.37 | ±9.6 |
| 11026 | AAA | IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle) | WLAN | 8.39 | ±9.6 |

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

ANNEX E DIPOLE CALIBRATION CERTIFICATE

Dipole 835 MHz

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



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

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

Accreditation No.: **SCS 0108**

Client **CTTL**
Beijing

Certificate No. **CD835V3-1023_Aug23**

CALIBRATION CERTIFICATE

Object **CD835V3 - SN: 1023**

Calibration procedure(s) **QA CAL-20.v7**
Calibration Procedure for Validation Sources in air

Calibration date: **August 15, 2023**

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)

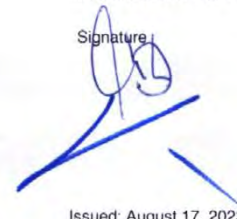
| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration |
|-----------------------------|--------------------|---------------------------------|-----------------------|
| Power meter NRP2 | SN: 104778 | 30-Mar-23 (No. 217-03804/03805) | Mar-24 |
| Power sensor NRP-Z91 | SN: 103244 | 30-Mar-23 (No. 217-03804) | Mar-24 |
| Power sensor NRP-Z91 | SN: 103245 | 30-Mar-23 (No. 217-03805) | Mar-24 |
| Reference 20 dB Attenuator | SN: BH9394 (20k) | 30-Mar-23 (No. 217-03809) | Mar-24 |
| Type-N mismatch combination | SN: 310982 / 06327 | 30-Mar-23 (No. 217-03810) | Mar-24 |
| Probe EF3DV3 | SN: 4013 | 30-Dec-22 (No. EF3-4013_Dec22) | Dec-23 |
| DAE4 | SN: 781 | 03-Jan-23 (No. DAE4-781_Jan23) | Jan-24 |

| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
|---------------------------------|----------------|-----------------------------------|------------------------|
| Power meter Agilent 4419B | SN: GB42420191 | 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 |
| Power sensor HP E4412A | SN: US38485102 | 05-Jan-10 (in house check Oct-20) | In house check: Oct-23 |
| Power sensor HP 8482A | SN: US37295597 | 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 |
| RF generator R&S SMT-06 | SN: 837633/005 | 10-Jan-19 (in house check Oct-20) | In house check: Oct-23 |
| Network Analyzer Agilent E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-22) | In house check: Oct-24 |

Calibrated by: **Claudio Leubler** **Laboratory Technician**

Approved by: **Niels Kuster** **Quality Manager**

Signature



Issued: August 17, 2023

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

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



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

Accredited by the Swiss Accreditation Service (SAS)

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

Accreditation No.: SCS 0108

References

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

Methods Applied and Interpretation of Parameters:

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

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

Measurement Conditions

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

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

Maximum Field values at 835 MHz

| E-field 15 mm above dipole surface | condition | Interpolated maximum |
|------------------------------------|--------------------|------------------------------|
| Maximum measured above high end | 100 mW input power | 113.4 V/m = 41.09 dBV/m |
| Maximum measured above low end | 100 mW input power | 110.5 V/m = 40.87 dBV/m |
| Averaged maximum above arm | 100 mW input power | 112.0 V/m \pm 12.8 % (k=2) |

Appendix (Additional assessments outside the scope of SCS 0108)

Antenna Parameters

| Frequency | Return Loss | Impedance |
|-----------|-------------|---------------------------------|
| 800 MHz | 17.0 dB | 40.3 Ω - 8.3 j Ω |
| 835 MHz | 23.2 dB | 52.9 Ω + 6.5 j Ω |
| 880 MHz | 16.4 dB | 61.6 Ω - 12.6 j Ω |
| 900 MHz | 16.8 dB | 51.3 Ω - 14.8 j Ω |
| 945 MHz | 23.4 dB | 45.2 Ω + 4.3 j Ω |

3.2 Antenna Design and Handling

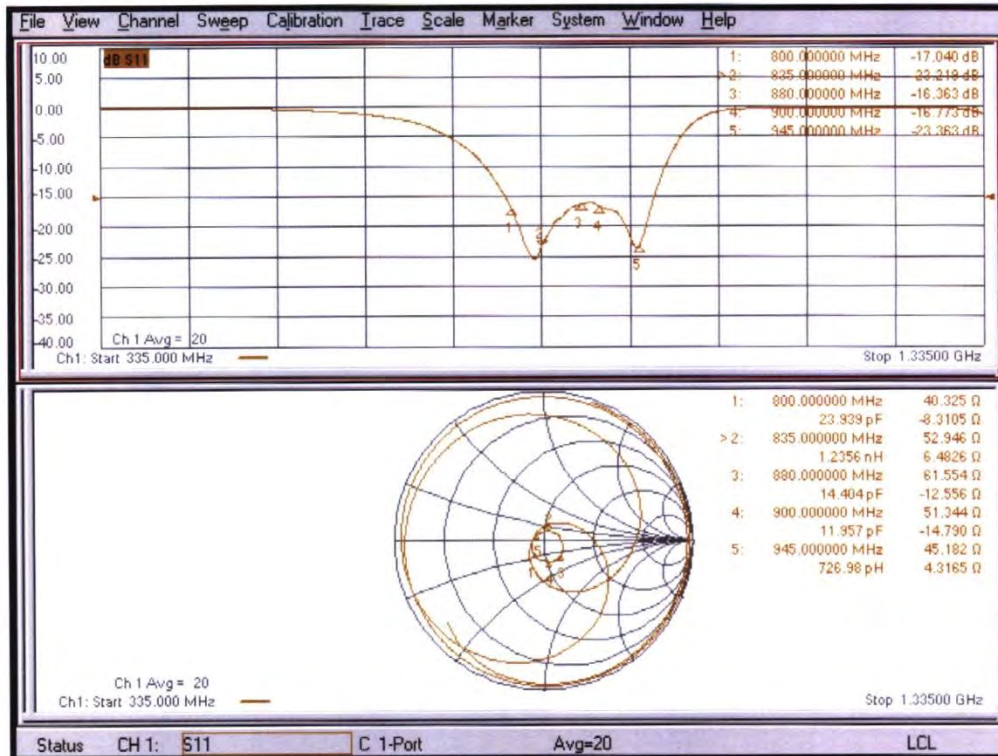
The calibration dipole has a symmetric geometry with a built-in two stub matching network, which leads to the enhanced bandwidth.

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

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

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

Impedance Measurement Plot



DASY5 E-field Result

Date: 15.08.2023

Test Laboratory: SPEAG Lab2

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

Communication System: UID 0 - CW ; Frequency: 835 MHz

Medium parameters used: $\sigma = 0$ S/m, $\epsilon_r = 1$; $\rho = 0$ kg/m³

Phantom section: RF Section

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

DASY52 Configuration:

- Probe: EF3DV3 - SN4013; ConvF(1, 1, 1) @ 835 MHz; Calibrated: 30.12.2022
- Sensor-Surface: (Fix Surface)
- Electronics: DAE4 Sn781; Calibrated: 03.01.2023
- Phantom: HAC Test Arch with AMCC; Type: SD HAC P01 BA; Serial: 1070
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

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

Interpolated grid: dx=0.5000 mm, dy=0.5000 mm

Device Reference Point: 0, 0, -6.3 mm

Reference Value = 132.8 V/m; Power Drift = -0.00 dB

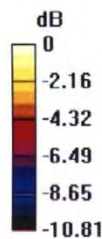
Applied MIF = 0.00 dB

RF audio interference level = 41.09 dBV/m

Emission category: M3

MIF scaled E-field

| | | |
|--------------------------|--------------------------|--------------------------|
| Grid 1 M3 40.84 dBV/m | Grid 2 M3 40.87 dBV/m | Grid 3 M3 40.45 dBV/m |
| Grid 4 M4 35.82 dBV/m | Grid 5 M4 35.83 dBV/m | Grid 6 M4 35.41 dBV/m |
| Grid 7 M3 41.05 dBV/m | Grid 8 M3 41.09 dBV/m | Grid 9 M3 40.67 dBV/m |



0 dB = 113.4 V/m = 41.09 dBV/m

Dipole 1880 MHz

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



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **CTTL**
Beijing

Certificate No. **CD1880V3-1018_Aug23**

CALIBRATION CERTIFICATE

Object **CD1880V3 - SN: 1018**

Calibration procedure(s) **QA CAL-20.v7
Calibration Procedure for Validation Sources in air**

Calibration date: **August 15, 2023**


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 Calibration |
|-----------------------------|--------------------|---------------------------------|-----------------------|
| Power meter NRP2 | SN: 104778 | 30-Mar-23 (No. 217-03804/03805) | Mar-24 |
| Power sensor NRP-Z91 | SN: 103244 | 30-Mar-23 (No. 217-03804) | Mar-24 |
| Power sensor NRP-Z91 | SN: 103245 | 30-Mar-23 (No. 217-03805) | Mar-24 |
| Reference 20 dB Attenuator | SN: BH9394 (20k) | 30-Mar-23 (No. 217-03809) | Mar-24 |
| Type-N mismatch combination | SN: 310982 / 06327 | 30-Mar-23 (No. 217-03810) | Mar-24 |
| Probe EF3DV3 | SN: 4013 | 30-Dec-22 (No. EF3-4013_Dec22) | Dec-23 |
| DAE4 | SN: 781 | 03-Jan-23 (No. DAE4-781_Jan23) | Jan-24 |

| Secondary Standards | ID # | Check Date (in house) | Scheduled Check |
|---------------------------------|----------------|-----------------------------------|------------------------|
| Power meter Agilent 4419B | SN: GB42420191 | 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 |
| Power sensor HP E4412A | SN: US38485102 | 05-Jan-10 (in house check Oct-20) | In house check: Oct-23 |
| Power sensor HP 8482A | SN: US37295597 | 09-Oct-09 (in house check Oct-20) | In house check: Oct-23 |
| RF generator R&S SMT-06 | SN: 837633/005 | 10-Jan-19 (in house check Oct-20) | In house check: Oct-23 |
| Network Analyzer Agilent E8358A | SN: US41080477 | 31-Mar-14 (in house check Oct-22) | In house check: Oct-24 |

| | | | |
|----------------|--------------------------------|-----------------------------------|--|
| Calibrated by: | Name Claudio Leubler | Function Laboratory Technician | Signature  |
| Approved by: | Name Niels Kuster | Function Quality Manager | |

Issued: August 17, 2023

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