



HCT Co., Ltd.

74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA
Tel. +82 31 634 6300 Fax. +82 31 645 6401

WIFI 6 GHz RF Exposure Report

| | |
|--|---|
| Applicant Name: SAMSUNG Electronics Co., Ltd. 129, Samsung-ro, Yeongtong-gu, Suwon-Si, Gyeonggi-do, 16677 Rep. of Korea | Date of Issue: May 17, 2023 Test Report No.: HCT-SR-2305-FC004-R1 Test Site: HCT CO., LTD. |
|--|---|

FCC ID:

A3LSMX818U

Equipment Type: Tablet
Application Type: Certification
FCC Rule Part(s): CFR §2.1093
Model Name: SM-X818U
Date of Test: Mar. 21. 2023 ~ Mar. 28. 2023

| Band | Tx. Frequency | Equipment Class | SAR | APD | PD |
|------------|-----------------------|-----------------|-------------------|-------------------------------|-------------------------------|
| | | | 1g Body (W/kg) | Body (mW/cm ²) | psPD (mW/cm ²) |
| WIFI 6 GHz | 5 935 MHz ~ 7 115 MHz | 6CD | 0.96 | 0.41 | 0.47 |

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Tested By

Bong-Kyun Park
Test Engineer
SAR Team
Certification Division

Reviewed By

Yun Jeang, Heo
Technical Manager
SAR Team
Certification Division

This report only responds to the tested sample and may not be reproduced, except in full, without written approval of the HCT Co., Ltd.

REVISION HISTORY

The revision history for this test report is shown in table.

| Revision No. | Date of Issue | Description |
|---------------------|----------------------|-------------------------------|
| 0 | May 09, 2023 | Initial Release |
| 1 | May 17, 2023 | Revised to KDB 447498 D04 v01 |

This test results were applied only to the test methods required by the standard.

The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS (Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.

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1. Test Regulations

FCC RF Exposure evaluation of U-NII 6 -7 GHz Band of this device were measured by referring to the interim procedures in TCB Workshop document of Oct 2020, IEC/IEEE 62209-1528:2020 and also the Application Note of SPEAG, the manufacturer of measuring equipment.

SAR Testing was performed using 6.5 GHz SAR Probe calibration factor according to FCC TCBC Document.

November 2017, October 2018, April 2019, November 2019, October 2020, April 2021 TCBC Workshop Notes.

SPEAG DASY6 System Handbook

SPEAG DASY6 Application Note (Interim Procedures for Operating at 6 -10 GHz) (June 2021)

IEEE 1528-2013

IEC TR 63170:2018

IEC 62479:2010

FCC KDB 865664 D02 v01r02

FCC KDB 616217 D04 v01r02

FCC KDB 248227 D01 v02r02

FCC KDB 447498 D04 v01

FCC KDB 865664 D01 v01r04

FCC KDB 648474 D04 v01r03

2. Test Location

2.1 Test Laboratory

| | |
|---------------------|---|
| Company Name | HCT Co., Ltd. |
| Address | 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA |
| Telephone | 031-645-6300 |
| Fax. | 031-645-6401 |

2.2 Test Facilities

Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

| | |
|--------------|---|
| Korea | National Radio Research Agency (Designation No. KR0032) |
| | KOLAS (Testing No. KT197) |

3. Information of the EUT

3.1 General Information of the EUT

| | |
|-------------------------|-------------------------------|
| Model Name | SM-X818U |
| Equipment Type | Tablet |
| FCC ID | A3LSMX818U |
| Application Type | Certification |
| Applicant | SAMSUNG Electronics Co., Ltd. |

4. Device Under Test Description

4.1 DUT specification

| Band & Mode | Operating Mode | Tx Frequency |
|------------------------|-----------------------|-----------------------|
| U-NII-5 | Data | 5 935 MHz – 6 415 MHz |
| U-NII-6 | Data | 6 435 MHz – 6 515 MHz |
| U-NII-7 | Data | 6 535 MHz – 6 875 MHz |
| U-NII-8 | Data | 6 875 MHz – 7 115 MHz |

4.2 Nominal and Maximum Output Power Specifications

SAR values were scaled to the maximum allowed power to determine compliance per KDB publication 447498 D04 v01.

4.2.1 Maximum 6 GHz WIFI output power () : power for 6E dual client.

| Mode | MIMO | |
|----------------------------|---------|---------------|
| | 802.11a | 802.11 ax(SU) |
| U-NII 6-7 GHz (20 MHz BW) | 12 | 12 (12) |
| U-NII 6-7 GHz (40 MHz BW) | | 12 (12) |
| U-NII 6-7 GHz (80 MHz BW) | | 12 (12) |
| U-NII 6-7 GHz (160 MHz BW) | | 12 (12) |

(Upper Tolerance: target ~ +1.0 dB)

4.2.2 Reduced Power 6 GHz WIFI output power -Grip Active.

| Mode | MIMO | |
|----------------------------|---------|---------------|
| | 802.11a | 802.11 ax(SU) |
| U-NII 6-7 GHz (20 MHz BW) | 11 | 11 |
| U-NII 6-7 GHz (40 MHz BW) | | 10.5 |
| U-NII 6-7 GHz (80 MHz BW) | | 10.5 |
| U-NII 6-7 GHz (160 MHz BW) | | 10.5 |

(Upper Tolerance: target ~ +1.0 dB)

4.2.3 Reduced Power 6 GHz WIFI output power - RSDB, mmWave, Sub6 Active.

| Mode | MIMO | |
|----------------------------|---------|---------------|
| | 802.11a | 802.11 ax(SU) |
| U-NII 6-7 GHz (20 MHz BW) | 9 | 9 |
| U-NII 6-7 GHz (40 MHz BW) | | 8.5 |
| U-NII 6-7 GHz (80 MHz BW) | | 8.5 |
| U-NII 6-7 GHz (160 MHz BW) | | 8.5 |

(Upper Tolerance: target ~ +1.0 dB)

4.2.4 Maximum 6 GHz 802.11ax RU Power () : power for 6E dual client.

| Tones | MIMO | | | |
|--------|-------------------------------|---------------|---------------|---------------|
| | 6G/20 MHz | 6G/40 MHz | 6G/80 MHz | 6G/160 MHz |
| 26T | 3.0 (12.0) 2ch : 0 (0) | 3.0 (12.0) | 3.0 (12.0) | 3.0 (12.0) |
| 52T | 6.0 (12.0) 2ch : 3 (3) | 6.0 (12.0) | 6.0 (12.0) | 6.0 (12.0) |
| 106T | 9.0 (12.0) 2ch : 5 (5) | 9.0 (12.0) | 9.0 (12.0) | 9.0 (12.0) |
| 242T | 12.0 (12.0) 2ch : 8 (8) | 11.5 (12) | 11.5 (12) | 11.5 (12) |
| 484T | | 11.5 (12) | 11.5 (12) | 11.5 (12) |
| 996T | | | 11.5 (12) | 11.5 (12) |
| 996T*2 | | | | 11.5 (12) |

(Upper Tolerance: target ~ +1.0 dB)

4.2.5 Reduced Power 6 GHz 802.11ax RU Power- Grip Active.

| Tones | MIMO | | | |
|--------|-----------|-----------|-----------|------------|
| | 6G/20 MHz | 6G/40 MHz | 6G/80 MHz | 6G/160 MHz |
| 26T | 3.0 | 3.0 | 3.0 | 3.0 |
| 52T | 6.0 | 6.0 | 6.0 | 6.0 |
| 106T | 9.0 | 9.0 | 9.0 | 9.0 |
| 242T | 11.0 | 10.5 | 10.5 | 10.5 |
| 484T | | 10.5 | 10.5 | 10.5 |
| 996T | | | 10.5 | 10.5 |
| 996T*2 | | | | 10.5 |

(Upper Tolerance: target ~ +1.0 dB)

4.2.6 Reduced Power 6 GHz 802.11ax RU Power- RSDB, mmWave, Sub6 Active.

| Tones | MIMO | | | |
|--------|-----------|-----------|-----------|------------|
| | 6G/20 MHz | 6G/40 MHz | 6G/80 MHz | 6G/160 MHz |
| 26T | 3.0 | 3.0 | 3.0 | 3.0 |
| 52T | 6.0 | 6.0 | 6.0 | 6.0 |
| 106T | 9.0 | 8.5 | 8.5 | 8.5 |
| 242T | 9.0 | 8.5 | 8.5 | 8.5 |
| 484T | | 8.5 | 8.5 | 8.5 |
| 996T | | | 8.5 | 8.5 |
| 996T*2 | | | | 8.5 |

(Upper Tolerance: target ~ +1.0 dB)

4.3 DUT Antenna Locations

The dimensions and separation distances of this model are shown in the Technical Descriptions.

| Antenna | Band | Freq. | Max. Power | | Separation Distances (mm) | | | | | Device Configurations for SAR Testing | | | | |
|------------|---------|-------|------------|------|---------------------------|-----|------|-------|--------|---------------------------------------|-----|------|-------|--------|
| | | [MHz] | dBm | mW | Rear | Top | Left | Right | Bottom | Rear | Top | Left | Right | Bottom |
| WIFI 1 Ant | WIFI 6G | 7115 | 13.0 | 20.0 | 0 | 0 | 132 | 0 | 271 | Yes | Yes | No | Yes | No |
| WIFI 2 Ant | WIFI 6G | 7115 | 13.0 | 20.0 | 0 | 0 | 0 | 132 | 271 | Yes | Yes | Yes | No | No |

The distance between the transmit antennas and the edges of the device are included in the filing.

- Note: All test configurations are based on front view position.

4.4 Test Considerations

SAR was performed using 6.5 GHz SAR Probe calibration factors. FCC KDB 616217 D04 v01r02 and KDB 248227 D01 v02r02 were followed for test positions, distances, and modes.

Per Oct. 2020 and April 2021 TCBC Workshop notes:

Portable devices transmitting at frequencies > 6 GHz, including U-NII 6-7 GHz band, are subject to MPE incident power density (PD, or IPD) limits

MPE limit is 1 mW/cm² (10 W/m²) plane-wave-equivalent PD, averaged over 4 cm², evaluation distance emulating normal use conditions

1. SAR testing

The Probe Factor for SAR Testing were used 6.5 GHz SAR Probe calibration factor

For the SAR measurement test, five channels were selected according to the criteria of FCC KDB 248227 according to the notes of FCC Oct, 2020 TCBC Workshop.

Absorbed Power density(APD) using a 4cm² Averaging area is reported based on SAR measurements.

2. Power density measurement

Incident PD

Incident Power density is evaluated at 2mm ensuring that the resolution is sufficient such that integrated Power density(iPD) ratio between d=2 and d=λ/5 is ≥-1dB per equipment manufacture guidance.

Power density results are scaled up for uncertainty above 30%.

3. Simultaneous transmission analysis

6 GHz WIFI SAR results are used for simultaneous transmission analysis with the other transmitters and total exposure ratio(TER)

WLAN Note

1. WIFI 6 GHz operations are limited to MIMO operations only. Per FCC KDB publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB publication 447498 D04 v01 by making a SAR measurement with both antennas transmitting simultaneously.

5. Additional Test Positions due to Proximity Conditions

This device uses a sensor to reduce output powers in extremity use conditions.

When the sensor detects a user is touching the device on or near to the antenna the device reduces the maximum allowed output power. However, the proximity sensor is not active when the device is moved beyond the sensor triggering distance and the maximum output power is no longer limited. Therefore, an additional exposure condition is needed in the vicinity of the triggering distance to ensure SAR is compliant when the device is allowed to operate at a non-reduced output power level.

FCC KDB 616217 D04 v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device at these additional exposure conditions. The smallest separation distance determined by the sensor triggering and sensor coverage for each applicable edge, minus 1 mm, was used as the test separation distance for SAR testing. Sensor triggering distance summary data is included in below table.

| Wireless technologies | Position | §6.2 Triggering Distance | §6.3 Coverage | §6.4 Tilt Angle | Worst case distance for Max.Pwr SAR |
|-----------------------|------------|--------------------------|---------------|-----------------|-------------------------------------|
| 6 GHz WIFI MIMO | Rear | 20 mm | N/A | N/A | 19 mm |
| | Top | 18 mm | N/A | N/A | 17 mm |
| | Right Side | 10 mm | N/A | N/A | 9 mm |
| | Left Side | 10 mm | N/A | N/A | 9 mm |

In the MIMO operation state of the 6 GHz WIFI mode, the SAR was measured by applying the worst case separation distance.

6. Limits

RF Exposure Limits for Frequencies Below 6 GHz

| HUMAN EXPOSURE | UNCONTROLLED ENVIRONMENT General Population (W/kg) | CONTROLLED ENVIRONMENT Occupational (W/kg) |
|--|--|--|
| SPATIAL PEAK SAR * (Partial Body) | 1.6 | 8.0 |
| SPATIAL AVERAGE SAR ** (Whole Body) | 0.08 | 0.4 |
| SPATIAL PEAK SAR *** (Hands / Feet / Ankle / Wrist) | 4.0 | 20.0 |

NOTES:

- * The Spatial Peak value of the SAR averaged over any 1 g of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
- ** The Spatial Average value of the SAR averaged over the whole-body.
- *** The Spatial Peak value of the SAR averaged over any 10 g of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

RF Exposure Limits for Frequencies Above 6 GHz

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of mW/cm^2 or mW/cm^2 .

Peak Spatially Averaged Power Density was evaluated over a circular area of 4 cm^2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

| HUMAN EXPOSURE | Limits For Occupational / Controlled Environments | Limits For General Population / Uncontrolled Environments |
|---|--|--|
| Frequency Range[MHz] | 1,500 – 100,000 | 1,500 – 100,000 |
| Power Density[mW/cm²] | 5.0 | 1.0 |
| Average Time[Minutes] | 6 | 30 |

NOTES: 1.0 mW/cm^2 is 10 W/m^2

7. RF Conducted Powers

7.1 IEEE 802.11a (6 GHz) Maximum Conducted Power

| Frequency [MHz] | Channel | IEEE 802.11a (20 MHz BW) (6 GHz) Average RF Conducted Power [dBm] | | |
|-----------------|---------|--|------------|-----------|
| | | WIFI Ant 1 | WIFI Ant 2 | WIFI MIMO |
| 5 935 | 2 | 9.50 | 8.07 | 11.86 |
| 6 075 | 25 | 9.32 | 9.41 | 12.37 |
| 6 175 | 45 | 9.51 | 8.68 | 12.13 |
| 6 275 | 65 | 9.57 | 9.61 | 12.60 |
| 6 415 | 93 | 9.03 | 9.34 | 12.20 |
| 6 435 | 97 | 8.95 | 8.52 | 11.75 |
| 6 475 | 105 | 8.68 | 8.34 | 11.52 |
| 6 515 | 113 | 8.88 | 8.51 | 11.71 |
| 6 535 | 117 | 8.77 | 8.26 | 11.53 |
| 6 675 | 145 | 9.53 | 8.69 | 12.14 |
| 6 695 | 149 | 8.87 | 8.16 | 11.54 |
| 6 875 | 185 | 8.97 | 8.03 | 11.47 |
| 6 895 | 189 | 8.74 | 8.16 | 11.47 |
| 6 995 | 209 | 8.68 | 8.01 | 11.37 |
| 7 115 | 233 | 7.71 | 8.12 | 10.93 |

7.2 IEEE 802.11a (6 GHz) Reduced Conducted Power_Grip

| Frequency [MHz] | Channel | IEEE 802.11a (20 MHz BW) (6 GHz) Average RF Conducted Power [dBm] | | |
|-----------------|---------|--|------------|-----------|
| | | WIFI Ant 1 | WIFI Ant 2 | WIFI MIMO |
| 5 935 | 2 | 8.13 | 7.61 | 10.89 |
| 6 075 | 25 | 7.84 | 8.19 | 11.03 |
| 6 175 | 45 | 7.60 | 7.47 | 10.54 |
| 6 275 | 65 | 8.61 | 8.47 | 11.55 |
| 6 415 | 93 | 8.03 | 8.72 | 11.40 |
| 6 435 | 97 | 7.89 | 8.06 | 10.98 |
| 6 475 | 105 | 8.52 | 8.63 | 11.58 |
| 6 515 | 113 | 8.25 | 8.27 | 11.27 |
| 6 535 | 117 | 8.13 | 8.14 | 11.14 |
| 6 675 | 145 | 8.32 | 7.88 | 11.11 |
| 6 695 | 149 | 7.85 | 7.85 | 10.86 |
| 6 875 | 185 | 7.85 | 7.64 | 10.76 |
| 6 895 | 189 | 7.63 | 7.63 | 10.64 |
| 6 995 | 209 | 7.71 | 7.40 | 10.57 |
| 7 115 | 233 | 7.45 | 7.79 | 10.63 |

7.3 IEEE 802.11a (6 GHz) Reduced Conducted Power_RSDB

| Frequency [MHz] | Channel | IEEE 802.11a (20 MHz BW) (6 GHz) Average RF Conducted Power [dBm] | | |
|-----------------|---------|--|------------|-----------|
| | | WIFI Ant 1 | WIFI Ant 2 | WIFI MIMO |
| 5 935 | 2 | 6.59 | 5.88 | 9.26 |
| 6 075 | 25 | 6.37 | 6.58 | 9.49 |
| 6 175 | 45 | 6.68 | 6.52 | 9.61 |
| 6 275 | 65 | 6.37 | 6.43 | 9.41 |
| 6 415 | 93 | 5.94 | 6.77 | 9.38 |
| 6 435 | 97 | 5.89 | 6.22 | 9.07 |
| 6 475 | 105 | 6.49 | 6.83 | 9.67 |
| 6 515 | 113 | 6.76 | 6.75 | 9.76 |
| 6 535 | 117 | 6.66 | 6.64 | 9.66 |
| 6 675 | 145 | 6.25 | 6.02 | 9.15 |
| 6 695 | 149 | 6.56 | 5.99 | 9.29 |
| 6 875 | 185 | 5.90 | 6.36 | 9.14 |
| 6 895 | 189 | 5.70 | 6.35 | 9.05 |
| 6 995 | 209 | 6.67 | 6.43 | 9.56 |
| 7 115 | 233 | 6.43 | 6.05 | 9.25 |

7.4 IEEE 802.11ax (6 GHz) Maximum Conducted Power

| Frequency [MHz] | Channel | IEEE 802.11ax (6 GHz) 80MHz RF Conducted Power [dBm] | | |
|-----------------|---------|--|------------|-----------|
| | | WIFI Ant 1 | WIFI Ant 2 | WIFI MIMO |
| 5985 | 7 | 8.78 | 8.61 | 11.71 |
| 6065 | 23 | 9.50 | 9.73 | 12.63 |
| 6145 | 39 | 9.75 | 8.84 | 12.33 |
| 6305 | 71 | 9.31 | 9.65 | 12.50 |
| 6385 | 87 | 9.29 | 9.43 | 12.37 |
| 6465 | 103 | 9.07 | 8.56 | 11.83 |
| 6545 | 119 | 9.53 | 8.53 | 12.07 |
| 6705 | 151 | 8.68 | 8.01 | 11.37 |
| 6785 | 167 | 9.07 | 8.27 | 11.70 |
| 6865 | 183 | 8.97 | 8.19 | 11.61 |
| 6945 | 199 | 8.99 | 8.48 | 11.75 |
| 7025 | 215 | 8.66 | 8.63 | 11.65 |

7.5 IEEE 802.11ax (6 GHz) Maximum Conducted Power_Grip

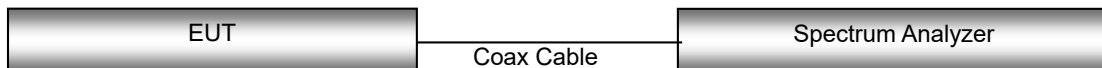
| Frequency [MHz] | Channel | IEEE 802.11ax (6 GHz) 20MHz RF Conducted Power [dBm] | | |
|-----------------|---------|--|------------|-----------|
| | | WIFI Ant 1 | WIFI Ant 2 | WIFI MIMO |
| 5 935 | 2 | 8.21 | 7.51 | 10.89 |
| 6 075 | 25 | 8.19 | 7.97 | 11.09 |
| 6 175 | 45 | 7.65 | 7.40 | 10.54 |
| 6 275 | 65 | 8.60 | 8.40 | 11.51 |
| 6 415 | 93 | 8.06 | 8.62 | 11.36 |
| 6 435 | 97 | 7.93 | 7.93 | 10.94 |
| 6 475 | 105 | 8.44 | 8.57 | 11.52 |
| 6 515 | 113 | 8.31 | 8.24 | 11.29 |
| 6 535 | 117 | 8.23 | 8.12 | 11.19 |
| 6 675 | 145 | 8.35 | 7.84 | 11.12 |
| 6 695 | 149 | 7.91 | 7.88 | 10.91 |
| 6 875 | 185 | 7.88 | 7.58 | 10.75 |
| 6 895 | 189 | 7.71 | 7.57 | 10.65 |
| 6 995 | 209 | 7.58 | 7.22 | 10.42 |
| 7 115 | 233 | 7.53 | 7.71 | 10.63 |

7.6 IEEE 802.11ax (6 GHz) Maximum Conducted Power_RSDB

| Frequency [MHz] | Channel | IEEE 802.11ax (6 GHz) 20MHz RF Conducted Power [dBm] | | |
|-----------------|---------|--|------------|-----------|
| | | WIFI Ant 1 | WIFI Ant 2 | WIFI MIMO |
| 5 935 | 2 | 6.63 | 5.64 | 9.18 |
| 6 075 | 25 | 6.00 | 5.89 | 8.96 |
| 6 175 | 45 | 6.73 | 6.34 | 9.55 |
| 6 275 | 65 | 6.37 | 6.24 | 9.32 |
| 6 415 | 93 | 6.00 | 6.61 | 9.33 |
| 6 435 | 97 | 5.94 | 6.15 | 9.06 |
| 6 475 | 105 | 6.49 | 6.71 | 9.61 |
| 6 515 | 113 | 6.74 | 6.65 | 9.71 |
| 6 535 | 117 | 6.67 | 6.58 | 9.64 |
| 6 675 | 145 | 6.29 | 5.92 | 9.12 |
| 6 695 | 149 | 6.55 | 5.89 | 9.25 |
| 6 875 | 185 | 5.73 | 6.09 | 8.93 |
| 6 895 | 189 | 5.58 | 6.15 | 8.89 |
| 6 995 | 209 | 6.74 | 6.34 | 9.56 |
| 7 115 | 233 | 6.43 | 5.98 | 9.22 |

Justification for test configurations for WLAN per KDB Publication 248227 D01v02r02:

- Power measurements were performed for the transmission mode configuration with the highest maximum output power specified for production units.
- For transmission mode with the same maximum output power specification, powers were measured for the largest channel bandwidth, lowest order modulation and lowest data rate.
- For transmission modes with identical maximum specified output power, channel bandwidth, modulation and data rates, power measurements were required for all identical configurations.
- For each transmission mode configuration, powers were measured for the highest and lowest channels; and at the mid-band channel(s) when there were at least 3 channels supported. For configurations with multiple mid-band channels, due to an even number of channels, both channels were measured.

Test Configuration

8. System Verification

8.1 Tissue Verification

The Head simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity.

| Table for Head Tissue Verification | | | | | | | | | |
|------------------------------------|-------------------|--------------|-------------|--------------------------------------|--|------------------------------------|--|----------------|------------------|
| Date of Tests | Tissue Temp. (°C) | Tissue Type | Freq. (MHz) | Measured Conductivity σ (S/m) | Measured Dielectric Constant, ϵ | Target Conductivity σ (S/m) | Target Dielectric Constant, ϵ | % dev σ | % dev ϵ |
| 03/21/2023 | 18.4 | 6.5 GHz Head | 6000 | 5.32 | 34.3 | 5.480 | 35.100 | -2.92 | -2.28 |
| | | | 6065 | 5.43 | 34.3 | 5.557 | 35.022 | -2.29 | -2.06 |
| | | | 6305 | 5.7 | 33.9 | 5.840 | 34.734 | -2.40 | -2.40 |
| | | | 6485 | 5.96 | 33.8 | 6.052 | 34.518 | -1.52 | -2.08 |
| | | | 6500 | 5.97 | 33.8 | 6.070 | 34.500 | -1.65 | -2.03 |
| | | | 6545 | 5.99 | 33.6 | 6.122 | 34.446 | -2.16 | -2.46 |
| | | | 6785 | 6.33 | 33.3 | 6.400 | 34.158 | -1.09 | -2.51 |
| | | | 7000 | 6.56 | 32.8 | 6.650 | 33.900 | -1.35 | -3.24 |
| | | | 7025 | 6.59 | 32.8 | 6.680 | 33.870 | -1.35 | -3.16 |
| 03/22/2023 | 21.2 | 6.5 GHz Head | 6000 | 5.31 | 34.3 | 5.480 | 35.100 | -3.10 | -2.28 |
| | | | 6065 | 5.42 | 34.3 | 5.557 | 35.022 | -2.47 | -2.06 |
| | | | 6305 | 5.69 | 33.8 | 5.840 | 34.734 | -2.57 | -2.69 |
| | | | 6485 | 5.93 | 33.8 | 6.052 | 34.518 | -2.02 | -2.08 |
| | | | 6500 | 5.96 | 33.8 | 6.070 | 34.500 | -1.81 | -2.03 |
| | | | 6545 | 5.96 | 33.5 | 6.122 | 34.446 | -2.65 | -2.75 |
| | | | 6785 | 6.31 | 33.2 | 6.400 | 34.158 | -1.41 | -2.80 |
| | | | 7000 | 6.56 | 32.8 | 6.650 | 33.900 | -1.35 | -3.24 |
| | | | 7025 | 6.57 | 32.7 | 6.680 | 33.870 | -1.65 | -3.45 |
| 03/23/2023 | 20.0 | 6.5 GHz Head | 6000 | 5.37 | 34.2 | 5.480 | 35.100 | -2.01 | -2.56 |
| | | | 6065 | 5.49 | 34.3 | 5.557 | 35.022 | -1.21 | -2.06 |
| | | | 6305 | 5.74 | 33.8 | 5.840 | 34.734 | -1.71 | -2.69 |
| | | | 6485 | 5.99 | 33.8 | 6.052 | 34.518 | -1.02 | -2.08 |
| | | | 6500 | 6.01 | 33.8 | 6.070 | 34.500 | -0.99 | -2.03 |
| | | | 6545 | 6.02 | 33.5 | 6.122 | 34.446 | -1.67 | -2.75 |
| | | | 6785 | 6.37 | 33.2 | 6.400 | 34.158 | -0.47 | -2.80 |
| | | | 7000 | 6.61 | 32.7 | 6.650 | 33.900 | -0.60 | -3.54 |
| | | | 7025 | 6.64 | 32.7 | 6.680 | 33.870 | -0.60 | -3.45 |
| | | | 7500 | 7.23 | 32.2 | 7.240 | 33.300 | -0.14 | -3.30 |

8.2 System Verification Procedure

For SAR Measurement

SAR measurement was prior to assessment, the system is verified to the $\pm 10\%$ of the specifications at each frequency band by using the system verification kit. (Graphic Plots Attached)

- Cabling the system, using the verification kit equipment.
- Generate about 50 mW Input level from the signal generator to the Dipole Antenna.
- Dipole antenna was placed below the flat phantom.
- The measured one-gram SAR at the surface of the phantom above the dipole feed-point should be within 10 % of the target reference value.
- The results are normalized to 1 W input power.

Note;

SAR Verification was performed according to the FCC KDB 865664 D01v01r04.

For Power Density Measurement

The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially(shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

8.2.1. SAR System Verification for 6.5 GHz

Input Power: 10 mW

| Freq. [MHz] | Date | Probe (S/N) | Dipole (S/N) | Liquid | Amb. Temp. [°C] | Liquid Temp. [°C] | 1 W Target SAR _{1g} (SPEAG) [W/kg] | 10mW Measured SAR _{1g} [W/kg] | 1 W Normalized SAR _{1g} [W/kg] | Deviation [%] | Limit [%] |
|-------------|------------|-------------|--------------|--------|-----------------|-------------------|---|--|---|---------------|-----------|
| 6500 | 03/21/2023 | 3968 | 1012 | Head | 18.5 | 18.4 | 289 | 29.6 | 296 | 2.42 | ± 10 |
| 6500 | 03/22/2023 | 3968 | | Head | 21.3 | 21.2 | 289 | 29.6 | 296 | 2.42 | ± 10 |
| 6500 | 03/23/2023 | 3968 | | Head | 20.1 | 20.0 | 289 | 29.9 | 299 | 3.46 | ± 10 |

8.2.2 Power Density Verification for 10 GHz

Input Power: 10 mW

| Freq. (GHz) | Date | Probe SN | Dipole S/N | Normal psPD (W/m ² over 4 cm ²) | | Deviation (dB) | Total psPD (W/m ² over 4 cm ²) | | Deviation (dB) |
|-------------|------------|----------|------------|--|--------|----------------|---|--------|----------------|
| | | | | Measured | Target | | Measured | Target | |
| 10 | 03/27/2023 | 9464 | 1027 | 4.49 | 48.8 | - 0.36 | 4.51 | 48.8 | - 0.34 |
| 10 | 03/28/2023 | 9464 | 1027 | 4.91 | 48.8 | + 0.03 | 4.94 | 48.8 | + 0.05 |

9. SAR Test Data Summary

9.1 SAR Measurement Results

| 6 GHz WLAN Body | | | | | | | | | | | | | | | | | | |
|--|-----|----------|------------------|------------------|---------------------|-------------------|------------------|---------------|-------------|----------|----------|------------|---------------|--|----------------|-----------------------|---------------------|----------|
| Frequency | | Mode | Band width (MHz) | Data Rate (Mbps) | Tune-Up Limit (dBm) | Meas. Power (dBm) | Power Drift (dB) | Test Position | Ant Config. | Peak No. | Sensor | Duty Cycle | Distance (mm) | Meas. SAR (W/kg) | Scaling Factor | Scaling Factor (Duty) | Reported SAR (W/kg) | Plot No. |
| Mhz | Ch. | | | | | | | | | | | | | | | | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | 0.19 | Rear | MIMO | 2 | Active | 99.7 | 0 | 0.843 | 1.138 | 1.003 | 0.962 | 1 |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.15 | Rear | MIMO | 1 | Active | 99.7 | 0 | 0.155 | 1.138 | 1.003 | 0.177 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.17 | Left | MIMO | 2 | Active | 99.7 | 0 | 0.355 | 1.138 | 1.003 | 0.405 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.19 | Right | MIMO | 1 | Active | 99.7 | 0 | 0.106 | 1.138 | 1.003 | 0.121 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | 0.00 | Top | MIMO | 2 | Active | 99.7 | 0 | 0.028 | 1.138 | 1.003 | 0.032 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.13 | Top | MIMO | 1 | Active | 99.7 | 0 | 0.023 | 1.138 | 1.003 | 0.026 | |
| 6075 | 25 | 802.11ax | 20 | MCS0 | 12 | 11.09 | 0.10 | Rear | MIMO | 2 | Active | 99.7 | 0 | 0.713 | 1.268 | 1.003 | 0.907 | |
| 6275 | 65 | 802.11ax | 20 | MCS0 | 12 | 11.51 | 0.10 | Rear | MIMO | 2 | Active | 99.7 | 0 | 0.815 | 1.148 | 1.003 | 0.938 | |
| 6675 | 145 | 802.11ax | 20 | MCS0 | 12 | 11.12 | 0.13 | Rear | MIMO | 2 | Active | 99.7 | 0 | 0.451 | 1.306 | 1.003 | 0.591 | |
| 6995 | 209 | 802.11ax | 20 | MCS0 | 12 | 10.42 | -0.08 | Rear | MIMO | 2 | Active | 99.7 | 0 | 0.456 | 1.507 | 1.003 | 0.689 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | -0.12 | Rear | MIMO | 2 | Inactive | 99.7 | 19 | 0.024 | 1.122 | 1.003 | 0.027 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | 0.00 | Left | MIMO | 2 | Inactive | 99.7 | 9 | 0.055 | 1.122 | 1.003 | 0.062 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | -0.15 | Right | MIMO | 1 | Inactive | 99.7 | 9 | 0.063 | 1.122 | 1.003 | 0.071 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | -0.16 | Top | MIMO | 2 | Inactive | 99.7 | 17 | 0.019 | 1.122 | 1.003 | 0.021 | |
| ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population | | | | | | | | | | | | | | Body 1.6 W/kg Averaged over 1 gram | | | | |

| 6 GHz WLAN Body SAR - RSDB | | | | | | | | | | | | | | | | | | |
|--|-----|----------|------------------|------------------|---------------------|-------------------|------------------|---------------|-------------|----------|------------|---------------|------------------|--|-----------------------|---------------------|----------|--|
| Frequency | | Mode | Band width (MHz) | Data Rate (Mbps) | Tune-Up Limit (dBm) | Meas. Power (dBm) | Power Drift (dB) | Test Position | Ant Config. | Peak No. | Duty Cycle | Distance (mm) | Meas. SAR (W/kg) | Scaling Factor | Scaling Factor (Duty) | Reported SAR (W/kg) | Plot No. | |
| Mhz | Ch. | | | | | | | | | | | | | | | | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.17 | Rear | MIMO | 2 | 99.7 | 0 | 0.637 | 1.125 | 1.003 | 0.719 | 2 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | -0.10 | Rear | MIMO | 1 | 99.7 | 0 | 0.121 | 1.125 | 1.003 | 0.137 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.10 | Left | MIMO | 2 | 99.7 | 0 | 0.179 | 1.125 | 1.003 | 0.202 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.15 | Right | MIMO | 1 | 99.7 | 0 | 0.073 | 1.125 | 1.003 | 0.082 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.19 | Top | MIMO | 2 | 99.7 | 0 | 0.008 | 1.125 | 1.003 | 0.009 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.16 | Top | MIMO | 1 | 99.7 | 0 | 0.019 | 1.125 | 1.003 | 0.021 | | |
| 6075 | 25 | 802.11ax | 20 | MCS0 | 10 | 9.39 | 0.16 | Rear | MIMO | 2 | 99.7 | 0 | 0.602 | 1.159 | 1.003 | 0.700 | | |
| 6275 | 65 | 802.11ax | 20 | MCS0 | 10 | 9.32 | 0.10 | Rear | MIMO | 2 | 99.7 | 0 | 0.459 | 1.191 | 1.003 | 0.548 | | |
| 6675 | 145 | 802.11ax | 20 | MCS0 | 10 | 9.12 | 0.00 | Rear | MIMO | 2 | 99.7 | 0 | 0.296 | 1.282 | 1.003 | 0.381 | | |
| 6995 | 209 | 802.11ax | 20 | MCS0 | 10 | 9.56 | 0.14 | Rear | MIMO | 2 | 99.7 | 0 | 0.438 | 1.164 | 1.003 | 0.511 | | |
| ANSI/ IEEE C95.1 - 2005– Safety Limit Spatial Peak Uncontrolled Exposure/ General Population | | | | | | | | | | | | | | Body 1.6 W/kg Averaged over 1 gram | | | | |

9.2 Absorbed Power Density Results

6 GHz WLAN Absorbed Power Density Body

| Frequency | | Mode | Band width (MHz) | Data Rate (Mbps) | Tune-Up Limit (dBm) | Meas. Power (dBm) | Power Drift (dB) | Test Position | Ant Config. | Sensor | Duty Cycle | Distance (mm) | Meas. APD mW/cm ² (4 cm ²) | Plot No. |
|-----------|-----|----------|------------------|------------------|---------------------|-------------------|------------------|---------------|-------------|----------|------------|---------------|---|----------|
| Mhz | Ch. | | | | | | | | | | | | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | 0.19 | Rear | MIMO | Active | 99.7 | 0 | 0.403 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.17 | Left | MIMO | Active | 99.7 | 0 | 0.185 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.19 | Right | MIMO | Active | 99.7 | 0 | 0.067 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | 0.00 | Top | MIMO | Active | 99.7 | 0 | 0.020 | |
| 6075 | 25 | 802.11ax | 20 | MCS0 | 12 | 11.09 | 0.10 | Rear | MIMO | Active | 99.7 | 0 | 0.367 | |
| 6275 | 65 | 802.11ax | 20 | MCS0 | 12 | 11.51 | 0.10 | Rear | MIMO | Active | 99.7 | 0 | 0.414 | |
| 6675 | 145 | 802.11ax | 20 | MCS0 | 12 | 11.12 | 0.13 | Rear | MIMO | Active | 99.7 | 0 | 0.222 | |
| 6995 | 209 | 802.11ax | 20 | MCS0 | 12 | 10.42 | -0.08 | Rear | MIMO | Active | 99.7 | 0 | 0.231 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | -0.12 | Rear | MIMO | Inactive | 99.7 | 19 | 0.0171 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | 0.00 | Left | MIMO | Inactive | 99.7 | 9 | 0.0426 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | -0.15 | Right | MIMO | Inactive | 99.7 | 9 | 0.0478 | |
| 6065 | 23 | 802.11ax | 80 | MCS0 | 13 | 12.63 | -0.16 | Top | MIMO | Inactive | 99.7 | 17 | 0.0162 | |

6 GHz WLAN Absorbed Power Density RSDB

| Frequency | | Mode | Band width (MHz) | Data Rate (Mbps) | Tune-Up Limit (dBm) | Meas. Power (dBm) | Power Drift (dB) | Test Position | Ant Config. | Duty Cycle | Distance (mm) | Meas. APD mW/cm ² (4 cm ²) | Plot No. |
|-----------|-----|----------|------------------|------------------|---------------------|-------------------|------------------|---------------|-------------|------------|---------------|---|----------|
| Mhz | Ch. | | | | | | | | | | | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.17 | Rear | MIMO | 99.7 | 0 | 0.308 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.10 | Left | MIMO | 99.7 | 0 | 0.0967 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.15 | Right | MIMO | 99.7 | 0 | 0.0405 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.19 | Top | MIMO | 99.7 | 0 | 0.0047 | |
| 6075 | 25 | 802.11ax | 20 | MCS0 | 10 | 9.39 | 0.16 | Rear | MIMO | 99.7 | 0 | 0.301 | |
| 6275 | 65 | 802.11ax | 20 | MCS0 | 10 | 9.32 | 0.10 | Rear | MIMO | 99.7 | 0 | 0.233 | |
| 6675 | 145 | 802.11ax | 20 | MCS0 | 10 | 9.12 | 0.00 | Rear | MIMO | 99.7 | 0 | 0.145 | |
| 6995 | 209 | 802.11ax | 20 | MCS0 | 10 | 9.56 | 0.14 | Rear | MIMO | 99.7 | 0 | 0.217 | |

9.3 Power Density Results

| 6 GHz WLAN Power Density Grip | | | | | | | | | | | | | | | | | | | | |
|---|-----|----------|------------------|------------------|---------------------|-------------------|------------------|----------|---------------|---------------|-------------|------------|---------------|---------------------------|--|---|--|----------------------------------|--|----------|
| Frequency | | Mode | Band width (MHz) | Data Rate (Mbps) | Tune-Up Limit (dBm) | Meas. Power (dBm) | Power Drift (dB) | Peak No. | Distance (mm) | Test Position | Ant Config. | Duty Cycle | Grid Step (λ) | Ipd (mW/cm ²) | Scaling Factor for Measurement Uncertainty per IEC 62479 | Normal psPD (mW/cm ²) | Scaled Normal psPD (mW/cm ²) | Total psPD (mW/cm ²) | Reported 4 m ² psPD (mW/cm ²) | Plot No. |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | 0.17 | 2 | 2 | Rear | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.240 | 0.373 | 0.264 | 0.410 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.14 | 2 | 2 | Left | MIMO | 99.7 | 0.05 | 4.59 | 1.554 | 0.277 | 0.430 | 0.302 | 0.469 | 3 |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.10 | 1 | 2 | Right | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.158 | 0.246 | 0.174 | 0.270 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.18 | 2 | 2 | Top | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.138 | 0.214 | 0.139 | 0.216 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | 0.11 | 1 | 2 | Rear | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.148 | 0.230 | 0.151 | 0.235 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | -0.12 | 1 | 2 | Top | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.133 | 0.207 | 0.135 | 0.210 | |
| 6075 | 25 | 802.11ax | 20 | MCS0 | 12 | 11.09 | -0.13 | 2 | 2 | Left | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.218 | 0.339 | 0.240 | 0.373 | |
| 6275 | 65 | 802.11ax | 20 | MCS0 | 12 | 11.51 | -0.14 | 2 | 2 | Left | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.246 | 0.382 | 0.281 | 0.437 | |
| 6675 | 145 | 802.11ax | 20 | MCS0 | 12 | 11.12 | 0.13 | 2 | 2 | Left | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.129 | 0.200 | 0.134 | 0.208 | |
| 6995 | 209 | 802.11ax | 20 | MCS0 | 12 | 10.42 | 0.18 | 2 | 2 | Left | MIMO | 99.7 | 0.05 | N/A | 1.554 | 0.165 | 0.256 | 0.172 | 0.267 | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 12 | 11.52 | 0.08 | 2 | 9.26 | Left | MIMO | 99.7 | 0.05 | 4.25 | 1.554 | 0.198 | 0.308 | 0.202 | 0.314 | |
| 47 CFR §1.1310 – Safety Limit Spatial Average Uncontrolled Exposure/ General Population | | | | | | | | | | | | | | | | Power Density 1 mW/cm ² Averaged over 4 m ² | | | | |

| 6 GHz WLAN Power Density RSDB | | | | | | | | | | | | | | | | | | | | |
|---|-----|----------|------------------|------------------|---------------------|-------------------|------------------|-------------|---------------|---------------|-------------|------------|---------------|--|-----------------------------------|---|----------------------------------|--|----------|--|
| Frequency | | Mode | Band width (MHz) | Data Rate (Mbps) | Tune-Up Limit (dBm) | Meas. Power (dBm) | Power Drift (dB) | Peak Number | Distance (mm) | Test Position | Ant Config. | Duty Cycle | Grid Step (λ) | Scaling Factor for Measurement Uncertainty per IEC 62479 | Normal psPD (mW/cm ²) | Scaled Normal psPD (mW/cm ²) | Total psPD (mW/cm ²) | Reported 4 m ² psPD (mW/cm ²) | Plot No. | |
| MHz | Ch. | | | | | | | | | | | | | | | | | | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.11 | 2 | 2 | Rear | MIMO | 99.7 | 0.05 | 1.554 | 0.255 | 0.396 | 0.285 | 0.443 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | -0.13 | 2 | 2 | Left | MIMO | 99.7 | 0.05 | 1.554 | 0.220 | 0.342 | 0.247 | 0.384 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.12 | 1 | 2 | Right | MIMO | 99.7 | 0.05 | 1.554 | 0.170 | 0.264 | 0.174 | 0.270 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | -0.10 | 2 | 2 | Top | MIMO | 99.7 | 0.05 | 1.554 | 0.126 | 0.196 | 0.132 | 0.205 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | 0.12 | 1 | 2 | Rear | MIMO | 99.7 | 0.05 | 1.554 | 0.193 | 0.300 | 0.197 | 0.306 | | |
| 6475 | 105 | 802.11ax | 20 | MCS0 | 10 | 9.61 | -0.14 | 1 | 2 | Top | MIMO | 99.7 | 0.05 | 1.554 | 0.096 | 0.150 | 0.098 | 0.152 | | |
| 6075 | 25 | 802.11ax | 20 | MCS0 | 10 | 9.39 | 0.10 | 2 | 2 | Rear | MIMO | 99.7 | 0.05 | 1.554 | 0.263 | 0.409 | 0.295 | 0.458 | 4 | |
| 6275 | 65 | 802.11ax | 20 | MCS0 | 10 | 9.32 | 0.17 | 2 | 2 | Rear | MIMO | 99.7 | 0.05 | 1.554 | 0.216 | 0.336 | 0.240 | 0.373 | | |
| 6675 | 145 | 802.11ax | 20 | MCS0 | 10 | 9.12 | 0.12 | 2 | 2 | Rear | MIMO | 99.7 | 0.05 | 1.554 | 0.206 | 0.320 | 0.213 | 0.331 | | |
| 6995 | 209 | 802.11ax | 20 | MCS0 | 10 | 9.56 | 0.13 | 2 | 2 | Rear | MIMO | 99.7 | 0.05 | 1.554 | 0.200 | 0.311 | 0.205 | 0.319 | | |
| 47 CFR §1.1310 – Safety Limit Spatial Average Uncontrolled Exposure/ General Population | | | | | | | | | | | | | | | | Power Density 1 mW/cm ² Averaged over 4 m ² | | | | |

9.4 SAR and Absorbed Power Density Test Notes

General Notes:

1. The test data reported are the worst-case SAR values according to test procedures specified in IEEE 1528-2013, FCC KDB Publication 447498 D04 v01
2. Batteries are fully charged at the beginning of the SAR measurements. A standard battery was used for all SAR measurements.
3. Liquid tissue depth was at least 15.0 cm for all frequencies.
4. The manufacturer has confirmed that the device(s) tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
5. SAR results were scaled to the maximum allowed power to demonstrate compliance per FCC KDB 447498 D04 v01.
6. This device utilizes power reduction for some wireless mode and technologies, as outlined in sec. 4.2 The maximum output power allowed for each transmitter and exposure condition was evaluated for SAR compliance based on expected use conditions and simultaneous scenarios.
7. FCC KDB Publication 616217 D04v01r02 Section 4.3, SAR tests are required for the back surface and edges of the tablet with the tablet touching the phantom. The SAR Exclusion Threshold in FCC KDB 447498 D04 v01 was applied to determine SAR test exclusion for adjacent edge configurations.
8. Per FCC guidance SAR was performed using 6.5 GHz SAR probe calibration factors. Per October 2020 TCB Workshop notes, 5 channels were tested. Absorbed power density (APD) using a 4 cm² averaging area is reported based on SAR measurements.
9. For Simultaneous transmission analysis including WLAN6E, is shown in the section 14 of Part 1 SAR Report.

WLAN Notes:

1. WIFI 6 GHz operations are limited to MIMO operations only (does not support stand-alone mode). Per KDB Publication 248227 D01v02r02, SAR for MIMO was evaluated by following the simultaneous SAR provisions from KDB Publication 447498 D04 v01 by making a SAR measurement with both antennas transmitting simultaneously.
2. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools. The reported SAR was scaled to the 100% transmission duty factor to determine compliance. Procedures used to measure the duty factor are identical to that in the associated WLAN test reports.

9.5 Power Density General Notes

1. The manufacturer has confirmed that the device tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
2. Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
3. Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
4. The device was configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools.
5. Per FCC guidance and equipment manufacturer guidance, power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty $>30\%$. Total expanded uncertainty of 2.68 dB(85.4%) was used to determine the psPD measurement scaling factor.
6. Per equipment manufacturer guidance, power density was measured at $d=2$ mm and $d= \lambda/5$ mm using the same grid size and grid step size for some frequencies and surfaces. The integrated power density (iPD) was calculated based on these measurements. Since iPD ratio between the two distances is <1 dB, the grid step was sufficient for determining compliance at $d=2$ mm.
7. WIFI 6 GHz operations are limited to MIMO operations only (does not support stand-alone mode). psPD for MIMO was evaluated by making a measurement with both antennas transmitting simultaneously.

10. Measurement Uncertainty

.For SAR Measurements

| Measurement Uncertainty for handset SAR test According to IEC/IEEE 62209-1528 (6 - 10 GHz range) | | | | | | | | | |
|---|-------------|--------------------|-----------------------------|----------|-----------------------------------|------------------------------------|---|--|--|
| <i>a</i> | <i>b</i> | <i>c</i> | <i>d</i> | <i>e</i> | <i>f</i> | <i>g</i> | <i>h = c x f / e</i> | <i>i = c x g / e</i> | <i>k</i> |
| Source of uncertainty | Description | Uncertainty ± % | Probability distribution | Div. | <i>c_i</i> (1 g) | <i>c_i</i> (10 g) | Standard Uncertainty ± % (1 g) | Standard Uncertainty ± % (10 g) | <i>v_i</i> or <i>v_{eff}</i> |
| Measurement system | | | | | | | | | |
| Probe calibration | CF | 18.60 | N | 2 | 1 | 1 | 9.30 | 9.30 | ∞ |
| Probe Calibration Drift | CFdrift | 1.70 | R | 1.73 | 1.00 | 1.00 | 0.98 | 0.98 | ∞ |
| Probe Linearity | LIN | 4.70 | R | 1.73 | 1.00 | 1.00 | 2.71 | 2.71 | ∞ |
| Broadband Signal | BBS | 2.80 | R | 1.73 | 1 | 1 | 1.62 | 1.62 | ∞ |
| Probe Isotropy | ISO | 7.60 | R | 1.73 | 1 | 1 | 4.39 | 4.39 | ∞ |
| Data Acquisition | DAE | 0.30 | N | 1.00 | 1 | 1 | 0.30 | 0.30 | ∞ |
| RF Ambient | AMB | 1.80 | N | 1.00 | 1 | 1 | 1.80 | 1.80 | ∞ |
| Probe Positioning | Δsys | 0.01 | N | 1 | 0.5 | 0.5 | 0.25 | 0.25 | ∞ |
| Data Processing | DAT | 3.50 | N | 1 | 1 | 1 | 3.50 | 3.50 | ∞ |
| Phantom and Device Errors | | | | | | | | | |
| Conductivity (meas.)DAK | LIQ(σ) | 2.50 | N | 1.00 | 0.78 | 0.71 | 1.95 | 1.78 | ∞ |
| Conductivity (temp.)BB | LIQ(Tσ) | 2.40 | R | 1.73 | 0.78 | 0.71 | 1.08 | 0.98 | ∞ |
| Phantom Permittivity | EPS | 14.00 | R | 1.73 | 0.5 | 0.5 | 4.04 | 4.04 | ∞ |
| Distance DUT - TSL | DIS | 2.00 | N | 1.00 | 2 | 2 | 4.00 | 4.00 | ∞ |
| Device Positioning | Dxyz | 1.00 | N | 1.00 | 1 | 1 | 1.00 | 1.00 | ∞ |
| Device Holder | H | 3.60 | N | 1.00 | 1 | 1 | 3.60 | 3.60 | ∞ |
| DUT Modulation | MOD | 2.40 | R | 1.73 | 1 | 1 | 1.39 | 1.39 | 47 |
| Time-average SAR | TAS | 0.00 | R | 1.73 | 1 | 1 | 0.00 | 0.00 | 5 |
| DUT drift | RFdrift | 2.50 | N | 1.00 | 1 | 1 | 2.50 | 2.50 | ∞ |
| Val Antenna Unc.val | VAL | 0.00 | N | 1.00 | 1 | 1 | 0.00 | 0.00 | ∞ |
| Unc. Input Powerval | RFin | 0.00 | N | 1.00 | 1 | 1 | 0.00 | 0.00 | ∞ |
| Correction to the SAR results | | | | | | | | | |
| Phantom uDeviation to Target | C(ε, σ) | 1.90 | N | 1.00 | 1 | 0.84 | 1.90 | 1.60 | ∞ |
| SAR scalingp | C(R) | 0.00 | R | 1 | 1 | 1 | 0.00 | 0.00 | ∞ |
| Combined Uncertainty | u(ΔSAR) | | RSS | | | | 13.98 | 13.91 | 0 |
| Expanded uncertainty (95% confidence interval) | | | <i>k</i> = 2 | | | | 27.96 | 27.82 | |

For Power Density Measurements:

| Measurement Uncertainty for CDASY6 Power density module | | | | | | |
|--|--------------------------|---------------------------------|-------------|----------------------|-----------------------------|----------------------|
| a | b | c | d | e | f = b x e / d | g |
| Source of uncertainty | Uncertainty Value | Probability distribution | Div. | c_i | Standard Uncertainty | v_i |
| | (± dB) | | | | | |
| Probe calibration | 0.49 | N | 1 | 1 | 0.49 | ∞ |
| Probe correction | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Frequency Response(BW ≤ 1GHz) | 0.20 | R | 1.73 | 1 | 0.12 | ∞ |
| Sensor cross coupling | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Istropy | 0.50 | R | 1.73 | 1 | 0.29 | ∞ |
| Linearity | 0.20 | R | 1.73 | 1 | 0.12 | ∞ |
| Probe scattering | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Probe positioning offset | 0.30 | R | 1.73 | 1 | 0.17 | ∞ |
| Probe positioning Repeatability | 0.04 | R | 1.73 | 1 | 0.02 | ∞ |
| Probe spatial Resolution | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Field Impedence Dependence | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Sensor Mechanical Offset | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Amplitude and Phase drift | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Amplitude and Phase noise | 0.04 | R | 1.73 | 1 | 0.02 | ∞ |
| Measurement area truncation | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| System Detection Limit | 0.04 | R | 1.73 | 1 | 0.02 | ∞ |
| Data acquisition | 0.03 | N | 1 | 1 | 0.03 | ∞ |
| Field Reconstruction | 2.00 | R | 1.73 | 1 | 1.15 | ∞ |
| Forward Transformation | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Power density Scailing | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Spatial Averaging | 0.10 | R | 1.73 | 1 | 0.06 | ∞ |
| System Detection Limit | 0.04 | R | 1.73 | 1 | 0.02 | ∞ |
| Test sample and Environmental Factors | | | | | | |
| Probe coupling with DUT | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Modulation Response | 0.40 | R | 1.73 | 1 | 0.23 | ∞ |
| Integration time | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Response time | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Device holder influence | 0.10 | R | 1.73 | 1 | 0.06 | ∞ |
| DUT alignment | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| RF Ambient Conditions | 0.04 | R | 1.73 | 1 | 0.02 | ∞ |
| RF ambient - reflections | 0.04 | R | 1.73 | 1 | 0.02 | ∞ |
| Immunity/Secondary Reception | 0.00 | R | 1.73 | 1 | 0.00 | ∞ |
| Power Drif of DUT | 0.21 | R | 1.73 | 1 | 0.12 | ∞ |
| Combined standard uncertainty (k = 1) | | RSS | | | 1.34 | ∞ |
| Expanded uncertainty (95% confidence level) | | k = 2 | | | 2.68 | |

11. SAR Test Equipment

| Manufacturer | Type / Model | S/N | Calib. Date | Calib.Interval | Calib.Due |
|---------------|-------------------------------|--------------------|-------------|----------------|------------|
| SPEAG | ELI Phantom | - | N/A | N/A | N/A |
| SPEAG | cDASY6 5G Module Phantom | | N/A | N/A | N/A |
| HP | SAR System Control PC | - | N/A | N/A | N/A |
| Staubli | CS8Cspeag-TX60 | F/20/0018446/C/001 | N/A | N/A | N/A |
| Staubli | CS9spe-TX2-60 | F/21/0029145/C/001 | N/A | N/A | N/A |
| Staubli | Teach Pendant (Joystick) | 020885 | N/A | N/A | N/A |
| Staubli | Teach Pendant (Joystick)/SP2 | D21144507C | N/A | N/A | N/A |
| SPEAG | DAE4 | 780 | 06/14/2022 | Annual | 06/14/2023 |
| SPEAG | DAE4 | 868 | 09/21/2022 | Annual | 09/21/2023 |
| SPEAG | E-Field Probe EX3DV4 | 3968 | 09/28/2022 | Annual | 09/28/2023 |
| SPEAG | E-Field Probe EUmmWV4 | 9464 | 07/18/2022 | Annual | 07/18/2023 |
| SPEAG | Dipole D6.5 GHz V2 | 1012 | 09/20/2022 | Annual | 09/20/2023 |
| SPEAG | 5G Verification source 10 GHz | 1027 | 07/18/2022 | Annual | 07/18/2023 |
| TESTO | 175-H1/Thermometer | 44606559906 | 03/27/2023 | Annual | 03/27/2024 |
| TESTO | 608-H1/Thermometer | 2183499992 | 11/29/2022 | Annual | 11/29/2023 |
| Agilent | Power Meter E4419B | MY41291386 | 09/27/2022 | Annual | 09/27/2023 |
| Agilent | Power Meter N1911A | MY45101406 | 06/27/2022 | Annual | 06/27/2023 |
| Agilent | Power Sensor 8481A | SG1091286 | 09/27/2022 | Annual | 09/27/2023 |
| Agilent | Power Sensor 8481A | MY41090675 | 09/27/2022 | Annual | 09/27/2023 |
| HP | Attenuator (3dB) 33340A | 02427 | 08/25/2022 | Annual | 08/25/2023 |
| HP | Attenuator (20dB) 8493C | 09271 | 08/25/2022 | Annual | 08/25/2023 |
| Agilent | Directional Bridge 86205A | 3140A04581 | 05/26/2022 | Annual | 05/26/2023 |
| SPEAG | DAKS 3.5 | 1038 | 01/25/2023 | Annual | 01/25/2024 |
| SPEAG | Vector Reflectometer | 00141013 | 02/13/2023 | Annual | 02/13/2024 |
| ROHDE&SCHWARZ | Signal Generator SMB100A | 177633 | 07/05/2022 | Annual | 07/05/2023 |
| Agilent | MXA Signal Analyzer N9020A | MY50510407 | 06/07/2022 | Annual | 06/07/2023 |

* The E-field probe was calibrated by SPEAG, by the waveguide technique procedure. Dipole Verification measurement is performed by HCT Lab. before each test. The brain/body simulating material is calibrated by HCT using the DAKS 3.5 to determine the conductivity and permittivity (dielectric constant) of the brain/body-equivalent material.

12. Conclusion

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the ANSI/ IEEE C95.1 - 2005.

These measurements were taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

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Appendix A. – DUT Ant. Information & SETUP PHOTO

Please refer to test DUT Ant. Information & setup photo file no. as follows:

| Report No. |
|---------------------|
| HCT-SR-2305-FC004-P |

Appendix B. – SAR Test Plots

Test Laboratory: HCT CO., LTD
 EUT Type: Tablet
 Liquid Temperature: 18.4 °C
 Ambient Temperature: 18.5 °C
 Test Date: 03/21/2023
 Plot No.: 1

Measurement Report for Device, BACK, U-NII-6, IEEE 802.11ax (20MHz, MCS0, 99pc duty cycle), Channel 105 (6475.0 MHz)

Device Under Test Properties

| | | | |
|--------------------------------|--|------|-------------------|
| Model, Manufacturer Device, | Dimensions [mm] 285.0 x 185.0 x 6.0 | IMEI | DUT Type Phone |
|--------------------------------|--|------|-------------------|

Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, HSL | BACK, 0.00 | U-NII-6 | WLAN, 10683-AAC | 6475.0, 105 | 5.7 | 5.96 | 33.9 |

Hardware Setup

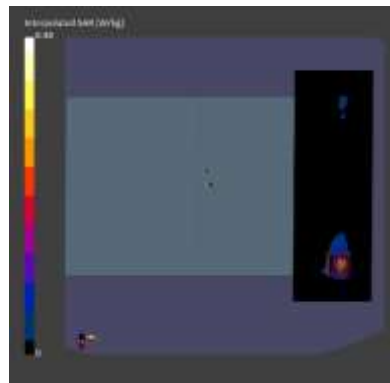
| | | |
|---|--|---|
| Phantom ELI V4.0 (20deg probe tilt) - xxxx | Probe, Calibration Date EX3DV4 - SN3968, 2022-09-28 | DAE, Calibration Date DAE4 Sn780, 2022-06-14 |
|---|--|---|

Scans Setup

| | Area Scan | Zoom Scan |
|-------------------|--------------|--------------------|
| Grid Extents [mm] | 240.0 x 80.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm] | 10.0 x 10.0 | 2.2 x 2.2 x 1.2 |
| Graded Grid | n/a | Yes |
| Grading Ratio | n/a | 1.2 |

Measurement Results

| | Area Scan | Zoom Scan |
|---------------------------|-----------|-----------|
| psSAR1g [W/kg] | 0.634 | 0.843 |
| psSAR10g [W/kg] | 0.160 | 0.167 |
| psAPD (1.0cm2, sq) [W/m2] | | 8.43 |
| psAPD (4.0cm2, sq) [W/m2] | | 4.03 |
| Power Drift [dB] | -0.16 | 0.19 |



Test Laboratory: HCT CO., LTD
 EUT Type: Tablet
 Liquid Temperature: 21.2 °C
 Ambient Temperature: 21.3 °C
 Test Date: 03/22/2023
 Plot No.: 2

Measurement Report for Device, BACK, U-NII-6, IEEE 802.11ax (20MHz, MCS0, 99pc duty cycle), Channel 105 (6475.0 MHz)

Device Under Test Properties

| | | | |
|---------------------|---------------------|------|----------|
| Model, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
| Device, | 285.0 x 185.0 x 6.0 | | Phone |

Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|----------------------|------------------------------|---------|-----------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, HSL | BACK, 0.00 | U-NII-6 | WLAN, 10683-AAC | 6475.0, 105 | 5.7 | 5.94 | 33.8 |

Hardware Setup

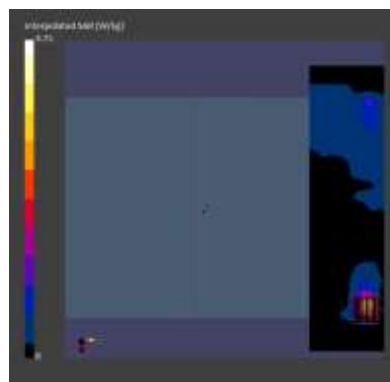
| | | |
|------------------------------------|-----------------------------|------------------------|
| Phantom | Probe, Calibration Date | DAE, Calibration Date |
| ELI V4.0 (20deg probe tilt) - xxxx | EX3DV4 - SN3968, 2022-09-28 | DAE4 Sn780, 2022-06-14 |

Scans Setup

| | Area Scan | Zoom Scan |
|-------------------|--------------|--------------------|
| Grid Extents [mm] | 240.0 x 80.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm] | 10.0 x 10.0 | 2.2 x 2.2 x 1.2 |
| Graded Grid | n/a | Yes |
| Grading Ratio | n/a | 1.2 |

Measurement Results

| | Area Scan | Zoom Scan |
|---------------------------|-----------|-----------|
| psSAR1q [W/kg] | 0.516 | 0.637 |
| psSAR10g [W/kg] | 0.136 | 0.127 |
| psAPD (1.0cm2, sq) [W/m2] | | 6.37 |
| psAPD (4.0cm2, sq) [W/m2] | | 3.08 |
| Power Drift [dB] | n/a | 0.17 |



Test Laboratory: HCT CO., LTD
 EUT Type: Tablet
 Ambient Temperature: 20.8 °C
 Test Date: 03/27/2023
 Plot No.: 3

Measurement Report for Device, EDGE LEFT, U-NII-6, IEEE 802.11ax (20MHz, MCS0, 99pc duty cycle), Channel 105 (6475.0 MHz)

Device Under Test Properties

| | | | |
|-----------------------------|--|------|--------------------|
| Model, Manufacturer Device, | Dimensions [mm] 285.0 x 185.0 x 6.0 | IMEI | DUT Type Tablet |
|-----------------------------|--|------|--------------------|

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| 5G | EDGE LEFT, 2.00 | U-NII-6 | WLAN, 10683-AAC | 6475.0, 105 | 1.0 |

Hardware Setup

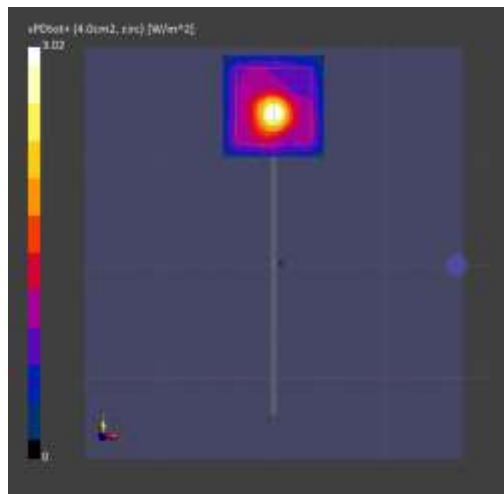
| | | |
|-----------------------|--|---|
| Phantom mmWave - xxxx | Probe, Calibration Date EUmmWV4 - SN9464_F1-55GHz, 2022-07-18 | DAE, Calibration Date DAE4 Sn868, 2022-09-21 |
|-----------------------|--|---|

Scans Setup

| | |
|---------------------|-------------|
| Scan Type | 5G Scan |
| Grid Extents [mm] | 90.0 x 90.0 |
| Grid Steps [lambda] | 0.05 x 0.05 |
| Sensor Surface [mm] | 2.0 |

Measurement Results

| | |
|------------------------------|---------|
| Scan Type | 5G Scan |
| Avg. Area [cm ²] | 4.00 |
| psPDn+ [W/m ²] | 2.77 |
| psPDtot+ [W/m ²] | 3.02 |
| psPDmod+ [W/m ²] | 3.24 |
| E _{max} [V/m] | 58.0 |
| Power Drift [dB] | -0.14 |



Test Laboratory: HCT CO., LTD
 EUT Type: Tablet
 Ambient Temperature: 20.8 °C
 Test Date: 03/28/2023
 Plot No.: 4

Measurement Report for Device, BACK, U-NII-5, IEEE 802.11ax (20MHz, MCS0, 99pc duty cycle), Channel 25 (6075.0 MHz)

Device Under Test Properties

| | | | |
|-----------------------------|--|------|--------------------|
| Model, Manufacturer Device, | Dimensions [mm] 285.0 x 185.0 x 6.0 | IMEI | DUT Type Tablet |
|-----------------------------|--|------|--------------------|

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|---------|-----------------|---------------------------------|-------------------|
| 5G | BACK, 2.00 | U-NII-5 | WLAN, 10683-AAC | 6075.0, 25 | 1.0 |

Hardware Setup

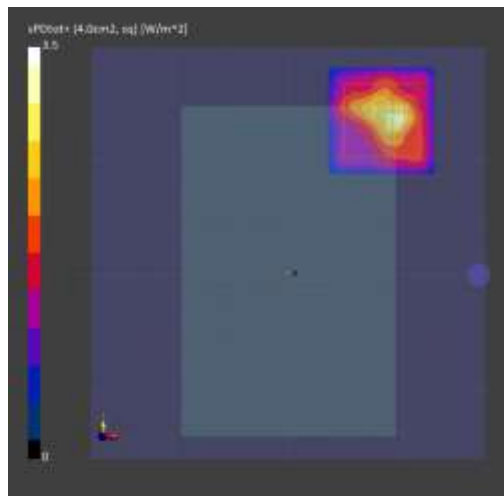
| | | |
|-----------------------|--|---|
| Phantom mmWave - xxxx | Probe, Calibration Date EUmmWV4 - SN9464_F1-55GHz, 2022-07-18 | DAE, Calibration Date DAE4 Sn868, 2022-09-21 |
|-----------------------|--|---|

Scans Setup

| | |
|---------------------|-------------|
| Scan Type | 5G Scan |
| Grid Extents [mm] | 90.0 x 90.0 |
| Grid Steps [lambda] | 0.05 x 0.05 |
| Sensor Surface [mm] | 2.0 |

Measurement Results

| | |
|------------------------------|---------|
| Scan Type | 5G Scan |
| Avg. Area [cm ²] | 4.00 |
| psPDn+ [W/m ²] | 2.63 |
| psPDtot+ [W/m ²] | 2.95 |
| psPDmod+ [W/m ²] | 3.65 |
| E _{max} [V/m] | 56.3 |
| Power Drift [dB] | 0.10 |



Appendix C. – Dipole Verification Plots

■ **Verification Data (6 500 MHz)**

Test Laboratory: HCT CO., LTD
 Input Power 10 mW
 Liquid Temp: 18.4 °C
 Ambient Temp: 18.5 °C
 Test Date: 03/21/2023

Measurement Report for Device, , , CW, Channel 0 (6500.0 MHz)

Exposure Conditions

| Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|---------------------------------|-------------------|------------------------|------------------|
| 6500.0, 0 | 5.7 | 5.97 | 33.8 |

Hardware Setup

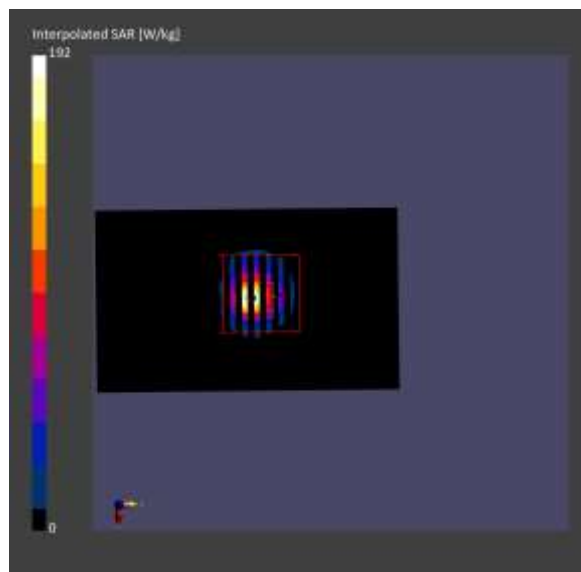
| Phantom | Probe, Calibration Date | DAE, Calibration Date |
|----------|-----------------------------|------------------------|
| ELI V4.0 | EX3DV4 - SN3968, 2022-09-28 | DAE4 Sn780, 2022-06-14 |

Scans Setup

| | Area Scan | Zoom Scan |
|-------------------|-------------|--------------------|
| Grid Extents [mm] | 51.0 x 85.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm] | 8.5 x 8.5 | 3.4 x 3.4 x 1.4 |
| Grading Ratio | n/a | 1.4 |

Measurement Results

| | Area Scan | Zoom Scan |
|------------------|-----------|-----------|
| psSAR1g [W/kg] | 25.1 | 29.6 |
| psSAR10g [W/kg] | 5.19 | 5.53 |
| Power Drift [dB] | 0.02 | -0.06 |



■ **Verification Data (6 500 MHz)**

Test Laboratory: HCT CO., LTD
 Input Power: 10 mW
 Liquid Temp: 21.2 °C
 Ambient Temp: 21.3 °C
 Test Date: 03/22/2023

Measurement Report for Device, , , CW, Channel 0 (6500.0 MHz)

Exposure Conditions

| Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|---------------------------------|-------------------|------------------------|------------------|
| 6500.0, 0 | 5.7 | 5.96 | 33.8 |

Hardware Setup

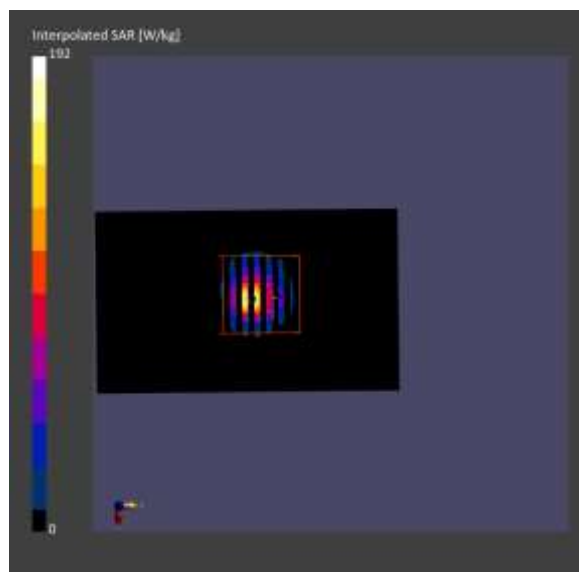
| Phantom | Probe, Calibration Date | DAE, Calibration Date |
|----------|-----------------------------|------------------------|
| ELI V4.0 | EX3DV4 - SN3968, 2022-09-28 | DAE4 Sn780, 2022-06-14 |

Scans Setup

| | Area Scan | Zoom Scan |
|-------------------|-------------|--------------------|
| Grid Extents [mm] | 51.0 x 85.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm] | 8.5 x 8.5 | 3.4 x 3.4 x 1.4 |
| Grading Ratio | n/a | 1.4 |

Measurement Results

| | Area Scan | Zoom Scan |
|------------------|-----------|-----------|
| psSAR1g [W/kg] | 24.7 | 29.6 |
| psSAR10g [W/kg] | 5.13 | 5.51 |
| Power Drift [dB] | 0.03 | -0.03 |



■ **Verification Data (6 500 MHz)**

Test Laboratory: HCT CO., LTD
 Input Power 10 mW
 Liquid Temp: 20.0 °C
 Liquid Temp: 20.1 °C
 Test Date: 03/23/2023
 Measurement Report for Device, , , CW, Channel 0 (6500.0 MHz)

Exposure Conditions

| Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|---------------------------------|-------------------|------------------------|------------------|
| 6500.0, 0 | 5.7 | 6.01 | 33.8 |

Hardware Setup

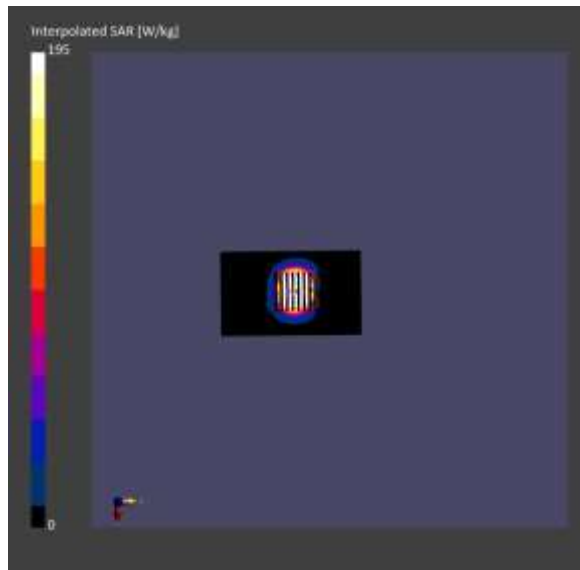
| Phantom | Probe, Calibration Date | DAE, Calibration Date |
|----------|-----------------------------|------------------------|
| ELI V4.0 | EX3DV4 - SN3968, 2022-09-28 | DAE4 Sn780, 2022-06-14 |

Scans Setup

| | Area Scan | Zoom Scan |
|-------------------|-------------|--------------------|
| Grid Extents [mm] | 51.0 x 85.0 | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm] | 8.5 x 8.5 | 3.4 x 3.4 x 1.4 |
| Grading Ratio | n/a | 1.4 |

Measurement Results

| | Area Scan | Zoom Scan |
|------------------|-----------|-----------|
| psSAR1g [W/kg] | 25.3 | 29.9 |
| psSAR10g [W/kg] | 5.21 | 5.58 |
| Power Drift [dB] | 0.01 | -0.02 |



■ **Verification Data (10 000 MHz)**

Test Laboratory: HCT CO., LTD
 Input Power 10 mW
 Ambient Temp: 20.8°C
 Test Date: 03/27/2023

Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Exposure Conditions

| Position, Test Distance [mm] | Frequency [MHz], Channel Number | Conversion Factor |
|------------------------------|---------------------------------|-------------------|
| FRONT, 10.00 | 10000.0, 10000 | 1.0 |

Hardware Setup

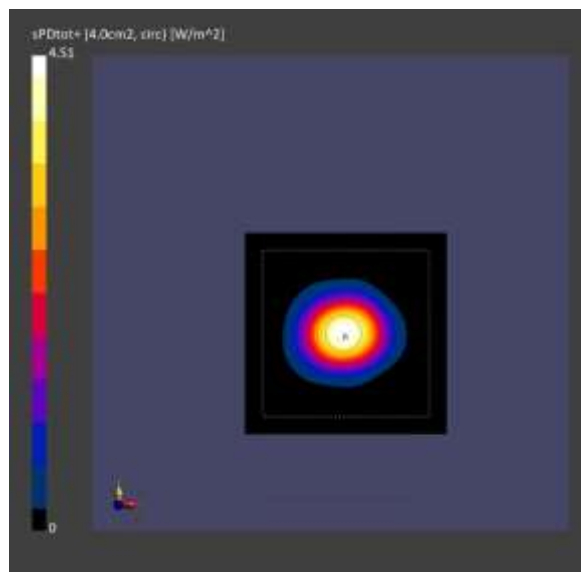
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|---------|--------|------------------------------|------------------------|
| mmWave | Air - | EUmmWV4 - SN9464, 2022-07-18 | DAE4 Sn868, 2022-09-21 |

Scans Setup

| | |
|---------------------|---------------|
| Scan Type | 5G Scan |
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |

Measurement Results

| | |
|------------------------------|---------|
| Scan Type | 5G Scan |
| Avg. Area [cm ²] | 4.00 |
| psPDn+ [W/m ²] | 4.49 |
| psPDtot+ [W/m ²] | 4.51 |
| psPDmod+ [W/m ²] | 4.56 |
| E _{max} [V/m] | 45.0 |
| Power Drift [dB] | 0.18 |



■ **Verification Data (10 000 MHz)**

Test Laboratory: HCT CO., LTD
Input Power 10 mW
Ambient Temp: 20.8°C
Test Date: 03/28/2023
Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

Exposure Conditions

| Position, Test Distance [mm] | Frequency [MHz], Channel Number | Conversion Factor |
|------------------------------|---------------------------------|-------------------|
| FRONT, 10.00 | 10000.0, 10000 | 1.0 |

Hardware Setup

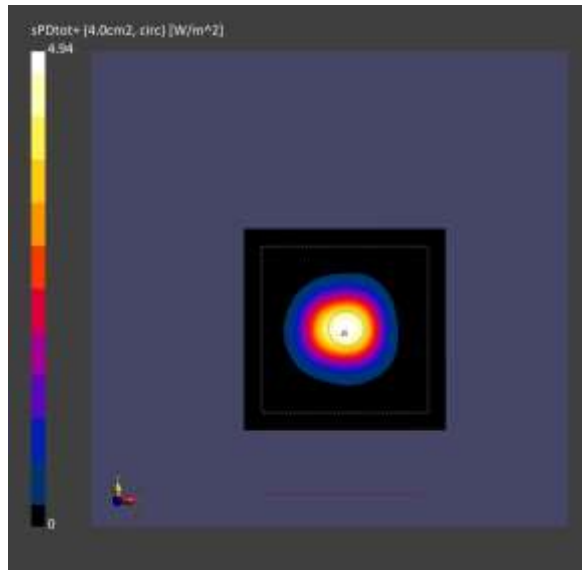
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|---------|--------|------------------------------|------------------------|
| mmWave | Air - | EUmmWV4 - SN9464, 2022-07-18 | DAE4 Sn868, 2022-09-21 |

Scans Setup

| | |
|---------------------|---------------|
| Scan Type | 5G Scan |
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |

Measurement Results

| | |
|------------------------------|---------|
| Scan Type | 5G Scan |
| Avg. Area [cm ²] | 4.00 |
| psPDn+ [W/m ²] | 4.91 |
| psPDtot+ [W/m ²] | 4.94 |
| psPDmod+ [W/m ²] | 4.97 |
| E _{max} [V/m] | 47.1 |
| Power Drift [dB] | 0.13 |



Appendix D. – Probe Calibration Data

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 **HCT (Dymstec)**

Certificate No **EX-3968_Sep22**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:3968**

Calibration procedure(s) **QA CAL-01.v9, QA CAL-12.v9, QA CAL-14.v6, QA CAL-23.v5,
 QA CAL-25.v7
 Calibration procedure for dosimetric E-field probes**

Calibration date **September 28, 2022**

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 NRP | SN: 104776 | 04-Apr-22 (No. 217-03525/03524) | Apr-23 |
| Power sensor NRP-Z91 | SN: 103244 | 04-Apr-22 (No. 217-03524) | Apr-23 |
| OCP DAK-3.5 (weighted) | SN: 1249 | 20-Oct-21 (OCP-DAK3.5-1249_Oct21) | Oct-22 |
| OCP DAK-12 | SN: 1016 | 20-Oct-21 (OCP-DAK12-1016_Oct21) | Oct-22 |
| Reference 20 dB Attenuator | SN: CC2552 (20x) | 04-Apr-22 (No. 217-03527) | Apr-23 |
| DAE4 | SN: 660 | 13-Oct-21 (No. DAE4-660_Oct21) | Oct-22 |
| Reference Probe ES3DV2 | SN: 3013 | 27-Dec-21 (No. ES3-3013_Dec21) | Dec-22 |

| 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-20) | in house check: Oct-22 |

| | Name | Function | Signature |
|---------------|----------------|-----------------------|-----------|
| Calibrated by | Jeton Kastrati | Laboratory Technician | |
| Approved by | Sven Kühn | Technical Manager | |

Issued: October 3, 2022

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

Certificate No: EX-3968_Sep22

Page 1 of 22

| 결 | 부 | 기 | 안 | 리 | 문 | 수 | 일 |
|---------|----|-----|---|---|---|---|-------|
| 제 | 김 | 리 | 훈 | | | | |
| 411/119 | 5w | 김리훈 | | / | | | 10/12 |
| 94 | 10 | 12 | | / | | | 10/12 |

**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

| | |
|------------------------|--|
| TSL | tissue simulating liquid |
| NORM _{x,y,z} | sensitivity in free space |
| ConvF | sensitivity in TSL / NORM _{x,y,z} |
| DCP | diode compression point |
| CF | crest factor (1/duty_cycle) of the RF signal |
| A, B, C, D | modulation dependent linearization parameters |
| 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:

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

Methods Applied and Interpretation of Parameters:

- **NORM_{x,y,z}**: Assessed for E-field polarization $\theta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not affect the E²-field uncertainty inside TSL (see below ConvF).
- **NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- **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.
- **ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- **Spherical isotropy (3D deviation from isotropy)**: In a field of low gradients realized using a flat phantom exposed by a patch antenna.
- **Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- **Connector Angle**: The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).

EX3DV4 - SN:3968

September 28, 2022

Parameters of Probe: EX3DV4 - SN:3968

Basic Calibration Parameters

| | Sensor X | Sensor Y | Sensor Z | Unc (k = 2) |
|---------------------------------------|----------|----------|----------|-------------|
| Norm ($\mu V/(V/m)^2$) ^A | 0.56 | 0.56 | 0.56 | ±10.1% |
| DCP (mV) ^B | 100.0 | 100.0 | 98.0 | ±4.7% |

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 | 172.8 | ±2.7% | ±4.7% |
| | | Y | 0.00 | 0.00 | 1.00 | | 179.4 | | |
| | | Z | 0.00 | 0.00 | 1.00 | | 155.0 | | |
| 10352 | Pulse Waveform (200Hz, 10%) | X | 3.40 | 68.14 | 11.38 | 10.00 | 60.0 | ±3.1% | ±9.6% |
| | | Y | 20.00 | 90.06 | 19.90 | | 60.0 | | |
| | | Z | 20.00 | 88.76 | 19.27 | | 60.0 | | |
| 10353 | Pulse Waveform (200Hz, 20%) | X | 3.72 | 70.50 | 11.49 | 6.99 | 80.0 | ±1.8% | ±9.6% |
| | | Y | 20.00 | 91.71 | 19.89 | | 80.0 | | |
| | | Z | 20.00 | 90.04 | 19.00 | | 80.0 | | |
| 10354 | Pulse Waveform (200Hz, 40%) | X | 12.37 | 81.33 | 13.92 | 3.98 | 95.0 | ±0.8% | ±9.6% |
| | | Y | 20.00 | 92.42 | 18.67 | | 95.0 | | |
| | | Z | 20.00 | 92.21 | 18.90 | | 95.0 | | |
| 10355 | Pulse Waveform (200Hz, 60%) | X | 20.00 | 85.67 | 14.24 | 2.22 | 120.0 | ±0.9% | ±9.6% |
| | | Y | 20.00 | 92.76 | 17.54 | | 120.0 | | |
| | | Z | 20.00 | 97.33 | 20.19 | | 120.0 | | |
| 10387 | QPSK Waveform, 1 MHz | X | 1.68 | 66.35 | 15.01 | 1.00 | 150.0 | ±2.6% | ±9.6% |
| | | Y | 1.64 | 65.84 | 14.66 | | 150.0 | | |
| | | Z | 1.84 | 67.73 | 16.04 | | 150.0 | | |
| 10388 | QPSK Waveform, 10 MHz | X | 2.25 | 68.20 | 15.79 | 0.00 | 150.0 | ±0.9% | ±9.6% |
| | | Y | 2.21 | 67.84 | 15.49 | | 150.0 | | |
| | | Z | 2.49 | 69.87 | 16.80 | | 150.0 | | |
| 10396 | 64-QAM Waveform, 100 kHz | X | 2.75 | 69.76 | 18.52 | 3.01 | 150.0 | ±0.8% | ±9.6% |
| | | Y | 2.77 | 69.30 | 18.31 | | 150.0 | | |
| | | Z | 2.89 | 70.43 | 19.13 | | 150.0 | | |
| 10399 | 64-QAM Waveform, 40 MHz | X | 3.54 | 67.28 | 15.85 | 0.00 | 150.0 | ±1.9% | ±9.6% |
| | | Y | 3.52 | 67.11 | 15.72 | | 150.0 | | |
| | | Z | 3.69 | 67.97 | 16.34 | | 150.0 | | |
| 10414 | WLAN CCDF, 64-QAM, 40 MHz | X | 4.91 | 65.82 | 15.65 | 0.00 | 150.0 | ±3.8% | ±9.6% |
| | | Y | 4.92 | 65.80 | 15.62 | | 150.0 | | |
| | | Z | 4.85 | 65.54 | 15.60 | | 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%.

^A The uncertainties of Norm X,Y,Z do not affect the E²-field uncertainty inside TSL (see Pages 5 and 6).
^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.

EX3DV4 - SN:3968

September 28, 2022

Parameters of Probe: EX3DV4 - SN:3968

Sensor Model Parameters

| | C1 fF | C2 fF | α V ⁻¹ | T1 ms V ⁻² | T2 ms V ⁻¹ | T3 ms | T4 V ⁻² | T5 V ⁻¹ | T6 |
|---|----------|----------|-----------------------------|--------------------------|--------------------------|----------|-----------------------|-----------------------|------|
| x | 44.7 | 335.99 | 35.90 | 17.69 | 0.00 | 5.02 | 0.80 | 0.27 | 1.01 |
| y | 46.9 | 356.20 | 36.58 | 15.28 | 0.05 | 5.10 | 0.20 | 0.43 | 1.01 |
| z | 47.1 | 354.33 | 36.05 | 18.96 | 0.00 | 5.06 | 0.42 | 0.35 | 1.01 |

Other Probe Parameters

| | |
|---|------------|
| Sensor Arrangement | Triangular |
| Connector Angle | -95.1° |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 337 mm |
| Probe Body Diameter | 10 mm |
| Tip Length | 9 mm |
| Tip Diameter | 2.5 mm |
| Probe Tip to Sensor X Calibration Point | 1 mm |
| Probe Tip to Sensor Y Calibration Point | 1 mm |
| Probe Tip to Sensor Z Calibration Point | 1 mm |
| Recommended Measurement Distance from Surface | 1.4 mm |

Note: Measurement distance from surface can be increased to 3-4 mm for an Area Scan job.

EX3DV4 - SN:3968

September 28, 2022

Parameters of Probe: EX3DV4 - SN:3968

Calibration Parameter Determined in Head Tissue Simulating Media

| f (MHz) ^C | Relative Permittivity ^F | Conductivity ^F (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha ^G | Depth ^G (mm) | Unc (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-------------|
| 750 | 41.9 | 0.89 | 9.88 | 9.88 | 9.88 | 0.57 | 0.88 | ±12.0% |
| 835 | 41.5 | 0.90 | 9.61 | 9.61 | 9.61 | 0.59 | 0.80 | ±12.0% |
| 900 | 41.5 | 0.97 | 9.37 | 9.37 | 9.37 | 0.50 | 0.87 | ±12.0% |
| 1750 | 40.1 | 1.37 | 8.73 | 8.73 | 8.73 | 0.31 | 0.86 | ±12.0% |
| 1900 | 40.0 | 1.40 | 8.43 | 8.43 | 8.43 | 0.25 | 0.86 | ±12.0% |
| 2300 | 39.5 | 1.67 | 7.78 | 7.78 | 7.78 | 0.35 | 0.90 | ±12.0% |
| 2450 | 39.2 | 1.80 | 7.64 | 7.64 | 7.64 | 0.38 | 0.90 | ±12.0% |
| 2600 | 39.0 | 1.96 | 7.59 | 7.59 | 7.59 | 0.25 | 0.90 | ±12.0% |
| 3300 | 38.2 | 2.71 | 7.09 | 7.09 | 7.09 | 0.30 | 1.35 | ±13.1% |
| 3500 | 37.9 | 2.91 | 7.05 | 7.05 | 7.05 | 0.30 | 1.35 | ±13.1% |
| 3700 | 37.7 | 3.12 | 6.92 | 6.92 | 6.92 | 0.30 | 1.35 | ±13.1% |
| 3900 | 37.5 | 3.32 | 6.61 | 6.61 | 6.61 | 0.35 | 1.50 | ±13.1% |
| 4100 | 37.2 | 3.53 | 6.57 | 6.57 | 6.57 | 0.35 | 1.50 | ±13.1% |
| 4400 | 36.9 | 3.84 | 6.31 | 6.31 | 6.31 | 0.35 | 1.60 | ±13.1% |
| 4600 | 36.7 | 4.04 | 6.24 | 6.24 | 6.24 | 0.35 | 1.60 | ±13.1% |
| 4800 | 36.4 | 4.25 | 6.15 | 6.15 | 6.15 | 0.40 | 1.80 | ±13.1% |
| 4950 | 36.3 | 4.40 | 5.90 | 5.90 | 5.90 | 0.40 | 1.80 | ±13.1% |
| 5250 | 35.9 | 4.71 | 5.56 | 5.56 | 5.56 | 0.40 | 1.80 | ±13.1% |
| 5600 | 35.5 | 5.07 | 4.86 | 4.86 | 4.86 | 0.40 | 1.80 | ±13.1% |
| 5750 | 35.4 | 5.22 | 5.01 | 5.01 | 5.01 | 0.40 | 1.80 | ±13.1% |
| 5800 | 35.3 | 5.27 | 4.91 | 4.91 | 4.91 | 0.40 | 1.80 | ±13.1% |

^C Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–8 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

^F At frequencies below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

EX3DV4 - SN:3968

September 28, 2022

Parameters of Probe: EX3DV4 - SN:3968**Calibration Parameter Determined in Head Tissue Simulating Media**

| f (MHz) ^C | Relative Permittivity ^F | Conductivity ^F (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha ^G | Depth ^G (mm) | Unc (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-------------|
| 6500 | 34.5 | 6.07 | 5.70 | 5.70 | 5.70 | 0.20 | 2.50 | ±18.6% |

^C Frequency validity at 6.5 GHz is -800/+700 MHz, and ±700 MHz at or above 7 GHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

^F At frequencies 6–10 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

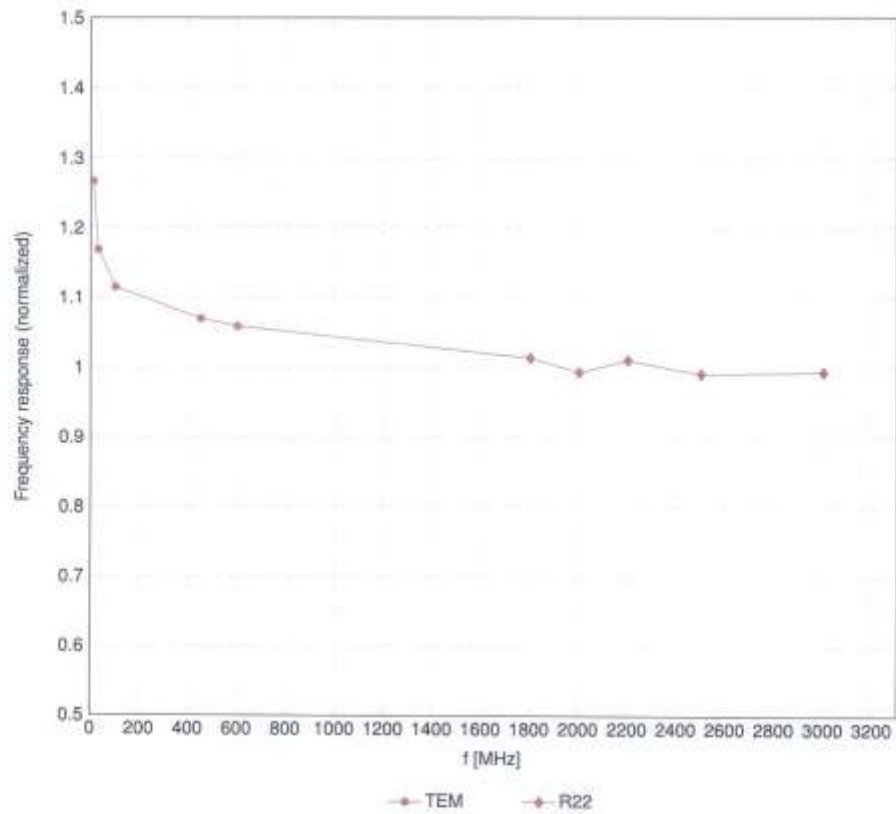
^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz; below ±2% for frequencies between 3–6 GHz; and below ±4% for frequencies between 6–10 GHz at any distance larger than half the probe tip diameter from the boundary.

EX3DV4 - SN:3968

September 28, 2022

Frequency Response of E-Field

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

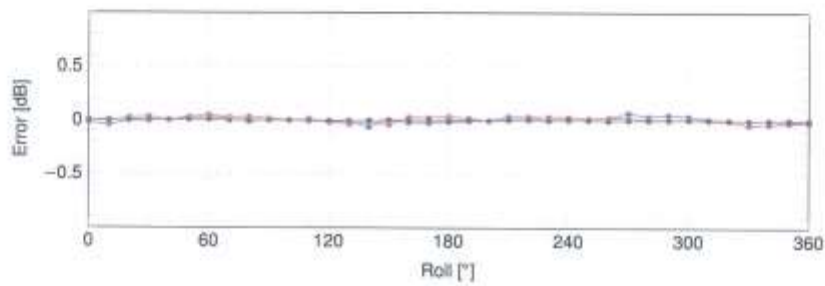
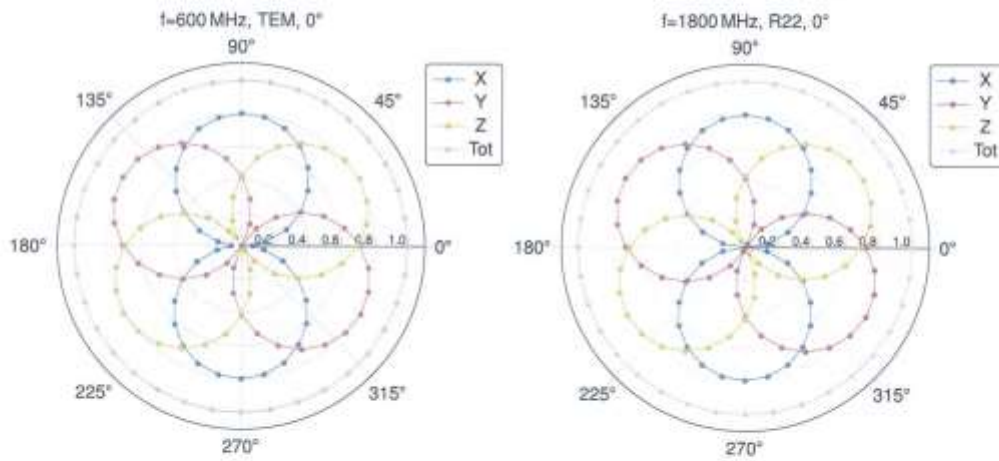


Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ ($k=2$)

EX3DV4 - SN:3968

September 28, 2022

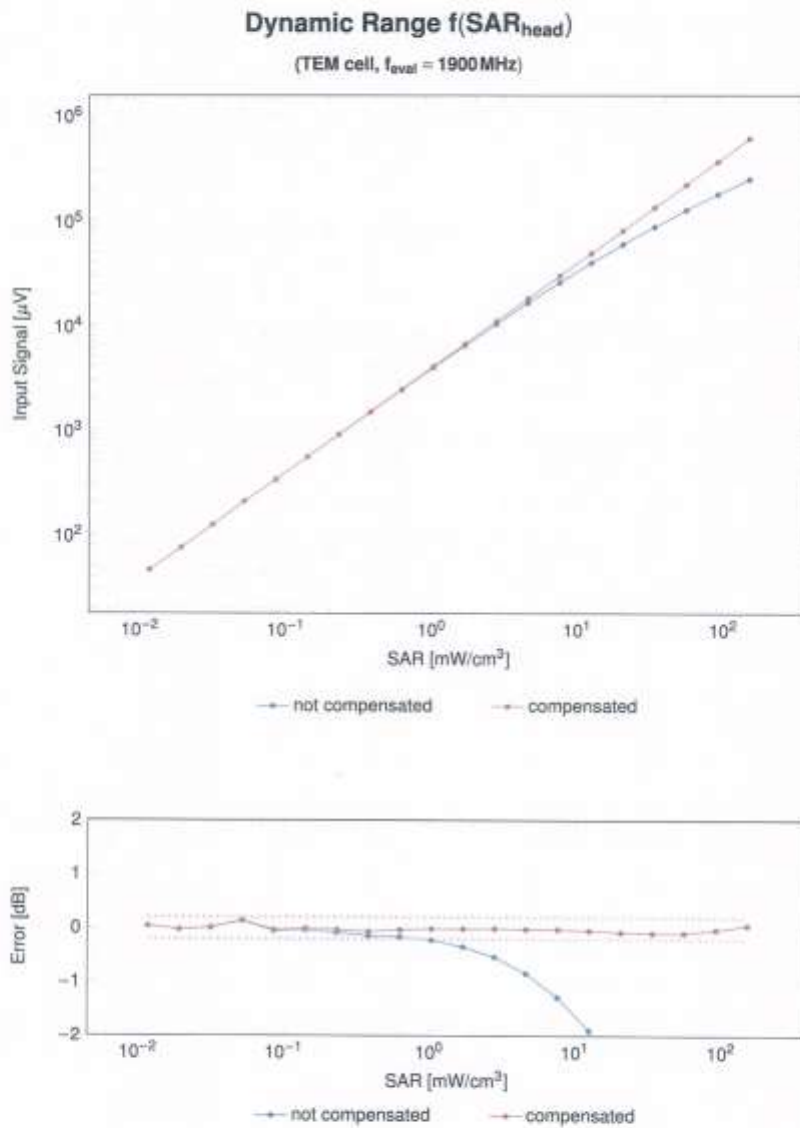
Receiving Pattern (ϕ), $\theta = 0^\circ$



Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ (k=2)

EX3DV4 - SN:3968

September 28, 2022

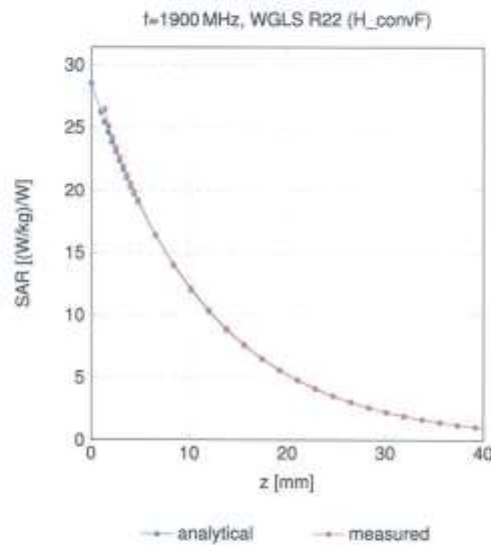


Uncertainty of Linearity Assessment: ±0.6% (k=2)

EX3DV4 - SN:3968

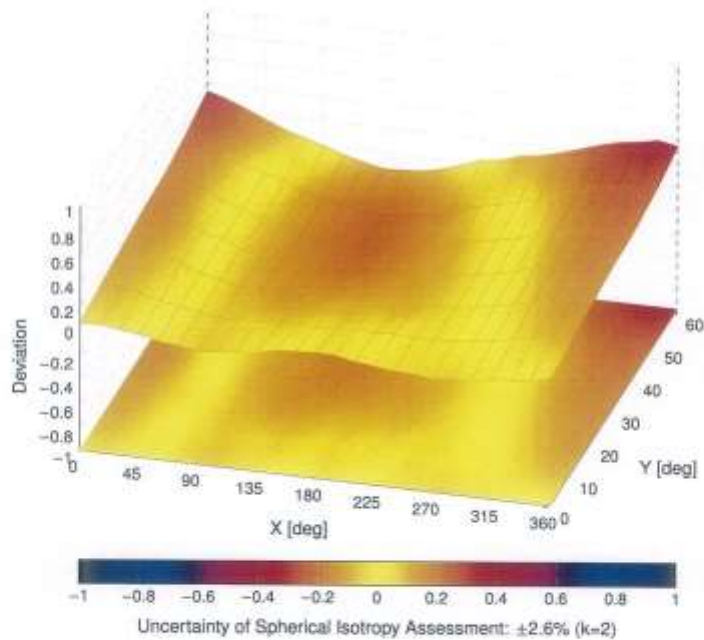
September 28, 2022

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 900 MHz



EX3DV4 - SN:3968

September 28, 2022

Appendix: Modulation Calibration Parameters

| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^k k = 2 |
|-------|-----|--|-----------|----------|------------------------|
| 0 | | CW | CW | 0.00 | ±4.7 |
| 10010 | CAA | SAR Validation (Square, 100 ms, 10 ms) | Test | 10.00 | ±9.6 |
| 10011 | CAB | 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-QPSK, DH1) | Bluetooth | 7.74 | ±9.6 |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (Pi/4-QPSK, DH3) | Bluetooth | 4.33 | ±9.6 |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (Pi/4-QPSK, DH5) | Bluetooth | 3.83 | ±9.6 |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-PSK, DH1) | Bluetooth | 8.01 | ±9.6 |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-PSK, DH3) | Bluetooth | 4.77 | ±9.6 |
| 10038 | CAA | IEEE 802.15.1 Bluetooth (8-PSK, 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-QPSK, 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 |
| 10058 | 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 | 6.68 | ±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 | 9.82 | ±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-QPSK, 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 | DAC | UMTS-FDD (HSUPA, Subtest 2) | WCDMA | 3.98 | ±9.6 |
| 10099 | CAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | GSM | 9.55 | ±9.6 |
| 10100 | CAC | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | LTE-FDD | 5.67 | ±9.6 |
| 10101 | CAB | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | LTE-FDD | 6.42 | ±9.6 |
| 10102 | CAB | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | LTE-FDD | 6.60 | ±9.6 |
| 10103 | DAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | LTE-TDD | 9.29 | ±9.6 |
| 10104 | CAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | LTE-TDD | 9.97 | ±9.6 |
| 10105 | CAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | LTE-TDD | 10.01 | ±9.6 |
| 10108 | CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | LTE-FDD | 5.80 | ±9.6 |
| 10109 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10110 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | LTE-FDD | 5.75 | ±9.6 |
| 10111 | CAG | 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 ^k k = 2 |
|-------|-----|--|---------|----------|------------------------|
| 10112 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | LTE-FDD | 6.59 | ±9.6 |
| 10113 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | LTE-FDD | 6.62 | ±9.6 |
| 10114 | CAG | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 10115 | CAG | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM) | WLAN | 8.46 | ±9.6 |
| 10116 | CAG | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN | 8.15 | ±9.6 |
| 10117 | CAG | 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 | CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10141 | CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | LTE-FDD | 6.53 | ±9.6 |
| 10142 | CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10143 | CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | LTE-FDD | 6.35 | ±9.6 |
| 10144 | CAC | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | LTE-FDD | 6.65 | ±9.6 |
| 10145 | CAC | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | LTE-FDD | 5.76 | ±9.6 |
| 10146 | CAC | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-FDD | 6.41 | ±9.6 |
| 10147 | CAC | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.72 | ±9.6 |
| 10148 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | LTE-FDD | 6.42 | ±9.6 |
| 10150 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | LTE-FDD | 6.60 | ±9.6 |
| 10151 | CAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | LTE-TDD | 9.28 | ±9.6 |
| 10152 | CAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | LTE-TDD | 9.92 | ±9.6 |
| 10153 | CAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | LTE-TDD | 10.05 | ±9.6 |
| 10154 | CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | LTE-FDD | 5.75 | ±9.6 |
| 10155 | CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10156 | CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | LTE-FDD | 5.79 | ±9.6 |
| 10157 | CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10158 | CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | LTE-FDD | 6.62 | ±9.6 |
| 10159 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | LTE-FDD | 6.56 | ±9.6 |
| 10160 | CAG | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | LTE-FDD | 5.82 | ±9.6 |
| 10161 | CAG | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10162 | CAG | 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 | CAG | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10170 | CAG | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10171 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10172 | CAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10173 | CAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10174 | CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10175 | CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10176 | CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10177 | CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10178 | CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10179 | AAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10180 | CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10181 | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10182 | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10183 | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10184 | CAG | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10185 | CAI | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | LTE-FDD | 6.51 | ±9.6 |
| 10186 | CAG | 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 | CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10193 | CAE | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK) | WLAN | 8.09 | ±9.6 |
| 10194 | AAD | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | WLAN | 8.12 | ±9.6 |
| 10195 | CAE | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM) | WLAN | 8.21 | ±9.6 |
| 10196 | CAE | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 10197 | AAE | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM) | WLAN | 8.13 | ±9.6 |
| 10198 | CAF | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM) | WLAN | 8.27 | ±9.6 |
| 10219 | CAF | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | WLAN | 8.03 | ±9.6 |
| 10220 | AAF | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM) | WLAN | 8.13 | ±9.6 |
| 10221 | CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM) | WLAN | 8.27 | ±9.6 |
| 10222 | CAC | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK) | WLAN | 8.06 | ±9.6 |
| 10223 | CAD | IEEE 802.11n (HT Mixed, 80 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 ^k k = 2 |
|-------|-----|---|----------|----------|------------------------|
| 10225 | CAD | UMTS-FDD (HSPA+) | WCDMA | 5.97 | ±9.6 |
| 10226 | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.49 | ±9.6 |
| 10227 | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-TDD | 10.26 | ±9.6 |
| 10228 | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | LTE-TDD | 9.22 | ±9.6 |
| 10229 | DAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10230 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10231 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | LTE-TDD | 9.19 | ±9.6 |
| 10232 | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10233 | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10234 | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10235 | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10236 | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10237 | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10238 | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10239 | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10240 | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10241 | CAB | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.82 | ±9.6 |
| 10242 | CAD | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | LTE-TDD | 9.86 | ±9.6 |
| 10243 | CAD | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | LTE-TDD | 9.46 | ±9.6 |
| 10244 | CAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10245 | CAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10246 | CAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | LTE-TDD | 9.30 | ±9.6 |
| 10247 | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | LTE-TDD | 9.91 | ±9.6 |
| 10248 | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | LTE-TDD | 10.09 | ±9.6 |
| 10249 | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | LTE-TDD | 9.29 | ±9.6 |
| 10250 | CAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | LTE-TDD | 9.81 | ±9.6 |
| 10251 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | LTE-TDD | 10.17 | ±9.6 |
| 10252 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | LTE-TDD | 9.24 | ±9.6 |
| 10253 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | LTE-TDD | 9.90 | ±9.6 |
| 10254 | CAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | LTE-TDD | 10.14 | ±9.6 |
| 10255 | CAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | LTE-TDD | 9.20 | ±9.6 |
| 10256 | CAB | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.96 | ±9.6 |
| 10257 | CAD | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-TDD | 10.08 | ±9.6 |
| 10258 | CAD | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | LTE-TDD | 9.34 | ±9.6 |
| 10259 | CAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | LTE-TDD | 9.98 | ±9.6 |
| 10260 | CAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | LTE-TDD | 9.97 | ±9.6 |
| 10261 | CAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | LTE-TDD | 9.24 | ±9.6 |
| 10262 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | LTE-TDD | 9.83 | ±9.6 |
| 10263 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | LTE-TDD | 10.16 | ±9.6 |
| 10264 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | LTE-TDD | 9.23 | ±9.6 |
| 10265 | CAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | LTE-TDD | 9.92 | ±9.6 |
| 10266 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | LTE-TDD | 10.07 | ±9.6 |
| 10267 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | LTE-TDD | 9.30 | ±9.6 |
| 10268 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10269 | CAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | LTE-TDD | 10.13 | ±9.6 |
| 10270 | CAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | LTE-TDD | 9.56 | ±9.6 |
| 10274 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | WCDMA | 4.87 | ±9.6 |
| 10275 | CAD | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | WCDMA | 3.96 | ±9.6 |
| 10277 | CAD | PHS (QPSK) | PHS | 11.81 | ±9.6 |
| 10279 | CAD | PHS (QPSK, BW 884 MHz, Roll-off 0.5) | PHS | 11.81 | ±9.6 |
| 10279 | CAG | PHS (QPSK, BW 884 MHz, Roll-off 0.38) | PHS | 12.18 | ±9.6 |
| 10290 | CAG | CDMA2000, RC1, SQ55, Full Rate | CDMA2000 | 3.91 | ±9.6 |
| 10291 | CAG | CDMA2000, RC3, SQ55, Full Rate | CDMA2000 | 3.46 | ±9.6 |
| 10292 | CAG | CDMA2000, RC3, SQ32, Full Rate | CDMA2000 | 3.39 | ±9.6 |
| 10293 | CAG | CDMA2000, RC3, SQ3, Full Rate | CDMA2000 | 3.50 | ±9.6 |
| 10295 | CAG | CDMA2000, RC1, SQ3, 1/8th Rate 25 fr. | CDMA2000 | 12.49 | ±9.6 |
| 10297 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | LTE-FDD | 5.81 | ±9.6 |
| 10298 | CAF | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10299 | CAF | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | LTE-FDD | 6.39 | ±9.6 |
| 10300 | CAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | LTE-FDD | 6.60 | ±9.6 |
| 10301 | CAC | IEEE 802.16e WIMAX (29-18, 5 ms, 10 MHz, QPSK, PUSC) | WIMAX | 12.03 | ±9.6 |
| 10302 | CAB | IEEE 802.16e WIMAX (29-18, 5 ms, 10 MHz, QPSK, PUSC, 3CTRL) | WIMAX | 12.57 | ±9.6 |
| 10303 | CAB | IEEE 802.16e WIMAX (31-15, 5 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 12.52 | ±9.6 |
| 10304 | CAA | IEEE 802.16e WIMAX (29-18, 5 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 11.86 | ±9.6 |
| 10305 | CAA | IEEE 802.16e WIMAX (31-15, 10 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 15.24 | ±9.6 |
| 10306 | CAA | IEEE 802.16e WIMAX (29-18, 10 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 14.67 | ±9.6 |

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|-------|-----|--|----------|----------|------------------------|
| 10307 | AAB | IEEE 802.16e WIMAX (29.18, 10ms, 10MHz, QPSK, PUSC) | WIMAX | 14.49 | ±9.6 |
| 10309 | AAB | IEEE 802.16e WIMAX (29.18, 10ms, 10MHz, 16QAM, PUSC) | WIMAX | 14.46 | ±9.6 |
| 10309 | AAB | IEEE 802.16e WIMAX (29.18, 10ms, 10MHz, 16QAM, AMC 2x3) | WIMAX | 14.58 | ±9.6 |
| 10310 | AAB | IEEE 802.16e WIMAX (29.18, 10ms, 10MHz, QPSK, AMC 2x3) | WIMAX | 14.57 | ±9.6 |
| 10311 | AAB | LTE-FDD (SC-FDMA, 100% RB, 15MHz, QPSK) | LTE-FDD | 6.00 | ±9.6 |
| 10313 | AAD | IDEN 1.3 | IDEN | 10.51 | ±9.6 |
| 10314 | AAD | IDEN 1.3 | IDEN | 13.48 | ±9.6 |
| 10315 | AAD | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc) | WLAN | 1.71 | ±9.6 |
| 10316 | AAD | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10317 | AAA | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10352 | AAA | Pulse Waveform (200 Hz, 10%) | Generic | 10.00 | ±9.6 |
| 10353 | AAA | Pulse Waveform (200 Hz, 20%) | Generic | 6.99 | ±9.6 |
| 10354 | AAA | Pulse Waveform (200 Hz, 40%) | Generic | 3.98 | ±9.6 |
| 10355 | AAA | Pulse Waveform (200 Hz, 60%) | Generic | 2.22 | ±9.6 |
| 10356 | AAA | Pulse Waveform (200 Hz, 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 | AAD | IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc dc) | WLAN | 8.37 | ±9.6 |
| 10401 | AAA | IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc dc) | WLAN | 8.60 | ±9.6 |
| 10402 | AAA | IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc dc) | 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 | AAD | CDMA2000, RC3, SC32, SCH0, Full Rate | CDMA2000 | 5.22 | ±9.6 |
| 10410 | AAD | LTE-TDD (SC-FDMA, 1 RB, 10MHz, QPSK, UL Sub=2,3,4,7,8,9) | 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 dc) | WLAN | 1.54 | ±9.6 |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc) | WLAN | 8.23 | ±9.6 |
| 10417 | AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc) | WLAN | 8.23 | ±9.6 |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long) | WLAN | 8.14 | ±9.6 |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short) | WLAN | 8.19 | ±9.6 |
| 10422 | AAA | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | WLAN | 8.32 | ±9.6 |
| 10423 | AAA | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | WLAN | 8.47 | ±9.6 |
| 10424 | AAE | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | WLAN | 8.40 | ±9.6 |
| 10425 | AAE | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK) | WLAN | 8.41 | ±9.6 |
| 10426 | AAE | IEEE 802.11n (HT Greenfield, 80 Mbps, 16-QAM) | WLAN | 8.45 | ±9.6 |
| 10427 | AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | WLAN | 8.41 | ±9.6 |
| 10430 | AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) | LTE-FDD | 8.28 | ±9.6 |
| 10431 | AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) | LTE-FDD | 8.38 | ±9.6 |
| 10432 | AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
| 10433 | AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
| 10434 | AAG | W-CDMA (BS Test Model 1, 64 DPCH) | WCDMA | 8.60 | ±9.6 |
| 10435 | AAA | LTE-TDD (SC-FDMA, 1 RB, 20MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10447 | AAA | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.56 | ±9.6 |
| 10448 | AAA | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.53 | ±9.6 |
| 10449 | AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.51 | ±9.6 |
| 10450 | AAA | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.48 | ±9.6 |
| 10451 | AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) | WCDMA | 7.59 | ±9.6 |
| 10453 | AAC | Validation (Square, 10 ms, 1 ms) | Test | 10.00 | ±9.6 |
| 10456 | AAC | IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc dc) | WLAN | 8.63 | ±9.6 |
| 10457 | AAC | UMTS-FDD (DC-HSDPA) | WCDMA | 6.62 | ±9.6 |
| 10458 | AAC | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | CDMA2000 | 6.55 | ±9.6 |
| 10459 | AAC | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | CDMA2000 | 6.25 | ±9.6 |
| 10460 | AAC | UMTS-FDD (WCDMA, AMR) | WCDMA | 2.39 | ±9.6 |
| 10461 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10462 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.30 | ±9.6 |
| 10463 | AAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.56 | ±9.6 |
| 10464 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10465 | AAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |
| 10466 | AAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10467 | AAA | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10468 | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |
| 10469 | AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.56 | ±9.6 |
| 10470 | AAD | LTE-TDD (SC-FDMA, 1 RB, 10MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10471 | AAC | LTE-TDD (SC-FDMA, 1 RB, 10MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^E k = 2 |
|-------|-----|---|---------|----------|------------------------|
| 10472 | AAC | LTE-TDD (SC-FDMA, 1 RB, 10MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10473 | AAA | LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10474 | AAC | LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |
| 10475 | AAD | LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10477 | AAC | LTE-TDD (SC-FDMA, 1 RB, 20MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |
| 10478 | AAC | LTE-TDD (SC-FDMA, 1 RB, 20MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10479 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10480 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.18 | ±9.6 |
| 10481 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.45 | ±9.6 |
| 10482 | AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Sub) | LTE-TDD | 7.71 | ±9.6 |
| 10483 | AAA | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, Sub) | LTE-TDD | 8.39 | ±9.6 |
| 10484 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.47 | ±9.6 |
| 10485 | AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Sub) | LTE-TDD | 7.59 | ±9.6 |
| 10486 | AAB | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.38 | ±9.6 |
| 10487 | AAC | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.60 | ±9.6 |
| 10488 | AAC | LTE-TDD (SC-FDMA, 80% RB, 10 MHz, QPSK, UL Sub) | LTE-TDD | 7.70 | ±9.6 |
| 10489 | AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.31 | ±9.6 |
| 10490 | AAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.54 | ±9.6 |
| 10491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10492 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.41 | ±9.6 |
| 10493 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.55 | ±9.6 |
| 10494 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10495 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.37 | ±9.6 |
| 10496 | AAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.54 | ±9.6 |
| 10497 | AAE | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Sub) | LTE-TDD | 7.67 | ±9.6 |
| 10498 | AAE | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.40 | ±9.6 |
| 10499 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.68 | ±9.6 |
| 10500 | AAF | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Sub) | LTE-TDD | 7.67 | ±9.6 |
| 10501 | AAF | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.44 | ±9.6 |
| 10502 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.52 | ±9.6 |
| 10503 | AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Sub) | LTE-TDD | 7.72 | ±9.6 |
| 10504 | AAB | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.31 | ±9.6 |
| 10505 | AAC | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.54 | ±9.6 |
| 10506 | AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10507 | AAC | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.36 | ±9.6 |
| 10508 | AAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.55 | ±9.6 |
| 10509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Sub) | LTE-TDD | 7.39 | ±9.6 |
| 10510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.49 | ±9.6 |
| 10511 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.51 | ±9.6 |
| 10512 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10513 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.42 | ±9.6 |
| 10514 | AAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.45 | ±9.6 |
| 10515 | AAE | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc dc) | WLAN | 1.58 | ±9.6 |
| 10516 | AAE | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc dc) | WLAN | 1.57 | ±9.6 |
| 10517 | AAF | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc dc) | WLAN | 1.58 | ±9.6 |
| 10518 | AAF | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc dc) | WLAN | 8.23 | ±9.6 |
| 10519 | AAF | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc dc) | WLAN | 8.39 | ±9.6 |
| 10520 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc dc) | WLAN | 8.12 | ±9.6 |
| 10521 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc dc) | WLAN | 7.97 | ±9.6 |
| 10522 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10523 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc dc) | WLAN | 8.08 | ±9.6 |
| 10524 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc dc) | WLAN | 8.27 | ±9.6 |
| 10525 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10526 | AAF | IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10527 | AAF | IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc dc) | WLAN | 8.21 | ±9.6 |
| 10528 | AAF | IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10529 | AAF | IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10531 | AAF | IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc dc) | WLAN | 8.43 | ±9.6 |
| 10532 | AAF | IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10533 | AAE | IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc dc) | WLAN | 8.38 | ±9.6 |
| 10534 | AAE | IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10535 | AAE | IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10536 | AAF | IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc dc) | WLAN | 8.32 | ±9.6 |
| 10537 | AAF | IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc dc) | WLAN | 8.44 | ±9.6 |
| 10538 | AAF | IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc dc) | WLAN | 8.54 | ±9.6 |
| 10540 | AAA | IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc dc) | WLAN | 8.39 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^h k = 2 |
|-------|-----|---|-------|----------|------------------------|
| 10541 | AAA | IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc dc) | WLAN | 8.46 | ±9.6 |
| 10542 | AAA | IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc dc) | WLAN | 8.65 | ±9.6 |
| 10543 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc dc) | WLAN | 8.65 | ±9.6 |
| 10544 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc dc) | WLAN | 8.47 | ±9.6 |
| 10545 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc dc) | WLAN | 8.55 | ±9.6 |
| 10546 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc dc) | WLAN | 8.35 | ±9.6 |
| 10547 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc dc) | WLAN | 8.49 | ±9.6 |
| 10548 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc dc) | WLAN | 8.37 | ±9.6 |
| 10550 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc dc) | WLAN | 8.38 | ±9.6 |
| 10551 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc dc) | WLAN | 8.50 | ±9.6 |
| 10552 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10553 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10554 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc dc) | WLAN | 8.48 | ±9.6 |
| 10555 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc dc) | WLAN | 8.47 | ±9.6 |
| 10556 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc dc) | WLAN | 8.50 | ±9.6 |
| 10557 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc dc) | WLAN | 8.52 | ±9.6 |
| 10558 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc dc) | WLAN | 8.61 | ±9.6 |
| 10560 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc dc) | WLAN | 8.73 | ±9.6 |
| 10561 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc dc) | WLAN | 8.56 | ±9.6 |
| 10562 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc dc) | WLAN | 8.69 | ±9.6 |
| 10563 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc dc) | WLAN | 8.77 | ±9.6 |
| 10564 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10565 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10566 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc dc) | WLAN | 8.13 | ±9.6 |
| 10567 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc dc) | WLAN | 8.00 | ±9.6 |
| 10568 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc dc) | WLAN | 8.37 | ±9.6 |
| 10569 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc dc) | WLAN | 8.10 | ±9.6 |
| 10570 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc dc) | WLAN | 8.30 | ±9.6 |
| 10571 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc dc) | WLAN | 1.99 | ±9.6 |
| 10572 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc dc) | WLAN | 1.99 | ±9.6 |
| 10573 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc dc) | WLAN | 1.99 | ±9.6 |
| 10574 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc dc) | WLAN | 1.98 | ±9.6 |
| 10575 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc dc) | WLAN | 8.59 | ±9.6 |
| 10576 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc dc) | WLAN | 8.60 | ±9.6 |
| 10577 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10578 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc dc) | WLAN | 8.49 | ±9.6 |
| 10579 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc dc) | WLAN | 8.36 | ±9.6 |
| 10580 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc dc) | WLAN | 8.76 | ±9.6 |
| 10581 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc dc) | WLAN | 8.35 | ±9.6 |
| 10582 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc dc) | WLAN | 8.67 | ±9.6 |
| 10583 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc dc) | WLAN | 8.59 | ±9.6 |
| 10584 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc dc) | WLAN | 8.60 | ±9.6 |
| 10585 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10586 | AAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc dc) | WLAN | 8.49 | ±9.6 |
| 10587 | AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc dc) | WLAN | 8.36 | ±9.6 |
| 10588 | AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc dc) | WLAN | 8.76 | ±9.6 |
| 10589 | AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc dc) | WLAN | 8.35 | ±9.6 |
| 10590 | AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc dc) | WLAN | 8.67 | ±9.6 |
| 10591 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc dc) | WLAN | 8.63 | ±9.6 |
| 10592 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10593 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc dc) | WLAN | 8.64 | ±9.6 |
| 10594 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10595 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10596 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc dc) | WLAN | 8.71 | ±9.6 |
| 10597 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc dc) | WLAN | 8.72 | ±9.6 |
| 10598 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc dc) | WLAN | 8.50 | ±9.6 |
| 10599 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc dc) | WLAN | 8.79 | ±9.6 |
| 10600 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc dc) | WLAN | 8.88 | ±9.6 |
| 10601 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10602 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc dc) | WLAN | 8.94 | ±9.6 |
| 10603 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc dc) | WLAN | 8.03 | ±9.6 |
| 10604 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc dc) | WLAN | 8.76 | ±9.6 |
| 10605 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc dc) | WLAN | 8.97 | ±9.6 |
| 10606 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10607 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc dc) | WLAN | 8.64 | ±9.6 |
| 10608 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc dc) | WLAN | 8.77 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^k k = 2 |
|-------|-----|---|-----------|----------|------------------------|
| 10609 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc dc) | WLAN | 8.57 | ±9.6 |
| 10610 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10611 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10612 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc dc) | WLAN | 8.77 | ±9.6 |
| 10613 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc dc) | WLAN | 8.94 | ±9.6 |
| 10614 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc dc) | WLAN | 8.59 | ±9.6 |
| 10615 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc dc) | WLAN | 8.62 | ±9.6 |
| 10616 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10617 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc dc) | WLAN | 8.81 | ±9.6 |
| 10618 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc dc) | WLAN | 8.58 | ±9.6 |
| 10619 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc dc) | WLAN | 8.86 | ±9.6 |
| 10620 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc dc) | WLAN | 8.87 | ±9.6 |
| 10621 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc dc) | WLAN | 8.77 | ±9.6 |
| 10622 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc dc) | WLAN | 8.68 | ±9.6 |
| 10623 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10624 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc dc) | WLAN | 8.96 | ±9.6 |
| 10625 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc dc) | WLAN | 8.96 | ±9.6 |
| 10626 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10627 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc dc) | WLAN | 8.88 | ±9.6 |
| 10628 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc dc) | WLAN | 8.71 | ±9.6 |
| 10629 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc dc) | WLAN | 8.85 | ±9.6 |
| 10630 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc dc) | WLAN | 8.72 | ±9.6 |
| 10631 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc dc) | WLAN | 8.61 | ±9.6 |
| 10632 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10633 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10634 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc dc) | WLAN | 8.80 | ±9.6 |
| 10635 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc dc) | WLAN | 8.81 | ±9.6 |
| 10636 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10637 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc dc) | WLAN | 8.79 | ±9.6 |
| 10638 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc dc) | WLAN | 8.86 | ±9.6 |
| 10639 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc dc) | WLAN | 8.85 | ±9.6 |
| 10640 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc dc) | WLAN | 8.98 | ±9.6 |
| 10641 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc dc) | WLAN | 9.06 | ±9.6 |
| 10642 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc dc) | WLAN | 9.06 | ±9.6 |
| 10643 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc dc) | WLAN | 8.89 | ±9.6 |
| 10644 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc dc) | WLAN | 9.05 | ±9.6 |
| 10645 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc dc) | WLAN | 9.11 | ±9.6 |
| 10646 | AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7) | LTE-TDD | 11.98 | ±9.6 |
| 10647 | AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7) | LTE-TDD | 11.96 | ±9.6 |
| 10648 | AAC | CDMA2000 (1x Advanced) | CDMA2000 | 3.45 | ±9.6 |
| 10652 | AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.91 | ±9.6 |
| 10653 | AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.42 | ±9.6 |
| 10654 | AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.96 | ±9.6 |
| 10655 | AAC | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.21 | ±9.6 |
| 10658 | AAC | Pulse Waveform (200 Hz, 10%) | Test | 10.00 | ±9.6 |
| 10659 | AAC | Pulse Waveform (200 Hz, 20%) | Test | 6.99 | ±9.6 |
| 10660 | AAC | Pulse Waveform (200 Hz, 40%) | Test | 3.98 | ±9.6 |
| 10661 | AAC | Pulse Waveform (200 Hz, 60%) | Test | 2.22 | ±9.6 |
| 10662 | AAC | Pulse Waveform (200 Hz, 80%) | Test | 0.97 | ±9.6 |
| 10670 | AAC | Bluetooth Low Energy | Bluetooth | 2.19 | ±9.6 |
| 10671 | AAD | IEEE 802.11ax (20 MHz, MCS0, 90pc dc) | WLAN | 9.09 | ±9.6 |
| 10672 | AAD | IEEE 802.11ax (20 MHz, MCS1, 90pc dc) | WLAN | 8.57 | ±9.6 |
| 10673 | AAD | IEEE 802.11ax (20 MHz, MCS2, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10674 | AAD | IEEE 802.11ax (20 MHz, MCS3, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10675 | AAD | IEEE 802.11ax (20 MHz, MCS4, 90pc dc) | WLAN | 8.90 | ±9.6 |
| 10676 | AAD | IEEE 802.11ax (20 MHz, MCS5, 90pc dc) | WLAN | 8.77 | ±9.6 |
| 10677 | AAD | IEEE 802.11ax (20 MHz, MCS6, 90pc dc) | WLAN | 8.73 | ±9.6 |
| 10678 | AAD | IEEE 802.11ax (20 MHz, MCS7, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10679 | AAD | IEEE 802.11ax (20 MHz, MCS8, 90pc dc) | WLAN | 8.89 | ±9.6 |
| 10680 | AAD | IEEE 802.11ax (20 MHz, MCS9, 90pc dc) | WLAN | 8.80 | ±9.6 |
| 10681 | AAC | IEEE 802.11ax (20 MHz, MCS10, 90pc dc) | WLAN | 8.62 | ±9.6 |
| 10682 | AAF | IEEE 802.11ax (20 MHz, MCS11, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10683 | AAA | IEEE 802.11ax (20 MHz, MCS0, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10684 | AAC | IEEE 802.11ax (20 MHz, MCS1, 99pc dc) | WLAN | 8.26 | ±9.6 |
| 10685 | AAC | IEEE 802.11ax (20 MHz, MCS2, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10686 | AAC | IEEE 802.11ax (20 MHz, MCS3, 99pc dc) | WLAN | 8.28 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^k k = 2 |
|-------|-----|--|-------|----------|------------------------|
| 10687 | AAE | IEEE 802.11ax (20 MHz, MCS4, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10688 | AAE | IEEE 802.11ax (20 MHz, MCS5, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10689 | AAD | IEEE 802.11ax (20 MHz, MCS6, 99pc dc) | WLAN | 8.55 | ±9.6 |
| 10690 | AAE | IEEE 802.11ax (20 MHz, MCS7, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10691 | AAB | IEEE 802.11ax (20 MHz, MCS8, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10692 | AAA | IEEE 802.11ax (20 MHz, MCS9, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10693 | AAA | IEEE 802.11ax (20 MHz, MCS10, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10694 | AAA | IEEE 802.11ax (20 MHz, MCS11, 99pc dc) | WLAN | 8.57 | ±9.6 |
| 10695 | AAA | IEEE 802.11ax (40 MHz, MCS0, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10696 | AAA | IEEE 802.11ax (40 MHz, MCS1, 90pc dc) | WLAN | 8.91 | ±9.6 |
| 10697 | AAA | IEEE 802.11ax (40 MHz, MCS2, 90pc dc) | WLAN | 8.61 | ±9.6 |
| 10698 | AAA | IEEE 802.11ax (40 MHz, MCS3, 90pc dc) | WLAN | 8.89 | ±9.6 |
| 10699 | AAA | IEEE 802.11ax (40 MHz, MCS4, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10700 | AAA | IEEE 802.11ax (40 MHz, MCS5, 90pc dc) | WLAN | 8.73 | ±9.6 |
| 10701 | AAA | IEEE 802.11ax (40 MHz, MCS6, 90pc dc) | WLAN | 8.86 | ±9.6 |
| 10702 | AAA | IEEE 802.11ax (40 MHz, MCS7, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10703 | AAA | IEEE 802.11ax (40 MHz, MCS8, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10704 | AAA | IEEE 802.11ax (40 MHz, MCS9, 90pc dc) | WLAN | 8.56 | ±9.6 |
| 10705 | AAA | IEEE 802.11ax (40 MHz, MCS10, 90pc dc) | WLAN | 8.69 | ±9.6 |
| 10706 | AAC | IEEE 802.11ax (40 MHz, MCS11, 90pc dc) | WLAN | 8.66 | ±9.6 |
| 10707 | AAC | IEEE 802.11ax (40 MHz, MCS0, 99pc dc) | WLAN | 8.32 | ±9.6 |
| 10708 | AAC | IEEE 802.11ax (40 MHz, MCS1, 99pc dc) | WLAN | 8.55 | ±9.6 |
| 10709 | AAC | IEEE 802.11ax (40 MHz, MCS2, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10710 | AAC | IEEE 802.11ax (40 MHz, MCS3, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10711 | AAC | IEEE 802.11ax (40 MHz, MCS4, 99pc dc) | WLAN | 8.39 | ±9.6 |
| 10712 | AAC | IEEE 802.11ax (40 MHz, MCS5, 99pc dc) | WLAN | 8.67 | ±9.6 |
| 10713 | AAC | IEEE 802.11ax (40 MHz, MCS6, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10714 | AAC | IEEE 802.11ax (40 MHz, MCS7, 99pc dc) | WLAN | 8.26 | ±9.6 |
| 10715 | AAC | IEEE 802.11ax (40 MHz, MCS8, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10716 | AAC | IEEE 802.11ax (40 MHz, MCS9, 99pc dc) | WLAN | 8.30 | ±9.6 |
| 10717 | AAC | IEEE 802.11ax (40 MHz, MCS10, 99pc dc) | WLAN | 8.48 | ±9.6 |
| 10718 | AAC | IEEE 802.11ax (40 MHz, MCS11, 99pc dc) | WLAN | 8.24 | ±9.6 |
| 10719 | AAC | IEEE 802.11ax (80 MHz, MCS0, 90pc dc) | WLAN | 8.81 | ±9.6 |
| 10720 | AAC | IEEE 802.11ax (80 MHz, MCS1, 90pc dc) | WLAN | 8.87 | ±9.6 |
| 10721 | AAC | IEEE 802.11ax (80 MHz, MCS2, 90pc dc) | WLAN | 8.76 | ±9.6 |
| 10722 | AAC | IEEE 802.11ax (80 MHz, MCS3, 90pc dc) | WLAN | 8.55 | ±9.6 |
| 10723 | AAC | IEEE 802.11ax (80 MHz, MCS4, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10724 | AAC | IEEE 802.11ax (80 MHz, MCS5, 90pc dc) | WLAN | 8.90 | ±9.6 |
| 10725 | AAC | IEEE 802.11ax (80 MHz, MCS6, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10726 | AAC | IEEE 802.11ax (80 MHz, MCS7, 90pc dc) | WLAN | 8.72 | ±9.6 |
| 10727 | AAC | IEEE 802.11ax (80 MHz, MCS8, 90pc dc) | WLAN | 8.66 | ±9.6 |
| 10728 | AAC | IEEE 802.11ax (80 MHz, MCS9, 90pc dc) | WLAN | 8.65 | ±9.6 |
| 10729 | AAC | IEEE 802.11ax (80 MHz, MCS10, 90pc dc) | WLAN | 8.64 | ±9.6 |
| 10730 | AAC | IEEE 802.11ax (80 MHz, MCS11, 90pc dc) | WLAN | 8.67 | ±9.6 |
| 10731 | AAC | IEEE 802.11ax (80 MHz, MCS0, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10732 | AAC | IEEE 802.11ax (80 MHz, MCS1, 99pc dc) | WLAN | 8.46 | ±9.6 |
| 10733 | AAC | IEEE 802.11ax (80 MHz, MCS2, 99pc dc) | WLAN | 8.40 | ±9.6 |
| 10734 | AAC | IEEE 802.11ax (80 MHz, MCS3, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10735 | AAC | IEEE 802.11ax (80 MHz, MCS4, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10736 | AAC | IEEE 802.11ax (80 MHz, MCS5, 99pc dc) | WLAN | 8.27 | ±9.6 |
| 10737 | AAC | IEEE 802.11ax (80 MHz, MCS6, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10738 | AAC | IEEE 802.11ax (80 MHz, MCS7, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10739 | AAC | IEEE 802.11ax (80 MHz, MCS8, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10740 | AAC | IEEE 802.11ax (80 MHz, MCS9, 99pc dc) | WLAN | 8.48 | ±9.6 |
| 10741 | AAC | IEEE 802.11ax (80 MHz, MCS10, 99pc dc) | WLAN | 8.40 | ±9.6 |
| 10742 | AAC | IEEE 802.11ax (80 MHz, MCS11, 99pc dc) | WLAN | 8.43 | ±9.6 |
| 10743 | AAC | IEEE 802.11ax (160 MHz, MCS0, 90pc dc) | WLAN | 8.94 | ±9.6 |
| 10744 | AAC | IEEE 802.11ax (160 MHz, MCS1, 90pc dc) | WLAN | 9.16 | ±9.6 |
| 10745 | AAC | IEEE 802.11ax (160 MHz, MCS2, 90pc dc) | WLAN | 8.93 | ±9.6 |
| 10746 | AAC | IEEE 802.11ax (160 MHz, MCS3, 90pc dc) | WLAN | 9.11 | ±9.6 |
| 10747 | AAC | IEEE 802.11ax (160 MHz, MCS4, 90pc dc) | WLAN | 9.04 | ±9.6 |
| 10748 | AAC | IEEE 802.11ax (160 MHz, MCS5, 90pc dc) | WLAN | 8.93 | ±9.6 |
| 10749 | AAC | IEEE 802.11ax (160 MHz, MCS6, 90pc dc) | WLAN | 8.90 | ±9.6 |
| 10750 | AAC | IEEE 802.11ax (160 MHz, MCS7, 90pc dc) | WLAN | 8.79 | ±9.6 |
| 10751 | AAC | IEEE 802.11ax (160 MHz, MCS8, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10752 | AAC | IEEE 802.11ax (160 MHz, MCS9, 90pc dc) | WLAN | 8.81 | ±9.6 |

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|-------|-----|--|---------------|----------|------------------------|
| 10753 | AAC | IEEE 802.11ax (160 MHz, MCS10, 90pc dc) | WLAN | 9.00 | ±9.6 |
| 10754 | AAC | IEEE 802.11ax (160 MHz, MCS11, 90pc dc) | WLAN | 8.94 | ±9.6 |
| 10755 | AAC | IEEE 802.11ax (160 MHz, MCS0, 99pc dc) | WLAN | 8.84 | ±9.6 |
| 10756 | AAC | IEEE 802.11ax (160 MHz, MCS1, 99pc dc) | WLAN | 8.77 | ±9.6 |
| 10757 | AAC | IEEE 802.11ax (160 MHz, MCS2, 99pc dc) | WLAN | 8.77 | ±9.6 |
| 10758 | AAC | IEEE 802.11ax (160 MHz, MCS3, 99pc dc) | WLAN | 8.89 | ±9.6 |
| 10759 | AAC | IEEE 802.11ax (160 MHz, MCS4, 99pc dc) | WLAN | 8.58 | ±9.6 |
| 10760 | AAC | IEEE 802.11ax (160 MHz, MCS5, 99pc dc) | WLAN | 8.49 | ±9.6 |
| 10761 | AAC | IEEE 802.11ax (160 MHz, MCS6, 99pc dc) | WLAN | 8.58 | ±9.6 |
| 10762 | AAC | IEEE 802.11ax (160 MHz, MCS7, 99pc dc) | WLAN | 8.49 | ±9.6 |
| 10763 | AAC | IEEE 802.11ax (160 MHz, MCS8, 99pc dc) | WLAN | 8.53 | ±9.6 |
| 10764 | AAC | IEEE 802.11ax (160 MHz, MCS9, 99pc dc) | WLAN | 8.54 | ±9.6 |
| 10765 | AAC | IEEE 802.11ax (160 MHz, MCS10, 99pc dc) | WLAN | 8.54 | ±9.6 |
| 10766 | AAC | IEEE 802.11ax (160 MHz, MCS11, 99pc dc) | WLAN | 8.51 | ±9.6 |
| 10767 | AAC | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 7.99 | ±9.6 |
| 10768 | AAC | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10769 | AAC | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10770 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10771 | AAC | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10772 | AAC | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.23 | ±9.6 |
| 10773 | AAC | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.03 | ±9.6 |
| 10774 | AAC | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.6 |
| 10775 | AAC | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 10776 | AAC | 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 | AAC | 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 | AAC | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 10781 | AAC | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 10782 | AAC | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.43 | ±9.6 |
| 10783 | AAC | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.6 |
| 10784 | AAC | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.29 | ±9.6 |
| 10785 | AAC | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.40 | ±9.6 |
| 10786 | AAC | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.35 | ±9.6 |
| 10787 | AAC | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.44 | ±9.6 |
| 10788 | AAC | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.6 |
| 10789 | AAC | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10790 | AAC | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.6 |
| 10791 | AAC | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.83 | ±9.6 |
| 10792 | AAC | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.92 | ±9.6 |
| 10793 | AAC | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.95 | ±9.6 |
| 10794 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 10795 | AAC | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.84 | ±9.6 |
| 10796 | AAC | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.6 |
| 10797 | AAC | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.01 | ±9.6 |
| 10798 | AAC | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| 10799 | AAC | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.6 |
| 10801 | AAC | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.6 |
| 10802 | AAC | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.87 | ±9.6 |
| 10803 | AAE | 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 | AAD | 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 | AAC | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10822 | AAC | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10823 | AAC | 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 | AAE | 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 ^F 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 | AAE | 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 |
| 10838 | 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 | AAE | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10865 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10866 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10868 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.89 | ±9.6 |
| 10869 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10870 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.86 | ±9.6 |
| 10871 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10872 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.52 | ±9.6 |
| 10873 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 10874 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 10875 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 10876 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.39 | ±9.6 |
| 10877 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 7.95 | ±9.6 |
| 10878 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 10879 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.12 | ±9.6 |
| 10880 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.38 | ±9.6 |
| 10881 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10882 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.96 | ±9.6 |
| 10883 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.57 | ±9.6 |
| 10884 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.53 | ±9.6 |
| 10885 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 10886 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 10887 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 10888 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.35 | ±9.6 |
| 10889 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.02 | ±9.6 |
| 10890 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.40 | ±9.6 |
| 10891 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.13 | ±9.6 |
| 10892 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 10897 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10898 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 10899 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.57 | ±9.6 |
| 10900 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10901 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10902 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10903 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10904 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10905 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10906 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10907 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.78 | ±9.6 |
| 10908 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 10909 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.96 | ±9.6 |
| 10910 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ² k = 2 |
|-------|-----|---|---------------|----------|------------------------|
| 10911 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 10912 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10913 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10914 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.85 | ±9.6 |
| 10915 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |
| 10916 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10917 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10918 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.88 | ±9.6 |
| 10919 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.86 | ±9.6 |
| 10920 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10921 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10922 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.82 | ±9.6 |
| 10923 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10924 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10925 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.95 | ±9.6 |
| 10926 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10927 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10928 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10929 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10930 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10931 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10932 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10933 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10934 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10935 | AAA | 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 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.77 | ±9.6 |
| 10938 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10939 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.82 | ±9.6 |
| 10940 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.88 | ±9.6 |
| 10941 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.83 | ±9.6 |
| 10942 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.85 | ±9.6 |
| 10943 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.95 | ±9.6 |
| 10944 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.61 | ±9.6 |
| 10945 | AAB | 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 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10948 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10949 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10950 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10951 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.92 | ±9.6 |
| 10952 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.25 | ±9.6 |
| 10953 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.15 | ±9.6 |
| 10954 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.23 | ±9.6 |
| 10955 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.42 | ±9.6 |
| 10956 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.14 | ±9.6 |
| 10957 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.31 | ±9.6 |
| 10958 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.61 | ±9.6 |
| 10959 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.33 | ±9.6 |
| 10960 | AAB | 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 | AAB | 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 | 2.23 | ±9.6 |
| 10979 | AAA | ULLA HDR4 | ULLA | 7.02 | ±9.6 |
| 10980 | AAA | ULLA HDR8 | ULLA | 8.82 | ±9.6 |
| 10981 | AAA | ULLA HDRp4 | ULLA | 1.50 | ±9.6 |
| 10982 | AAA | ULLA HDRp11 | ULLA | 1.44 | ±9.6 |

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| 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 |

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

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



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 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client: **HCT (Dymstec)** Certificate No: **EUmm-9464_Jul22**

CALIBRATION CERTIFICATE

Object: EUmmWV4 - SN:9464

Calibration procedure(s): QA CAL-02.v9, QA CAL-25.v7, QA CAL-42.v2
 Calibration procedure for E-field probes optimized for close near field evaluations in air

Calibration date: July 18, 2022

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 sensor NRP110T | SN: 101244 | 14-Mar-22 (No. 20A1037915) | Mar-23 |
| Spectrum analyzer FSV40 | SN: 101832 | 25-Jan-22 (No. 4030-315003399) | Jan-25 |
| Ref. Probe EUmmWV3 | SN: 9374 | 21-Dec-21 (No. EUmmWV3-9374_Dec21) | Dec-22 |
| DAE4 | SN: 789 | 24-Dec-21 (No. DAE4-789_Dec21) | Dec-22 |

| Secondary Standards | ID | Check Date (in house) | Scheduled Check |
|--------------------------|----------------|-----------------------------------|------------------------|
| Generator APSIN26G | SN: 669 | 28-Mar-17 (in house check May-22) | In house check: May-23 |
| Generator Agilent E8251A | SN: US41140111 | 28-Mar-17 (in house check May-22) | In house check: May-23 |

| | Name | Function | Signature |
|---------------|--------------|-----------------------|-----------|
| Calibrated by | Leif Klysner | Laboratory Technician | |
| Approved by | Sven Kühn | Technical Manager | |

Issued: July 22, 2022

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

| 결재 | 담당자 | 확인자 |
|----|--------------------------|--------------------------|
| | | |
| | 01 / 박철환 2022. 08. 10 | 01 / 최윤경 2022. 08. 10 |

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



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Accreditation No.: **SCS 0108**

Glossary

| | |
|-----------------------|--|
| NORM _{x,y} | sensitivity in free space |
| DCP | diode compression point |
| CF | crest factor (1/duty_cycle) of the RF signal |
| A, B, C, D | modulation dependent linearization parameters |
| Polarization ψ | ψ 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 |
| Sensor Angles | sensor deviation from the probe axis, used to calculate the field orientation and polarization |
| \vec{k} | is the wave propagation direction |

Calibration is Performed According to the Following Standards:

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

Methods Applied and Interpretation of Parameters:

- **NORM_{x,y}**: Assessed for E-field polarization $\theta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). For frequencies > 6 GHz, the far field in front of waveguide horn antennas is measured for a set of frequencies in various waveguide bands up to 110 GHz.
- **DCP_{x,y}**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- **PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- The frequency sensor model parameters are determined prior to calibration based on a frequency sweep (sensor model involving resistors R, R_p, inductance L and capacitors C, C_p).
- **A_{x,y}; B_{x,y}; C_{x,y}; D_{x,y}; VR_{x,y}**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- **Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- **Connector Angle**: The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).
- **Equivalent Sensor Angle**: The two probe sensors are mounted in the same plane at different angles. The angles are assessed using the information gained by determining the NORM_x (no uncertainty required).
- **Spherical isotropy (3D deviation from isotropy)**: in a locally homogeneous field realized using an open waveguide / horn setup.

EUmmWV4 - SN:9464

July 18, 2022

Parameters of Probe: EUmmWV4 - SN:9464

Basic Calibration Parameters

| | Sensor X | Sensor Y | Unc (k = 2) |
|--|----------|----------|--------------|
| Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) | 0.02236 | 0.02350 | $\pm 10.1\%$ |
| DCP (mV) ^B | 105.0 | 104.0 | $\pm 4.7\%$ |
| Equivalent Sensor Angle | -59.3 | 35.3 | |

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

| Frequency MHz | Target E-Field V/m | Deviation Sensor X dB | Deviation Sensor Y dB | Unc (k = 2) dB |
|---------------|--------------------|-----------------------|-----------------------|----------------|
| 0.75 | 77.2 | -0.07 | 0.04 | ± 0.43 |
| 1.8 | 140.4 | 0.00 | 0.03 | ± 0.43 |
| 2.0 | 133.0 | 0.14 | 0.18 | ± 0.43 |
| 2.2 | 124.8 | -0.06 | -0.04 | ± 0.43 |
| 2.5 | 123.0 | 0.08 | 0.10 | ± 0.43 |
| 3.5 | 256.2 | -0.26 | -0.29 | ± 0.43 |
| 3.7 | 249.8 | -0.17 | -0.23 | ± 0.43 |
| | | | | |
| 6.6 | 76.1 | -0.41 | -0.40 | ± 0.98 |
| 8.0 | 68.3 | -0.23 | -0.18 | ± 0.98 |
| 10.0 | 67.5 | 0.02 | 0.03 | ± 0.98 |
| 15.0 | 55.3 | 0.31 | 0.28 | ± 0.98 |
| | | | | |
| 26.6 | 114.9 | -0.21 | -0.22 | ± 0.98 |
| 30.0 | 121.2 | -0.14 | -0.15 | ± 0.98 |
| 35.0 | 119.8 | 0.03 | 0.07 | ± 0.98 |
| 40.0 | 105.8 | 0.19 | 0.21 | ± 0.98 |
| | | | | |
| 50.0 | 60.5 | 0.01 | 0.07 | ± 0.98 |
| 55.0 | 75.8 | -0.03 | -0.07 | ± 0.98 |
| 60.0 | 80.0 | 0.01 | 0.01 | ± 0.98 |
| 65.0 | 77.7 | 0.03 | 0.13 | ± 0.98 |
| 70.0 | 73.8 | -0.03 | 0.07 | ± 0.98 |
| 75.0 | 73.2 | -0.27 | -0.18 | ± 0.98 |
| | | | | |
| 75.0 | 80.8 | 0.07 | 0.13 | ± 0.98 |
| 80.0 | 79.9 | -0.19 | -0.07 | ± 0.98 |
| 85.0 | 47.6 | -0.20 | -0.11 | ± 0.98 |
| 90.0 | 72.3 | -0.03 | -0.02 | ± 0.98 |
| 92.0 | 72.0 | 0.11 | 0.07 | ± 0.98 |
| 95.0 | 66.6 | 0.28 | 0.17 | ± 0.98 |
| 97.0 | 57.0 | 0.39 | 0.25 | ± 0.98 |
| 100.0 | 55.0 | 0.42 | 0.30 | ± 0.98 |
| 105.0 | 53.0 | -0.04 | -0.09 | ± 0.98 |
| 110.0 | 61.1 | -0.41 | -0.23 | ± 0.98 |

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

^B Linearization parameter uncertainty for maximum specified field strength.

EUmmWV4 - SN:9464

July 18, 2022

Parameters of Probe: EUmmWV4 - SN:9464

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 | 139.6 | ±3.3% | ±4.7% |
| | | Y | 0.00 | 0.00 | 1.00 | | 74.4 | | |
| 10352 | Pulse Waveform (200Hz, 10%) | X | 1.36 | 60.00 | 13.15 | 10.00 | 6.0 | ±1.2% | ±9.6% |
| | | Y | 0.58 | 60.00 | 18.34 | | 6.0 | | |
| 10353 | Pulse Waveform (200Hz, 20%) | X | 0.90 | 60.00 | 12.15 | 6.99 | 12.0 | ±1.0% | ±9.6% |
| | | Y | 0.45 | 60.00 | 17.17 | | 12.0 | | |
| 10354 | Pulse Waveform (200Hz, 40%) | X | 0.53 | 60.00 | 11.02 | 3.98 | 23.0 | ±1.2% | ±9.6% |
| | | Y | 0.33 | 60.00 | 15.33 | | 23.0 | | |
| 10355 | Pulse Waveform (200Hz, 60%) | X | 0.32 | 60.00 | 10.38 | 2.22 | 27.0 | ±1.0% | ±9.6% |
| | | Y | 0.28 | 60.00 | 13.48 | | 27.0 | | |
| 10387 | QPSK Waveform, 1 MHz | X | 0.85 | 60.00 | 11.03 | 1.00 | 22.0 | ±1.7% | ±9.6% |
| | | Y | 0.90 | 60.00 | 11.39 | | 22.0 | | |
| 10388 | QPSK Waveform, 10 MHz | X | 1.20 | 60.00 | 11.61 | 0.00 | 22.0 | ±0.7% | ±9.6% |
| | | Y | 1.26 | 60.00 | 11.89 | | 22.0 | | |
| 10396 | 64-QAM Waveform, 100 kHz | X | 1.64 | 60.00 | 13.78 | 3.01 | 17.0 | ±0.7% | ±9.6% |
| | | Y | 2.59 | 66.06 | 16.59 | | 17.0 | | |
| 10399 | 64-QAM Waveform, 40 MHz | X | 2.06 | 60.00 | 12.19 | 0.00 | 19.0 | ±1.1% | ±9.6% |
| | | Y | 2.04 | 60.00 | 12.49 | | 19.0 | | |
| 10414 | WLAN CCDF, 64-QAM, 40 MHz | X | 3.04 | 60.00 | 12.64 | 0.00 | 12.0 | ±0.8% | ±9.6% |
| | | Y | 2.97 | 60.00 | 12.91 | | 12.0 | | |

Note: For details on UID parameters see Appendix

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

EUmmWV4 - SN:9464

July 18, 2022

Parameters of Probe: EUmmWV4 - SN:9464

Calibration Results for Linearity Response

| Frequency GHz | Target E-Field V/m | Deviation Sensor X dB | Deviation Sensor Y dB | Unc (k = 2) dB |
|---------------|--------------------|-----------------------|-----------------------|----------------|
| 0.9 | 50.0 | -0.00 | 0.15 | ±0.2 |
| 0.9 | 100.0 | -0.01 | 0.10 | ±0.2 |
| 0.9 | 500.0 | 0.02 | -0.01 | ±0.2 |
| 0.9 | 1000.0 | 0.04 | 0.01 | ±0.2 |
| 0.9 | 1500.0 | 0.03 | 0.00 | ±0.2 |
| 0.9 | 2100.0 | 0.00 | -0.01 | ±0.2 |

Sensor Frequency Model Parameters (750 MHz – 55 GHz)

| | Sensor X | Sensor Y |
|---------------------|----------|----------|
| R (Ω) | 69.90 | 48.02 |
| R _p (Ω) | 75.76 | 56.38 |
| L (nH) | 0.08926 | 0.05844 |
| C (pF) | 0.3572 | 0.6322 |
| C _p (pF) | 0.0890 | 0.1292 |

Sensor Frequency Model Parameters (55 GHz – 110 GHz)

| | Sensor X | Sensor Y |
|---------------------|----------|----------|
| R (Ω) | 60.13 | 37.11 |
| R _p (Ω) | 233.24 | 159.70 |
| L (nH) | 0.10840 | 0.08238 |
| C (pF) | 0.0426 | 0.0551 |
| C _p (pF) | 0.0427 | 0.0550 |

Sensor Model Parameters

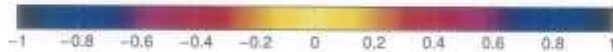
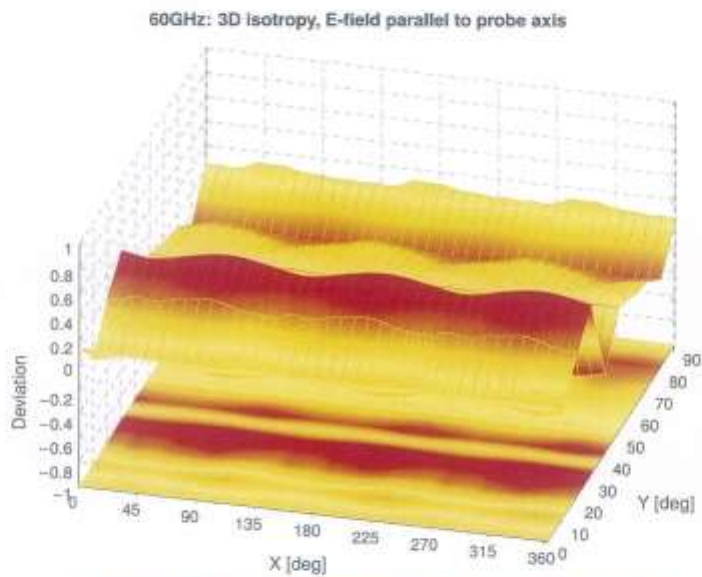
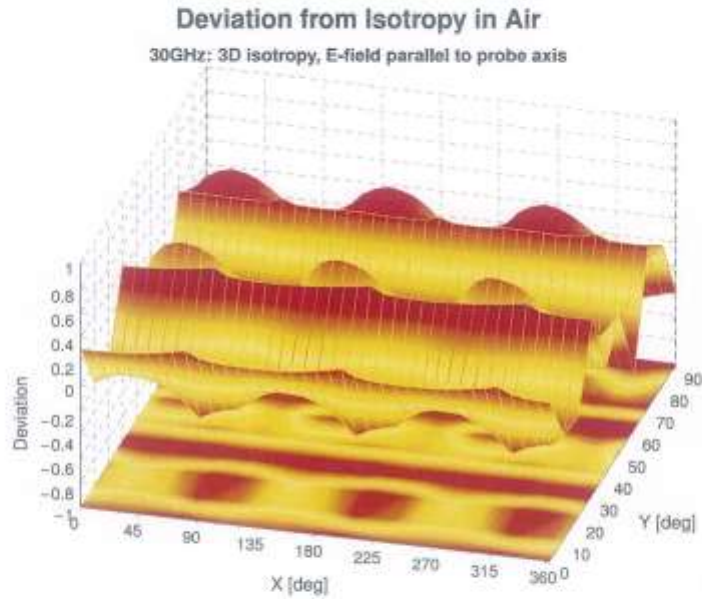
| | C1 fF | C2 fF | α V ⁻¹ | T1 ms V ⁻² | T2 ms V ⁻¹ | T3 ms | T4 V ⁻² | T5 V ⁻¹ | T6 |
|---|-------|--------|-------------------|-----------------------|-----------------------|-------|--------------------|--------------------|------|
| x | 24.4 | 178.01 | 33.83 | 0.92 | 1.94 | 4.99 | 0.00 | 0.47 | 1.01 |
| y | 24.2 | 174.17 | 33.22 | 2.66 | 1.02 | 5.05 | 0.00 | 0.51 | 1.01 |

Other Probe Parameters

| | |
|---|-------------|
| Sensor Arrangement | Rectangular |
| Connector Angle | 75.4° |
| Mechanical Surface Detection Mode | enabled |
| Optical Surface Detection Mode | disabled |
| Probe Overall Length | 320 mm |
| Probe Body Diameter | 8 mm |
| Tip Length | 23 mm |
| Tip Diameter | 8.0 mm |
| Probe Tip to Sensor X Calibration Point | 1.5 mm |
| Probe Tip to Sensor Y Calibration Point | 1.5 mm |

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Probe isotropy for E_{30} : probe rotated $\phi = 0^\circ$ to 360° , tilted from field propagation direction \hat{k}
 Parallel to the field propagation ($\psi = 0^\circ - 90^\circ$) at 30 GHz: deviation within ± 0.53 dB
 Parallel to the field propagation ($\psi = 0^\circ - 90^\circ$) at 60 GHz: deviation within ± 0.42 dB

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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 | CAA | SAR Validation (Square, 100 ms, 10 ms) | Test | 10.00 | ±9.6 |
| 10011 | CAB | 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 | 8.57 | ±9.6 |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1) | GSM | 8.56 | ±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 | 4.33 | ±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-61/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, 1.28Mbps) | TD-SCDMA | 11.01 | ±9.6 |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3) | GSM | 8.52 | ±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 | 3.80 | ±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 | 9.00 | ±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 (HSPA) | WCDMA | 3.98 | ±9.6 |
| 10098 | DAC | UMTS-FDD (HSPA, Subtest 2) | WCDMA | 3.98 | ±9.6 |
| 10099 | CAC | EDGE-FDD (TDMA, 8PSK, TN 0-4) | GSM | 9.55 | ±9.6 |
| 10100 | CAC | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | LTE-FDD | 5.67 | ±9.6 |
| 10101 | CAB | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | LTE-FDD | 6.42 | ±9.6 |
| 10102 | CAB | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | LTE-FDD | 8.60 | ±9.6 |
| 10103 | DAC | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK) | LTE-TDD | 9.29 | ±9.6 |
| 10104 | CAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM) | LTE-TDD | 9.97 | ±9.6 |
| 10105 | CAE | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM) | LTE-TDD | 10.01 | ±9.6 |
| 10108 | CAE | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | LTE-FDD | 5.80 | ±9.6 |
| 10109 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10110 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | LTE-FDD | 5.75 | ±9.6 |
| 10111 | CAG | 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 ² k = 2 |
|-------|-----|--|---------|----------|------------------------|
| 10112 | CAG | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 84-QAM) | LTE-FDD | 8.59 | ±9.6 |
| 10113 | CAG | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | LTE-FDD | 8.62 | ±9.6 |
| 10114 | CAG | IEEE 802.11n (HT Greenfield, 13.5Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 10115 | CAG | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM) | WLAN | 8.46 | ±9.6 |
| 10116 | CAG | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN | 8.15 | ±9.6 |
| 10117 | CAG | IEEE 802.11n (HT Mixed, 13.5Mbps, 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 | CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10141 | CAD | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | LTE-FDD | 6.53 | ±9.6 |
| 10142 | CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10143 | CAD | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | LTE-FDD | 6.35 | ±9.6 |
| 10144 | CAC | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | LTE-FDD | 6.65 | ±9.6 |
| 10145 | CAC | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | LTE-FDD | 5.76 | ±9.6 |
| 10146 | CAC | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-FDD | 6.41 | ±9.6 |
| 10147 | CAC | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.72 | ±9.6 |
| 10149 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | LTE-FDD | 6.42 | ±9.6 |
| 10150 | CAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | LTE-FDD | 6.60 | ±9.6 |
| 10151 | CAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | LTE-TDD | 9.26 | ±9.6 |
| 10152 | CAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM) | LTE-TDD | 9.92 | ±9.6 |
| 10153 | CAE | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM) | LTE-TDD | 10.05 | ±9.6 |
| 10154 | CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | LTE-FDD | 5.75 | ±9.6 |
| 10156 | CAF | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10156 | CAF | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | LTE-FDD | 5.79 | ±9.6 |
| 10157 | CAE | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10158 | CAE | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | LTE-FDD | 6.82 | ±9.6 |
| 10159 | CAG | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | LTE-FDD | 6.56 | ±9.6 |
| 10160 | CAG | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | LTE-FDD | 5.82 | ±9.6 |
| 10161 | CAG | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | LTE-FDD | 6.43 | ±9.6 |
| 10162 | CAG | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | LTE-FDD | 6.56 | ±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 | CAG | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10170 | CAG | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10171 | CAE | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | LTE-FDD | 6.49 | ±9.6 |
| 10172 | CAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10173 | CAE | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10174 | CAF | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10175 | CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10176 | CAF | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | LTE-FDD | 6.62 | ±9.6 |
| 10177 | CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10178 | CAE | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10179 | AAE | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10180 | CAG | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10181 | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10182 | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | LTE-FDD | 6.52 | ±9.6 |
| 10183 | CAG | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10184 | CAG | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | LTE-FDD | 5.73 | ±9.6 |
| 10185 | CAI | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | LTE-FDD | 6.51 | ±9.6 |
| 10186 | CAG | 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 | CAE | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-FDD | 6.50 | ±9.6 |
| 10193 | CAE | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK) | WLAN | 8.09 | ±9.6 |
| 10194 | AAD | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM) | WLAN | 8.12 | ±9.6 |
| 10195 | CAE | IEEE 802.11n (HT Greenfield, 85 Mbps, 64-QAM) | WLAN | 8.21 | ±9.6 |
| 10196 | CAE | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK) | WLAN | 8.10 | ±9.6 |
| 10197 | AAE | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM) | WLAN | 8.13 | ±9.6 |
| 10198 | CAF | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM) | WLAN | 8.27 | ±9.6 |
| 10219 | CAF | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK) | WLAN | 8.03 | ±9.6 |
| 10220 | AAF | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM) | WLAN | 8.13 | ±9.6 |
| 10221 | CAC | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM) | WLAN | 8.27 | ±9.6 |
| 10222 | CAC | 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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| 10225 | CAD | UMTS-FDD (HSPA+) | WCDMA | 5.97 | ±9.6 |
| 10226 | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.49 | ±9.6 |
| 10227 | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM) | LTE-TDD | 10.26 | ±9.6 |
| 10228 | CAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK) | LTE-TDD | 9.22 | ±9.6 |
| 10229 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10230 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10231 | CAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK) | LTE-TDD | 9.19 | ±9.6 |
| 10232 | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10233 | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10234 | CAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10235 | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10236 | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10237 | CAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10238 | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM) | LTE-TDD | 9.48 | ±9.6 |
| 10239 | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM) | LTE-TDD | 10.25 | ±9.6 |
| 10240 | CAB | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK) | LTE-TDD | 9.21 | ±9.6 |
| 10241 | CAB | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.82 | ±9.6 |
| 10242 | CAD | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM) | LTE-TDD | 9.86 | ±9.6 |
| 10243 | CAD | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK) | LTE-TDD | 9.46 | ±9.6 |
| 10244 | CAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10245 | CAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10246 | CAG | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | LTE-TDD | 9.30 | ±9.6 |
| 10247 | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM) | LTE-TDD | 9.91 | ±9.6 |
| 10248 | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM) | LTE-TDD | 10.09 | ±9.6 |
| 10249 | CAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK) | LTE-TDD | 9.29 | ±9.6 |
| 10250 | CAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM) | LTE-TDD | 9.81 | ±9.6 |
| 10251 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM) | LTE-TDD | 10.17 | ±9.6 |
| 10252 | CAF | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK) | LTE-TDD | 9.24 | ±9.6 |
| 10253 | CAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM) | LTE-TDD | 9.80 | ±9.6 |
| 10254 | CAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM) | LTE-TDD | 10.14 | ±9.6 |
| 10255 | CAB | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK) | LTE-TDD | 9.20 | ±9.6 |
| 10256 | CAB | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM) | LTE-TDD | 9.96 | ±9.6 |
| 10257 | CAD | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM) | LTE-TDD | 10.08 | ±9.6 |
| 10258 | CAD | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK) | LTE-TDD | 9.34 | ±9.6 |
| 10259 | CAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM) | LTE-TDD | 9.98 | ±9.6 |
| 10260 | CAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM) | LTE-TDD | 9.97 | ±9.6 |
| 10261 | CAG | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK) | LTE-TDD | 9.24 | ±9.6 |
| 10262 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM) | LTE-TDD | 9.83 | ±9.6 |
| 10263 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM) | LTE-TDD | 10.16 | ±9.6 |
| 10264 | CAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK) | LTE-TDD | 9.23 | ±9.6 |
| 10265 | CAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM) | LTE-TDD | 9.92 | ±9.6 |
| 10266 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM) | LTE-TDD | 10.07 | ±9.6 |
| 10267 | CAF | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK) | LTE-TDD | 9.30 | ±9.6 |
| 10268 | CAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM) | LTE-TDD | 10.06 | ±9.6 |
| 10269 | CAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM) | LTE-TDD | 10.13 | ±9.6 |
| 10270 | CAB | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK) | LTE-TDD | 9.58 | ±9.6 |
| 10274 | CAB | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10) | WCDMA | 4.87 | ±9.6 |
| 10275 | CAD | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4) | WCDMA | 3.96 | ±9.6 |
| 10277 | CAD | PHS (QPSK) | PHS | 11.81 | ±9.6 |
| 10278 | CAD | PHS (QPSK, BW 884 MHz, Rolloff 0.5) | PHS | 11.81 | ±9.6 |
| 10279 | CAG | PHS (QPSK, BW 884 MHz, Rolloff 0.38) | PHS | 12.18 | ±9.6 |
| 10290 | CAG | CDMA2000, RC1, SC65, Full Rate | CDMA2000 | 3.91 | ±9.6 |
| 10291 | CAG | CDMA2000, RC3, SC65, Full Rate | CDMA2000 | 3.46 | ±9.6 |
| 10292 | CAG | CDMA2000, RC3, SC32, Full Rate | CDMA2000 | 3.39 | ±9.6 |
| 10293 | CAG | CDMA2000, RC3, SC3, Full Rate | CDMA2000 | 3.50 | ±9.6 |
| 10295 | CAG | CDMA2000, RC1, SC3, 1/8th Rate 25 kb | CDMA2000 | 12.49 | ±9.6 |
| 10297 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK) | LTE-FDD | 5.81 | ±9.6 |
| 10298 | CAF | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK) | LTE-FDD | 5.72 | ±9.6 |
| 10299 | CAF | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM) | LTE-FDD | 6.39 | ±9.6 |
| 10300 | CAC | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM) | LTE-FDD | 6.90 | ±9.6 |
| 10301 | CAC | IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC) | WIMAX | 12.03 | ±9.6 |
| 10302 | CAB | IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3CTRL) | WIMAX | 12.57 | ±9.6 |
| 10303 | CAB | IEEE 802.16e WIMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 12.52 | ±9.6 |
| 10304 | CAA | IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 11.86 | ±9.6 |
| 10305 | CAA | IEEE 802.16e WIMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 15.24 | ±9.6 |
| 10306 | CAA | IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC) | WIMAX | 14.67 | ±9.6 |

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| 10307 | AAB | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, PUSC) | WIMAX | 14.49 | ±9.6 |
| 10308 | AAB | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, PUSC) | WIMAX | 14.46 | ±9.6 |
| 10309 | AAB | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, 16QAM, AMC 2x3) | WIMAX | 14.58 | ±9.6 |
| 10310 | AAB | IEEE 802.16e WIMAX (29:18, 10ms, 10MHz, QPSK, AMC 2x3) | WIMAX | 14.57 | ±9.6 |
| 10311 | AAB | LTE-FDD (SC-FDMA, 100% RB, 15MHz, QPSK) | LTE-FDD | 8.08 | ±9.6 |
| 10313 | AAD | iDEN 1:3 | iDEN | 10.51 | ±9.6 |
| 10314 | AAD | iDEN 1:6 | iDEN | 13.48 | ±9.6 |
| 10315 | AAD | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc) | WLAN | 1.71 | ±9.6 |
| 10316 | AAD | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10317 | AAA | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10352 | AAA | Pulse Waveform (200 Hz, 10%) | Generic | 10.00 | ±9.0 |
| 10353 | AAA | Pulse Waveform (200 Hz, 20%) | Generic | 6.99 | ±9.6 |
| 10354 | AAA | Pulse Waveform (200 Hz, 40%) | Generic | 3.98 | ±9.6 |
| 10355 | AAA | Pulse Waveform (200 Hz, 60%) | Generic | 2.22 | ±9.6 |
| 10356 | AAA | Pulse Waveform (200 Hz, 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 | AAD | IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc dc) | WLAN | 8.37 | ±9.6 |
| 10401 | AAA | IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc dc) | WLAN | 8.80 | ±9.6 |
| 10402 | AAA | IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc dc) | 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 | AAD | CDMA2000, RC3, SC32, SCH0, Full Rate | CDMA2000 | 5.22 | ±9.6 |
| 10410 | AAA | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub=2,3,4,7,8,9) | LTE-TDD | 7.82 | ±9.6 |
| 10414 | AAA | WLAN CCDF, 64-QAM, 40 MHz | Generic | 6.54 | ±9.6 |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc dc) | WLAN | 1.54 | ±9.6 |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc dc) | WLAN | 8.23 | ±9.6 |
| 10417 | AAA | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc dc) | WLAN | 8.23 | ±9.6 |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Long) | WLAN | 8.14 | ±9.6 |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc, Short) | WLAN | 8.19 | ±9.6 |
| 10422 | AAA | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK) | WLAN | 8.32 | ±9.6 |
| 10423 | AAA | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM) | WLAN | 8.47 | ±9.6 |
| 10424 | AAE | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM) | WLAN | 8.40 | ±9.6 |
| 10425 | AAE | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK) | WLAN | 8.41 | ±9.6 |
| 10426 | AAE | IEEE 802.11n (HT Greenfield, 30 Mbps, 16-QAM) | WLAN | 8.45 | ±9.6 |
| 10427 | AAB | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM) | WLAN | 8.41 | ±9.6 |
| 10430 | AAB | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1) | LTE-FDD | 8.28 | ±9.6 |
| 10431 | AAC | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1) | LTE-FDD | 8.38 | ±9.6 |
| 10432 | AAB | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
| 10433 | AAC | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1) | LTE-FDD | 8.34 | ±9.6 |
| 10434 | AAQ | W-CDMA (BS Test Model 1, 64 DPCH) | WCDMA | 8.60 | ±9.6 |
| 10435 | AAA | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10447 | AAA | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.56 | ±9.6 |
| 10448 | AAA | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.53 | ±9.6 |
| 10449 | AAC | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.51 | ±9.6 |
| 10450 | AAA | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-FDD | 7.48 | ±9.6 |
| 10451 | AAA | W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%) | WCDMA | 7.59 | ±9.6 |
| 10453 | AAC | Validation (Square, 10 ms, 1 ms) | Test | 10.00 | ±9.0 |
| 10456 | AAC | IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc dc) | WLAN | 8.63 | ±9.6 |
| 10457 | AAC | UMTS-FDD (DC-HSDPA) | WCDMA | 6.62 | ±9.6 |
| 10458 | AAC | CDMA2000 (1xEV-DO, Rev. B, 2 carriers) | CDMA2000 | 6.55 | ±9.6 |
| 10459 | AAC | CDMA2000 (1xEV-DO, Rev. B, 3 carriers) | CDMA2000 | 8.25 | ±9.6 |
| 10460 | AAC | UMTS-FDD (WCDMA, AMR) | WCDMA | 2.39 | ±9.6 |
| 10461 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10462 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.30 | ±9.6 |
| 10463 | AAD | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.56 | ±9.6 |
| 10464 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10465 | AAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |
| 10466 | AAC | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10467 | AAA | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10468 | AAF | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |
| 10469 | AAD | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.56 | ±9.6 |
| 10470 | AAD | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10471 | AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |

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| 10472 | AAC | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10473 | AAA | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Sub) | LTE-TDD | 7.82 | ±9.6 |
| 10474 | AAC | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Sub) | LTE-TDD | 6.32 | ±9.6 |
| 10475 | AAD | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10477 | AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.32 | ±9.6 |
| 10478 | AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.57 | ±9.6 |
| 10479 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10480 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Sub) | LTE-TDD | 8.18 | ±9.6 |
| 10481 | AAA | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Sub) | LTE-TDD | 8.45 | ±9.6 |
| 10482 | AAA | LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK, UL Sub) | LTE-TDD | 7.71 | ±9.6 |
| 10483 | AAA | LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM, Sub) | LTE-TDD | 8.39 | ±9.6 |
| 10484 | AAB | LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM, UL Sub) | LTE-TDD | 8.47 | ±9.6 |
| 10485 | AAB | LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK, UL Sub) | LTE-TDD | 7.59 | ±9.6 |
| 10486 | AAB | LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM, UL Sub) | LTE-TDD | 8.38 | ±9.6 |
| 10487 | AAC | LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM, UL Sub) | LTE-TDD | 8.60 | ±9.6 |
| 10488 | AAC | LTE-TDD (SC-FDMA, 50% RB, 10MHz, QPSK, UL Sub) | LTE-TDD | 7.70 | ±9.6 |
| 10489 | AAC | LTE-TDD (SC-FDMA, 50% RB, 10MHz, 16-QAM, UL Sub) | LTE-TDD | 8.31 | ±9.6 |
| 10490 | AAF | LTE-TDD (SC-FDMA, 50% RB, 10MHz, 64-QAM, UL Sub) | LTE-TDD | 8.54 | ±9.6 |
| 10491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10492 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15MHz, 16-QAM, UL Sub) | LTE-TDD | 8.41 | ±9.6 |
| 10493 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15MHz, 64-QAM, UL Sub) | LTE-TDD | 8.55 | ±9.6 |
| 10494 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10495 | AAF | LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM, UL Sub) | LTE-TDD | 8.37 | ±9.6 |
| 10496 | AAE | LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM, UL Sub) | LTE-TDD | 8.54 | ±9.6 |
| 10497 | AAE | LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, QPSK, UL Sub) | LTE-TDD | 7.67 | ±9.6 |
| 10498 | AAE | LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM, UL Sub) | LTE-TDD | 8.40 | ±9.6 |
| 10499 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM, UL Sub) | LTE-TDD | 8.68 | ±9.6 |
| 10500 | AAF | LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK, UL Sub) | LTE-TDD | 7.67 | ±9.6 |
| 10501 | AAF | LTE-TDD (SC-FDMA, 100% RB, 3MHz, 16-QAM, UL Sub) | LTE-TDD | 8.44 | ±9.6 |
| 10502 | AAB | LTE-TDD (SC-FDMA, 100% RB, 3MHz, 64-QAM, UL Sub) | LTE-TDD | 8.52 | ±9.6 |
| 10503 | AAB | LTE-TDD (SC-FDMA, 100% RB, 5MHz, QPSK, UL Sub) | LTE-TDD | 7.72 | ±9.6 |
| 10504 | AAB | LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM, UL Sub) | LTE-TDD | 8.31 | ±9.6 |
| 10505 | AAC | LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM, UL Sub) | LTE-TDD | 8.54 | ±9.6 |
| 10506 | AAC | LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10507 | AAC | LTE-TDD (SC-FDMA, 100% RB, 10MHz, 16-QAM, UL Sub) | LTE-TDD | 8.38 | ±9.6 |
| 10508 | AAF | LTE-TDD (SC-FDMA, 100% RB, 10MHz, 64-QAM, UL Sub) | LTE-TDD | 8.55 | ±9.6 |
| 10509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Sub) | LTE-TDD | 7.99 | ±9.6 |
| 10510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Sub) | LTE-TDD | 8.49 | ±9.6 |
| 10511 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM, UL Sub) | LTE-TDD | 8.51 | ±9.6 |
| 10512 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20MHz, QPSK, UL Sub) | LTE-TDD | 7.74 | ±9.6 |
| 10513 | AAF | LTE-TDD (SC-FDMA, 100% RB, 20MHz, 16-QAM, UL Sub) | LTE-TDD | 8.42 | ±9.6 |
| 10514 | AAE | LTE-TDD (SC-FDMA, 100% RB, 20MHz, 64-QAM, UL Sub) | LTE-TDD | 8.45 | ±9.6 |
| 10515 | AAE | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2Mbps, 99pc dc) | WLAN | 1.58 | ±9.6 |
| 10516 | AAE | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5Mbps, 99pc dc) | WLAN | 1.57 | ±9.6 |
| 10517 | AAF | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11Mbps, 99pc dc) | WLAN | 1.58 | ±9.6 |
| 10518 | AAF | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9Mbps, 99pc dc) | WLAN | 8.23 | ±9.6 |
| 10519 | AAF | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12Mbps, 99pc dc) | WLAN | 8.39 | ±9.6 |
| 10520 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18Mbps, 99pc dc) | WLAN | 8.12 | ±9.6 |
| 10521 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24Mbps, 99pc dc) | WLAN | 7.97 | ±9.6 |
| 10522 | AAB | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36Mbps, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10523 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48Mbps, 99pc dc) | WLAN | 8.06 | ±9.6 |
| 10524 | AAC | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54Mbps, 99pc dc) | WLAN | 8.27 | ±9.6 |
| 10525 | AAC | IEEE 802.11ac WiFi (20MHz, MCS0, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10526 | AAF | IEEE 802.11ac WiFi (20MHz, MCS1, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10527 | AAF | IEEE 802.11ac WiFi (20MHz, MCS2, 99pc dc) | WLAN | 8.21 | ±9.6 |
| 10528 | AAF | IEEE 802.11ac WiFi (20MHz, MCS3, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10529 | AAF | IEEE 802.11ac WiFi (20MHz, MCS4, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10531 | AAF | IEEE 802.11ac WiFi (20MHz, MCS5, 99pc dc) | WLAN | 8.43 | ±9.6 |
| 10532 | AAF | IEEE 802.11ac WiFi (20MHz, MCS7, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10533 | AAE | IEEE 802.11ac WiFi (20MHz, MCS8, 99pc dc) | WLAN | 8.38 | ±9.6 |
| 10534 | AAE | IEEE 802.11ac WiFi (40MHz, MCS0, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10535 | AAE | IEEE 802.11ac WiFi (40MHz, MCS1, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10536 | AAF | IEEE 802.11ac WiFi (40MHz, MCS2, 99pc dc) | WLAN | 8.32 | ±9.6 |
| 10537 | AAF | IEEE 802.11ac WiFi (40MHz, MCS3, 99pc dc) | WLAN | 8.44 | ±9.6 |
| 10538 | AAF | IEEE 802.11ac WiFi (40MHz, MCS4, 99pc dc) | WLAN | 8.54 | ±9.6 |
| 10540 | AAA | IEEE 802.11ac WiFi (40MHz, MCS6, 99pc dc) | WLAN | 8.39 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^F k = 2 |
|-------|-----|--|-------|----------|------------------------|
| 10541 | AAA | IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc dc) | WLAN | 8.46 | ±9.6 |
| 10542 | AAA | IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc dc) | WLAN | 8.65 | ±9.6 |
| 10543 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc dc) | WLAN | 8.65 | ±9.6 |
| 10544 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc dc) | WLAN | 8.47 | ±9.6 |
| 10545 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc dc) | WLAN | 8.55 | ±9.6 |
| 10546 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc dc) | WLAN | 8.35 | ±9.6 |
| 10547 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc dc) | WLAN | 8.49 | ±9.6 |
| 10548 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc dc) | WLAN | 8.37 | ±9.6 |
| 10550 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc dc) | WLAN | 8.38 | ±9.6 |
| 10551 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc dc) | WLAN | 8.50 | ±9.6 |
| 10552 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10553 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10554 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc dc) | WLAN | 8.48 | ±9.6 |
| 10555 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc dc) | WLAN | 8.47 | ±9.6 |
| 10556 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc dc) | WLAN | 8.50 | ±9.6 |
| 10557 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc dc) | WLAN | 8.52 | ±9.6 |
| 10558 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc dc) | WLAN | 8.61 | ±9.6 |
| 10560 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc dc) | WLAN | 8.73 | ±9.6 |
| 10561 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc dc) | WLAN | 8.56 | ±9.6 |
| 10562 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc dc) | WLAN | 8.69 | ±9.6 |
| 10563 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc dc) | WLAN | 8.77 | ±9.6 |
| 10564 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9Mbps, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10565 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12Mbps, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10566 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18Mbps, 99pc dc) | WLAN | 8.13 | ±9.6 |
| 10567 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24Mbps, 99pc dc) | WLAN | 8.00 | ±9.6 |
| 10568 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36Mbps, 99pc dc) | WLAN | 8.37 | ±9.6 |
| 10569 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48Mbps, 99pc dc) | WLAN | 8.10 | ±9.6 |
| 10570 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54Mbps, 99pc dc) | WLAN | 8.30 | ±9.6 |
| 10571 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1Mbps, 90pc dc) | WLAN | 1.99 | ±9.6 |
| 10572 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2Mbps, 90pc dc) | WLAN | 1.99 | ±9.6 |
| 10573 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5Mbps, 90pc dc) | WLAN | 1.98 | ±9.6 |
| 10574 | AAC | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11Mbps, 90pc dc) | WLAN | 1.98 | ±9.6 |
| 10575 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6Mbps, 90pc dc) | WLAN | 8.59 | ±9.6 |
| 10576 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9Mbps, 90pc dc) | WLAN | 8.60 | ±9.6 |
| 10577 | AAC | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12Mbps, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10578 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18Mbps, 90pc dc) | WLAN | 8.49 | ±9.6 |
| 10579 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24Mbps, 90pc dc) | WLAN | 8.36 | ±9.6 |
| 10580 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36Mbps, 90pc dc) | WLAN | 8.76 | ±9.6 |
| 10581 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48Mbps, 90pc dc) | WLAN | 8.35 | ±9.6 |
| 10582 | AAD | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54Mbps, 90pc dc) | WLAN | 8.67 | ±9.6 |
| 10583 | AAD | IEEE 802.11a/h WiFi 5GHz (OFDM, 6Mbps, 90pc dc) | WLAN | 8.58 | ±9.6 |
| 10584 | AAD | IEEE 802.11a/h WiFi 5GHz (OFDM, 9Mbps, 90pc dc) | WLAN | 8.60 | ±9.6 |
| 10585 | AAD | IEEE 802.11a/h WiFi 5GHz (OFDM, 12Mbps, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10586 | AAD | IEEE 802.11a/h WiFi 5GHz (OFDM, 18Mbps, 90pc dc) | WLAN | 8.48 | ±9.6 |
| 10587 | AAA | IEEE 802.11a/h WiFi 5GHz (OFDM, 24Mbps, 90pc dc) | WLAN | 8.36 | ±9.6 |
| 10588 | AAA | IEEE 802.11a/h WiFi 5GHz (OFDM, 36Mbps, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10589 | AAA | IEEE 802.11a/h WiFi 5GHz (OFDM, 48Mbps, 90pc dc) | WLAN | 8.35 | ±9.6 |
| 10590 | AAA | IEEE 802.11a/h WiFi 5GHz (OFDM, 54Mbps, 90pc dc) | WLAN | 8.67 | ±9.6 |
| 10591 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc dc) | WLAN | 8.63 | ±9.6 |
| 10592 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc dc) | WLAN | 8.79 | ±9.6 |
| 10593 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc dc) | WLAN | 8.84 | ±9.6 |
| 10594 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10595 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10596 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc dc) | WLAN | 8.71 | ±9.6 |
| 10597 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc dc) | WLAN | 8.72 | ±9.6 |
| 10598 | AAA | IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc dc) | WLAN | 8.50 | ±9.6 |
| 10599 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc dc) | WLAN | 8.79 | ±9.6 |
| 10600 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc dc) | WLAN | 8.88 | ±9.6 |
| 10601 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10602 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc dc) | WLAN | 8.94 | ±9.6 |
| 10603 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc dc) | WLAN | 9.03 | ±9.6 |
| 10604 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc dc) | WLAN | 8.76 | ±9.6 |
| 10605 | AAA | IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc dc) | WLAN | 8.97 | ±9.6 |
| 10606 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10607 | AAC | IEEE 802.11ac WiFi (20MHz, MCS0, 90pc dc) | WLAN | 8.54 | ±9.6 |
| 10608 | AAC | IEEE 802.11ac WiFi (20MHz, MCS1, 90pc dc) | 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 dc) | WLAN | 8.57 | ±9.6 |
| 10610 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10611 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10612 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc dc) | WLAN | 8.77 | ±9.6 |
| 10613 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc dc) | WLAN | 8.94 | ±9.6 |
| 10614 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc dc) | WLAN | 8.59 | ±9.6 |
| 10615 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10616 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10617 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc dc) | WLAN | 8.81 | ±9.6 |
| 10618 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc dc) | WLAN | 8.58 | ±9.6 |
| 10619 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc dc) | WLAN | 8.86 | ±9.6 |
| 10620 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc dc) | WLAN | 8.87 | ±9.6 |
| 10621 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc dc) | WLAN | 8.77 | ±9.6 |
| 10622 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc dc) | WLAN | 8.68 | ±9.6 |
| 10623 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10624 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc dc) | WLAN | 8.96 | ±9.6 |
| 10625 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc dc) | WLAN | 8.96 | ±9.6 |
| 10626 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10627 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc dc) | WLAN | 8.88 | ±9.6 |
| 10628 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc dc) | WLAN | 8.71 | ±9.6 |
| 10629 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc dc) | WLAN | 8.85 | ±9.6 |
| 10630 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc dc) | WLAN | 8.72 | ±9.6 |
| 10631 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc dc) | WLAN | 8.81 | ±9.6 |
| 10632 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10633 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10634 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc dc) | WLAN | 8.80 | ±9.6 |
| 10635 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc dc) | WLAN | 8.81 | ±9.6 |
| 10636 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10637 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc dc) | WLAN | 8.79 | ±9.6 |
| 10638 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc dc) | WLAN | 8.86 | ±9.6 |
| 10639 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc dc) | WLAN | 8.85 | ±9.6 |
| 10640 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc dc) | WLAN | 8.98 | ±9.6 |
| 10641 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc dc) | WLAN | 9.08 | ±9.6 |
| 10642 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc dc) | WLAN | 9.08 | ±9.6 |
| 10643 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc dc) | WLAN | 8.89 | ±9.6 |
| 10644 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc dc) | WLAN | 9.05 | ±9.6 |
| 10645 | AAC | IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc dc) | WLAN | 9.11 | ±9.6 |
| 10646 | AAC | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Sub=2,7) | LTE-TDD | 11.96 | ±9.6 |
| 10647 | AAC | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Sub=2,7) | LTE-TDD | 11.96 | ±9.6 |
| 10648 | AAC | CDMA2000 (1x Advanced) | CDMA2000 | 3.45 | ±9.6 |
| 10652 | AAC | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.91 | ±9.6 |
| 10653 | AAC | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.42 | ±9.6 |
| 10654 | AAC | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 6.96 | ±9.6 |
| 10655 | AAC | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%) | LTE-TDD | 7.21 | ±9.6 |
| 10658 | AAC | Pulse Waveform (200 Hz, 10%) | Test | 10.00 | ±9.6 |
| 10659 | AAC | Pulse Waveform (200 Hz, 20%) | Test | 6.99 | ±9.6 |
| 10660 | AAC | Pulse Waveform (200 Hz, 40%) | Test | 3.98 | ±9.6 |
| 10661 | AAC | Pulse Waveform (200 Hz, 60%) | Test | 2.22 | ±9.6 |
| 10662 | AAC | Pulse Waveform (200 Hz, 80%) | Test | 0.97 | ±9.6 |
| 10670 | AAC | Bluetooth Low Energy | Bluetooth | 2.19 | ±9.6 |
| 10671 | AAD | IEEE 802.11ax (20 MHz, MCS0, 90pc dc) | WLAN | 9.09 | ±9.6 |
| 10672 | AAD | IEEE 802.11ax (20 MHz, MCS1, 90pc dc) | WLAN | 8.57 | ±9.6 |
| 10673 | AAD | IEEE 802.11ax (20 MHz, MCS2, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10674 | AAD | IEEE 802.11ax (20 MHz, MCS3, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10675 | AAD | IEEE 802.11ax (20 MHz, MCS4, 90pc dc) | WLAN | 8.90 | ±9.6 |
| 10676 | AAD | IEEE 802.11ax (20 MHz, MCS5, 90pc dc) | WLAN | 8.77 | ±9.6 |
| 10677 | AAD | IEEE 802.11ax (20 MHz, MCS6, 90pc dc) | WLAN | 8.73 | ±9.6 |
| 10678 | AAD | IEEE 802.11ax (20 MHz, MCS7, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10679 | AAD | IEEE 802.11ax (20 MHz, MCS8, 90pc dc) | WLAN | 8.89 | ±9.6 |
| 10680 | AAD | IEEE 802.11ax (20 MHz, MCS9, 90pc dc) | WLAN | 8.80 | ±9.6 |
| 10681 | AAG | IEEE 802.11ax (20 MHz, MCS10, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10682 | AAF | IEEE 802.11ax (20 MHz, MCS11, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10683 | AAA | IEEE 802.11ax (20 MHz, MCS0, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10684 | AAC | IEEE 802.11ax (20 MHz, MCS1, 99pc dc) | WLAN | 8.26 | ±9.6 |
| 10685 | AAC | IEEE 802.11ax (20 MHz, MCS2, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10686 | AAC | IEEE 802.11ax (20 MHz, MCS3, 99pc dc) | WLAN | 8.28 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ² k = 2 |
|-------|-----|--|-------|----------|------------------------|
| 10687 | AAE | IEEE 802.11ax (20 MHz, MCS4, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10688 | AAE | IEEE 802.11ax (20 MHz, MCS5, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10689 | AAD | IEEE 802.11ax (20 MHz, MCS6, 99pc dc) | WLAN | 8.55 | ±9.6 |
| 10690 | AAE | IEEE 802.11ax (20 MHz, MCS7, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10691 | AAE | IEEE 802.11ax (20 MHz, MCS8, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10692 | AAA | IEEE 802.11ax (20 MHz, MCS9, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10693 | AAA | IEEE 802.11ax (20 MHz, MCS10, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10694 | AAA | IEEE 802.11ax (20 MHz, MCS11, 99pc dc) | WLAN | 8.57 | ±9.6 |
| 10695 | AAA | IEEE 802.11ax (40 MHz, MCS0, 90pc dc) | WLAN | 8.78 | ±9.6 |
| 10696 | AAA | IEEE 802.11ax (40 MHz, MCS1, 90pc dc) | WLAN | 6.91 | ±9.6 |
| 10697 | AAA | IEEE 802.11ax (40 MHz, MCS2, 90pc dc) | WLAN | 8.61 | ±9.6 |
| 10698 | AAA | IEEE 802.11ax (40 MHz, MCS3, 90pc dc) | WLAN | 8.89 | ±9.6 |
| 10699 | AAA | IEEE 802.11ax (40 MHz, MCS4, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10700 | AAA | IEEE 802.11ax (40 MHz, MCS5, 90pc dc) | WLAN | 8.73 | ±9.6 |
| 10701 | AAA | IEEE 802.11ax (40 MHz, MCS6, 90pc dc) | WLAN | 8.86 | ±9.6 |
| 10702 | AAA | IEEE 802.11ax (40 MHz, MCS7, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10703 | AAA | IEEE 802.11ax (40 MHz, MCS8, 90pc dc) | WLAN | 8.62 | ±9.6 |
| 10704 | AAA | IEEE 802.11ax (40 MHz, MCS9, 90pc dc) | WLAN | 8.56 | ±9.6 |
| 10705 | AAA | IEEE 802.11ax (40 MHz, MCS10, 90pc dc) | WLAN | 8.69 | ±9.6 |
| 10706 | AAC | IEEE 802.11ax (40 MHz, MCS11, 90pc dc) | WLAN | 8.66 | ±9.6 |
| 10707 | AAC | IEEE 802.11ax (40 MHz, MCS0, 99pc dc) | WLAN | 8.32 | ±9.6 |
| 10708 | AAC | IEEE 802.11ax (40 MHz, MCS1, 99pc dc) | WLAN | 8.55 | ±9.6 |
| 10709 | AAC | IEEE 802.11ax (40 MHz, MCS2, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10710 | AAC | IEEE 802.11ax (40 MHz, MCS3, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10711 | AAC | IEEE 802.11ax (40 MHz, MCS4, 99pc dc) | WLAN | 8.39 | ±9.6 |
| 10712 | AAC | IEEE 802.11ax (40 MHz, MCS5, 99pc dc) | WLAN | 8.67 | ±9.6 |
| 10713 | AAC | IEEE 802.11ax (40 MHz, MCS6, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10714 | AAC | IEEE 802.11ax (40 MHz, MCS7, 99pc dc) | WLAN | 8.26 | ±9.6 |
| 10715 | AAC | IEEE 802.11ax (40 MHz, MCS8, 99pc dc) | WLAN | 8.45 | ±9.6 |
| 10716 | AAC | IEEE 802.11ax (40 MHz, MCS9, 99pc dc) | WLAN | 8.30 | ±9.6 |
| 10717 | AAC | IEEE 802.11ax (40 MHz, MCS10, 99pc dc) | WLAN | 8.48 | ±9.6 |
| 10718 | AAC | IEEE 802.11ax (40 MHz, MCS11, 99pc dc) | WLAN | 8.24 | ±9.6 |
| 10719 | AAC | IEEE 802.11ax (80 MHz, MCS0, 90pc dc) | WLAN | 8.81 | ±9.6 |
| 10720 | AAC | IEEE 802.11ax (80 MHz, MCS1, 90pc dc) | WLAN | 8.87 | ±9.6 |
| 10721 | AAC | IEEE 802.11ax (80 MHz, MCS2, 90pc dc) | WLAN | 8.76 | ±9.6 |
| 10722 | AAC | IEEE 802.11ax (80 MHz, MCS3, 90pc dc) | WLAN | 8.55 | ±9.6 |
| 10723 | AAC | IEEE 802.11ax (80 MHz, MCS4, 90pc dc) | WLAN | 8.70 | ±9.6 |
| 10724 | AAC | IEEE 802.11ax (80 MHz, MCS5, 90pc dc) | WLAN | 8.50 | ±9.6 |
| 10725 | AAC | IEEE 802.11ax (80 MHz, MCS6, 90pc dc) | WLAN | 8.74 | ±9.6 |
| 10726 | AAC | IEEE 802.11ax (80 MHz, MCS7, 90pc dc) | WLAN | 8.72 | ±9.6 |
| 10727 | AAC | IEEE 802.11ax (80 MHz, MCS8, 90pc dc) | WLAN | 8.66 | ±9.6 |
| 10728 | AAC | IEEE 802.11ax (80 MHz, MCS9, 90pc dc) | WLAN | 8.65 | ±9.6 |
| 10729 | AAC | IEEE 802.11ax (80 MHz, MCS10, 90pc dc) | WLAN | 8.64 | ±9.6 |
| 10730 | AAC | IEEE 802.11ax (80 MHz, MCS11, 90pc dc) | WLAN | 8.67 | ±9.6 |
| 10731 | AAC | IEEE 802.11ax (80 MHz, MCS0, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10732 | AAC | IEEE 802.11ax (80 MHz, MCS1, 99pc dc) | WLAN | 8.46 | ±9.6 |
| 10733 | AAC | IEEE 802.11ax (80 MHz, MCS2, 99pc dc) | WLAN | 8.40 | ±9.6 |
| 10734 | AAC | IEEE 802.11ax (80 MHz, MCS3, 99pc dc) | WLAN | 8.25 | ±9.6 |
| 10735 | AAC | IEEE 802.11ax (80 MHz, MCS4, 99pc dc) | WLAN | 8.33 | ±9.6 |
| 10736 | AAC | IEEE 802.11ax (80 MHz, MCS5, 99pc dc) | WLAN | 8.27 | ±9.6 |
| 10737 | AAC | IEEE 802.11ax (80 MHz, MCS6, 99pc dc) | WLAN | 8.36 | ±9.6 |
| 10738 | AAC | IEEE 802.11ax (80 MHz, MCS7, 99pc dc) | WLAN | 8.42 | ±9.6 |
| 10739 | AAC | IEEE 802.11ax (80 MHz, MCS8, 99pc dc) | WLAN | 8.29 | ±9.6 |
| 10740 | AAC | IEEE 802.11ax (80 MHz, MCS9, 99pc dc) | WLAN | 8.48 | ±9.6 |
| 10741 | AAC | IEEE 802.11ax (80 MHz, MCS10, 99pc dc) | WLAN | 8.40 | ±9.6 |
| 10742 | AAC | IEEE 802.11ax (80 MHz, MCS11, 99pc dc) | WLAN | 8.43 | ±9.6 |
| 10743 | AAC | IEEE 802.11ax (160 MHz, MCS0, 90pc dc) | WLAN | 8.94 | ±9.6 |
| 10744 | AAC | IEEE 802.11ax (160 MHz, MCS1, 90pc dc) | WLAN | 9.16 | ±9.6 |
| 10745 | AAC | IEEE 802.11ax (160 MHz, MCS2, 90pc dc) | WLAN | 8.83 | ±9.6 |
| 10746 | AAC | IEEE 802.11ax (160 MHz, MCS3, 90pc dc) | WLAN | 9.11 | ±9.6 |
| 10747 | AAC | IEEE 802.11ax (160 MHz, MCS4, 90pc dc) | WLAN | 9.04 | ±9.6 |
| 10748 | AAC | IEEE 802.11ax (160 MHz, MCS5, 90pc dc) | WLAN | 8.93 | ±9.6 |
| 10749 | AAC | IEEE 802.11ax (160 MHz, MCS6, 90pc dc) | WLAN | 8.90 | ±9.6 |
| 10750 | AAC | IEEE 802.11ax (160 MHz, MCS7, 90pc dc) | WLAN | 8.79 | ±9.6 |
| 10751 | AAC | IEEE 802.11ax (160 MHz, MCS8, 90pc dc) | WLAN | 8.82 | ±9.6 |
| 10752 | AAC | IEEE 802.11ax (160 MHz, MCS9, 90pc dc) | WLAN | 8.81 | ±9.6 |

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|-------|-----|--|---------------|----------|------------------------|
| 10753 | AAC | IEEE 802.11ax (160MHz, MCS10, 99pc dc) | WLAN | 8.00 | ±9.8 |
| 10754 | AAC | IEEE 802.11ax (160MHz, MCS11, 99pc dc) | WLAN | 8.34 | ±9.8 |
| 10755 | AAC | IEEE 802.11ax (160MHz, MCS0, 99pc dc) | WLAN | 8.64 | ±9.8 |
| 10756 | AAC | IEEE 802.11ax (160MHz, MCS1, 99pc dc) | WLAN | 8.77 | ±9.8 |
| 10757 | AAC | IEEE 802.11ax (160MHz, MCS2, 99pc dc) | WLAN | 8.77 | ±9.8 |
| 10758 | AAC | IEEE 802.11ax (160MHz, MCS3, 99pc dc) | WLAN | 8.88 | ±9.8 |
| 10759 | AAC | IEEE 802.11ax (160MHz, MCS4, 99pc dc) | WLAN | 8.58 | ±9.8 |
| 10760 | AAC | IEEE 802.11ax (160MHz, MCS5, 99pc dc) | WLAN | 8.49 | ±9.8 |
| 10761 | AAC | IEEE 802.11ax (160MHz, MCS6, 99pc dc) | WLAN | 8.58 | ±9.8 |
| 10762 | AAC | IEEE 802.11ax (160MHz, MCS7, 99pc dc) | WLAN | 8.49 | ±9.8 |
| 10763 | AAC | IEEE 802.11ax (160MHz, MCS8, 99pc dc) | WLAN | 8.53 | ±9.8 |
| 10764 | AAC | IEEE 802.11ax (160MHz, MCS9, 99pc dc) | WLAN | 8.54 | ±9.8 |
| 10765 | AAC | IEEE 802.11ax (160MHz, MCS10, 99pc dc) | WLAN | 8.54 | ±9.8 |
| 10766 | AAC | IEEE 802.11ax (160MHz, MCS11, 99pc dc) | WLAN | 8.51 | ±9.8 |
| 10767 | AAC | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 7.99 | ±9.8 |
| 10768 | AAC | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.8 |
| 10769 | AAC | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.01 | ±9.8 |
| 10770 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.8 |
| 10771 | AAC | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.8 |
| 10772 | AAC | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.23 | ±9.8 |
| 10773 | AAC | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.03 | ±9.8 |
| 10774 | AAC | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.02 | ±9.8 |
| 10775 | AAC | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.8 |
| 10776 | AAC | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ±9.8 |
| 10777 | AAC | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.30 | ±9.8 |
| 10778 | AAC | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.34 | ±9.8 |
| 10779 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.42 | ±9.8 |
| 10780 | AAC | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.8 |
| 10781 | AAC | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.38 | ±9.8 |
| 10782 | AAC | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.43 | ±9.8 |
| 10783 | AAC | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.31 | ±9.8 |
| 10784 | AAC | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.29 | ±9.8 |
| 10785 | AAC | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.40 | ±9.8 |
| 10786 | AAC | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.35 | ±9.8 |
| 10787 | AAC | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.44 | ±9.8 |
| 10788 | AAC | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.8 |
| 10788 | AAC | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.37 | ±9.8 |
| 10790 | AAC | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39 | ±9.8 |
| 10791 | AAC | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.83 | ±9.8 |
| 10792 | AAC | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.92 | ±9.8 |
| 10793 | AAC | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.95 | ±9.8 |
| 10794 | AAC | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.8 |
| 10795 | AAC | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.84 | ±9.8 |
| 10796 | AAC | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.82 | ±9.8 |
| 10797 | AAC | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.01 | ±9.8 |
| 10798 | AAC | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.8 |
| 10799 | AAC | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.8 |
| 10801 | AAC | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.89 | ±9.8 |
| 10802 | AAC | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.87 | ±9.8 |
| 10803 | AAC | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 7.93 | ±9.8 |
| 10805 | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.8 |
| 10806 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.37 | ±9.8 |
| 10809 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.8 |
| 10810 | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.8 |
| 10812 | AAD | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.8 |
| 10817 | AAD | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.35 | ±9.8 |
| 10818 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34 | ±9.8 |
| 10819 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.33 | ±9.8 |
| 10820 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.30 | ±9.8 |
| 10821 | AAC | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.8 |
| 10822 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.8 |
| 10823 | AAC | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.36 | ±9.8 |
| 10824 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.39 | ±9.8 |
| 10825 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41 | ±9.8 |
| 10827 | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.42 | ±9.8 |
| 10828 | AAC | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.43 | ±9.8 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc ^k k = 2 |
|-------|-----|--|---------------|----------|------------------------|
| 10829 | AAD | 5G NR (CP-OFDM, 100% RB, 100MHz, 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 | AAE | 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 |
| 10838 | 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 | 8.38 | ±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 | AAE | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.37 | ±9.6 |
| 10865 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz) | 5G NR FR1 TDD | 8.41 | ±9.6 |
| 10866 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10868 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.89 | ±9.6 |
| 10869 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10870 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.86 | ±9.6 |
| 10871 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10872 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.52 | ±9.6 |
| 10873 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 10874 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 10875 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 10876 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.39 | ±9.6 |
| 10877 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 7.95 | ±9.6 |
| 10878 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 10879 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.12 | ±9.6 |
| 10880 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.38 | ±9.6 |
| 10881 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.75 | ±9.6 |
| 10882 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 5.96 | ±9.6 |
| 10883 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.57 | ±9.6 |
| 10884 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.53 | ±9.6 |
| 10885 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.61 | ±9.6 |
| 10886 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65 | ±9.6 |
| 10887 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 7.78 | ±9.6 |
| 10888 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz) | 5G NR FR2 TDD | 8.35 | ±9.6 |
| 10889 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.02 | ±9.6 |
| 10890 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 8.40 | ±9.6 |
| 10891 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.13 | ±9.6 |
| 10892 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 8.41 | ±9.6 |
| 10897 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.66 | ±9.6 |
| 10899 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 10899 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.67 | ±9.6 |
| 10900 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10901 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10902 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10903 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10904 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10905 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10906 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.68 | ±9.6 |
| 10907 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.79 | ±9.6 |
| 10908 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 10909 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.96 | ±9.6 |
| 10910 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |

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| UID | Rev | Communication System Name | Group | PAR (dB) | Unc [#] k = 2 |
|-------|-----|--|---------------|----------|------------------------|
| 10911 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 25MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.93 | ±9.6 |
| 10912 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 30MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10913 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 40MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10914 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 50MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.85 | ±9.6 |
| 10915 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 60MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.83 | ±9.6 |
| 10916 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 80MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10917 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 100MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10918 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.66 | ±9.6 |
| 10919 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 10MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.86 | ±9.6 |
| 10920 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 15MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.87 | ±9.6 |
| 10921 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 20MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10922 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 25MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.82 | ±9.6 |
| 10923 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 30MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10924 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 40MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10925 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.95 | ±9.6 |
| 10926 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 60MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.84 | ±9.6 |
| 10927 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 80MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 5.94 | ±9.6 |
| 10928 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 5MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10929 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 10MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10930 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 15MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.52 | ±9.6 |
| 10931 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 20MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10932 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10933 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 30MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10934 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 40MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10935 | AAA | 5G NR (DFT-s-OFDM, 1 RB, 50MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.51 | ±9.6 |
| 10936 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10937 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 10MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.77 | ±9.6 |
| 10938 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.90 | ±9.6 |
| 10939 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 20MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.82 | ±9.6 |
| 10940 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.89 | ±9.6 |
| 10941 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 30MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.83 | ±9.6 |
| 10942 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 40MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.85 | ±9.6 |
| 10943 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 50MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.95 | ±9.6 |
| 10944 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 5MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.81 | ±9.6 |
| 10945 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 10MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.85 | ±9.6 |
| 10946 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 15MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.83 | ±9.6 |
| 10947 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 20MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10948 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10949 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 30MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.87 | ±9.6 |
| 10950 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 40MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.94 | ±9.6 |
| 10951 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 50MHz, QPSK, 15 kHz) | 5G NR FR1 FDD | 5.92 | ±9.6 |
| 10952 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.25 | ±9.6 |
| 10953 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.15 | ±9.6 |
| 10954 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.23 | ±9.6 |
| 10955 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.42 | ±9.6 |
| 10956 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.14 | ±9.6 |
| 10957 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 10MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.31 | ±9.6 |
| 10958 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.61 | ±9.6 |
| 10959 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.33 | ±9.6 |
| 10960 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.32 | ±9.6 |
| 10961 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.36 | ±9.6 |
| 10962 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.40 | ±9.6 |
| 10963 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 10964 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 5MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.29 | ±9.6 |
| 10965 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.37 | ±9.6 |
| 10966 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.55 | ±9.6 |
| 10967 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.42 | ±9.6 |
| 10968 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 100MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.48 | ±9.6 |
| 10972 | AAB | 5G NR (CP-OFDM, 1 RB, 20MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 11.59 | ±9.6 |
| 10973 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 100MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 9.06 | ±9.6 |
| 10974 | AAB | 5G NR (CP-OFDM, 100% RB, 100MHz, 256-QAM, 30 kHz) | 5G NR FR1 TDD | 10.28 | ±9.6 |
| 10978 | AAA | ULLA BDR | ULLA | 2.23 | ±9.6 |
| 10979 | AAA | ULLA HDRM | ULLA | 7.02 | ±9.6 |
| 10980 | AAA | ULLA HDRB | ULLA | 8.82 | ±9.6 |
| 10981 | AAA | ULLA HDRpt | ULLA | 1.50 | ±9.6 |
| 10982 | AAA | ULLA HDRps | ULLA | 1.44 | ±9.6 |

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July 18, 2022

| 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 |

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

Appendix E. – Dipole Calibration Data

**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:

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

Calibration is Performed According to the Following Standards:

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

Additional Documentation:

- b) DASY System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.
- *The absorbed power density (APD):* The absorbed power density is evaluated according to Samaras T, Christ A, Kuster N, "Compliance assessment of the epithelial or absorbed power density above 6 GHz using SAR measurement systems", Bioelectromagnetics, 2021 (submitted). The additional evaluation uncertainty of 0.55 dB (rectangular distribution) is considered.

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 | DASY6 | V16.0 |
| Extrapolation | Advanced Extrapolation | |
| Phantom | Modular Flat Phantom | |
| Distance Dipole Center - TSL | 5 mm | with Spacer |
| Zoom Scan Resolution | dx, dy = 3.4 mm, dz = 1.4 mm | Graded Ratio = 1.4 (Z direction) |
| Frequency | 6500 MHz ± 1 MHz | |

Head TSL parameters

The following parameters and calculations were applied.

| | Temperature | Permittivity | Conductivity |
|---|-----------------|--------------|------------------|
| Nominal Head TSL parameters | 22.0 °C | 34.5 | 6.07 mho/m |
| Measured Head TSL parameters | (22.0 ± 0.2) °C | 35.2 ± 6 % | 6.23 mho/m ± 6 % |
| Head TSL temperature change during test | < 0.5 °C | --- | --- |

SAR result with Head TSL

| SAR averaged over 1 cm ³ (1 g) of Head TSL | Condition | |
|---|--------------------|--------------------------------|
| SAR measured | 100 mW input power | 28.8 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 289 W/kg ± 24.7 % (k=2) |

| SAR averaged over 8 cm ³ (8 g) of Head TSL | Condition | |
|---|--------------------|---------------------------------|
| SAR measured | 100 mW input power | 6.43 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 64.6 W/kg ± 24.4 % (k=2) |

| SAR averaged over 10 cm ³ (10 g) of Head TSL | condition | |
|---|--------------------|---------------------------------|
| SAR measured | 100 mW input power | 5.26 W/kg |
| SAR for nominal Head TSL parameters | normalized to 1W | 52.9 W/kg ± 24.4 % (k=2) |

Appendix

Antenna Parameters with Head TSL

| | |
|--------------------------------------|-----------------|
| Impedance, transformed to feed point | 52.4 Ω - 8.2 jΩ |
| Return Loss | - 21.6 dB |

APD (Absorbed Power Density)

| APD averaged over 1 cm ² | Condition | |
|-------------------------------------|--------------------|--|
| APD measured | 100 mW input power | 288 W/m ² |
| APD measured | normalized to 1W | 2880 W/m² ± 29.2 % (k=2) |

| APD averaged over 4 cm ² | condition | |
|-------------------------------------|--------------------|--|
| APD measured | 100 mW input power | 129 W/m ² |
| APD measured | normalized to 1W | 1290 W/m² ± 28.9 % (k=2) |

*The reported APD values have been derived using psSAR8g.

General Antenna Parameters and Design

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

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

DASY6 Validation Report for Head TSL

Measurement Report for D6.5GHz-1012, UID 0 -, Channel 6500 (6500.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|--------------------|--------------------|----------|----------|
| D6.5GHz | 16.0 x 6.0 x 300.0 | SN: 1012 | - |

Exposure Conditions

| Phantom Section, TSL | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz] | Conversion Factor | TSL Cond. [S/m] | TSL Permittivity |
|----------------------|------------------------------|------|------------|-----------------|-------------------|-----------------|------------------|
| Flat, HSL | 5.00 | Band | CW, | 6500 | 5.50 | 6.23 | 35.2 |

Hardware Setup

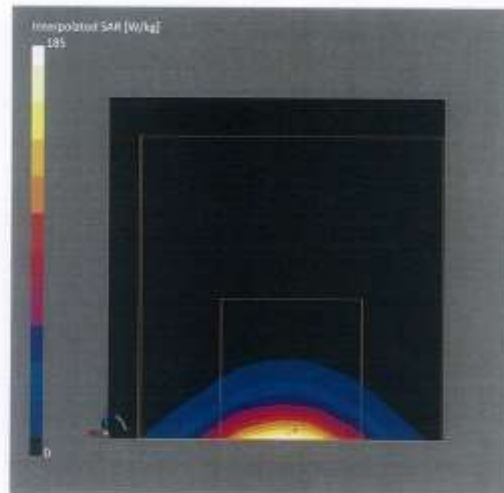
| Phantom | TSL | Probe, Calibration Date | DAE, Calibration Date |
|------------------------|-----------------|-----------------------------|------------------------|
| MFP V8.0 Center - 1182 | HBBL600-10000V6 | EX3DV4 - SN7405, 2022-06-02 | DAE4 Sn908, 2022-06-27 |

Scan Setup

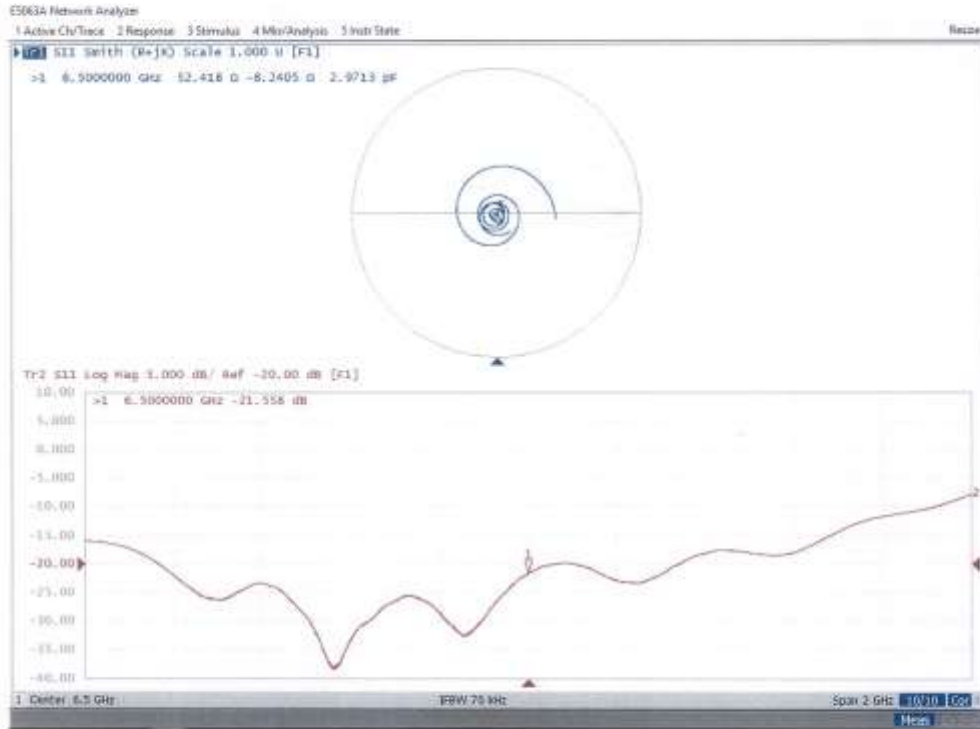
| | Zoom Scan |
|---------------------|--------------------|
| Grid Extents [mm] | 22.0 x 22.0 x 22.0 |
| Grid Steps [mm] | 3.4 x 3.4 x 1.4 |
| Sensor Surface [mm] | 1.4 |
| Graded Grid | Yes |
| Grading Ratio | 1.4 |
| MAIA | N/A |
| Surface Detection | VMS + 6p |
| Scan Method | Measured |

Measurement Results

| | Zoom Scan |
|---------------------|-------------------|
| Date | 2022-09-20, 13:46 |
| psSAR1g [W/Kg] | 28.8 |
| psSAR8g [W/Kg] | 6.43 |
| psSAR10g [W/Kg] | 5.26 |
| Power Drift [dB] | 0.01 |
| Power Scaling | Disabled |
| Scaling Factor [dB] | |
| TSL Correction | No correction |
| M2/M1 [%] | 50.8 |
| Dist 3dB Peak [mm] | 4.6 |



Impedance Measurement Plot for Head TSL



**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 **Estech (Dymstec)**

Certificate No: **5G-Veri10-1027_Jul22**

| CALIBRATION CERTIFICATE | | | | | | | | | | | | | | | | | | | | | | |
|--|--|------------------------------------|------------------------|-------------------|------|----------------------------|-----------------------|----------------------------------|----------|------------------------------------|--------|----------|------------------------------------|--------|---------------------|------|-----------------------|-----------------|-------------------------------|---------|-----------------------------------|------------------------|
| Object | 5G Verification Source 10 GHz - SN: 1027 | | | | | | | | | | | | | | | | | | | | | |
| Calibration procedure(s) | QA CAL-45.v3 Calibration procedure for sources in air above 6 GHz | | | | | | | | | | | | | | | | | | | | | |
| Calibration date: | July 18, 2022 | | | | | | | | | | | | | | | | | | | | | |
| <p>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.</p> <p>All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.</p> <p>Calibration Equipment used (M&TE critical for calibration)</p> <table border="1"> <thead> <tr> <th>Primary Standards</th> <th>ID #</th> <th>Cal Date (Certificate No.)</th> <th>Scheduled Calibration</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Reference Probe EUmWV3 DAE4ip</td> <td>SN: 9374</td> <td>2021-12-21 (No. EUmWV3-9374_Dec21)</td> <td>Dec-22</td> </tr> <tr> <td>SN: 1602</td> <td>2022-06-27 (No. DAE4ip-1602_Jun22)</td> <td>Jun-23</td> </tr> <tr> <th>Secondary Standards</th> <th>ID #</th> <th>Check Date (in house)</th> <th>Scheduled Check</th> </tr> <tr> <td>RF generator Anapico APSIN20G</td> <td>SN: 827</td> <td>18-Dec-18 (in house check Dec-21)</td> <td>In house check: Dec-23</td> </tr> </tbody> </table> | | | | Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration | Reference Probe EUmWV3 DAE4ip | SN: 9374 | 2021-12-21 (No. EUmWV3-9374_Dec21) | Dec-22 | SN: 1602 | 2022-06-27 (No. DAE4ip-1602_Jun22) | Jun-23 | Secondary Standards | ID # | Check Date (in house) | Scheduled Check | RF generator Anapico APSIN20G | SN: 827 | 18-Dec-18 (in house check Dec-21) | In house check: Dec-23 |
| Primary Standards | ID # | Cal Date (Certificate No.) | Scheduled Calibration | | | | | | | | | | | | | | | | | | | |
| Reference Probe EUmWV3 DAE4ip | SN: 9374 | 2021-12-21 (No. EUmWV3-9374_Dec21) | Dec-22 | | | | | | | | | | | | | | | | | | | |
| | SN: 1602 | 2022-06-27 (No. DAE4ip-1602_Jun22) | Jun-23 | | | | | | | | | | | | | | | | | | | |
| Secondary Standards | ID # | Check Date (in house) | Scheduled Check | | | | | | | | | | | | | | | | | | | |
| RF generator Anapico APSIN20G | SN: 827 | 18-Dec-18 (in house check Dec-21) | In house check: Dec-23 | | | | | | | | | | | | | | | | | | | |
| Calibrated by: | Name Leif Klynsner | Function Laboratory Technician | Signature | | | | | | | | | | | | | | | | | | | |
| Approved by: | Sven Kühn | Technical Manager | | | | | | | | | | | | | | | | | | | | |
| | | | Issued: July 26, 2022 | | | | | | | | | | | | | | | | | | | |
| 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



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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

CW Continuous wave

Calibration is Performed According to the Following Standards

- Internal procedure QA CAL-45-5Gsources
- IEC TR 63170 ED1, "Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz", January 2018

Methods Applied and Interpretation of Parameters

- *Coordinate System:* z-axis in the waveguide horn boresight, x-axis is in the direction of the E-field, y-axis normal to the others in the field scanning plane parallel to the horn flare and horn flange.
- *Measurement Conditions:* (1) 10 GHz: The radiated power is the forward power to the horn antenna minus ohmic and mismatch loss. During the measurements, the horn is directly connected to the cable and the antenna ohmic and mismatch losses are determined by far-field measurements. (2) 30, 45, 60 and 90 GHz: The verification sources are switched on for at least 30 minutes. Absorbers are used around the probe cub and at the ceiling to minimize reflections.
- *Horn Positioning:* The waveguide horn is mounted vertically on the flange of the waveguide source to allow vertical positioning of the EUmmW probe during the scan. The plane is parallel to the phantom surface. Probe distance is verified using mechanical gauges positioned on the flare of the horn.
- *E- field distribution:* E field is measured in two x-y-plane (10mm, 10mm + $\lambda/4$) with a vectorial E-field probe. The E-field value stated as calibration value represents the E-field-maxima and the averaged (1cm² and 4cm²) power density values at 10mm in front of the horn.
- *Field polarization:* Above the open horn, linear polarization of the field is expected. This is verified graphically in the field representation.

Calibrated Quantity

- Local peak E-field (V/m) and average of peak spatial components of the poynting vector (W/m²) averaged over the surface area of 1 cm² and 4cm² at the nominal operational frequency of the verification source. Both square and circular averaging results are listed.

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 | DASY8 Module mmWave | V3.0 |
| Phantom | 5G Phantom | |
| Distance Horn Aperture - plane | 10 mm | |
| XY Scan Resolution | dx, dy = 7.5 mm | |
| Number of measured planes | 2 (10mm, 10mm + $\lambda/4$) | |
| Frequency | 10 GHz \pm 10 MHz | |

Calibration Parameters, 10 GHz

Circular Averaging

| Distance Horn Aperture to Measured Plane | <i>Prad</i> ¹ (mW) | Max E-field (V/m) | Uncertainty (k = 2) | Avg Power Density (W/m ²) | | Uncertainty (k = 2) |
|--|-------------------------------|-------------------|---------------------|--|--|---------------------|
| | | | | Avg (psPD _{tot} , psPD _{tot} , psPD _{mod}) | Avg (psPD _{tot} , psPD _{tot} , psPD _{mod}) | |
| | | | | 1 cm ² | 4 cm ² | |
| 10 mm | 86.1 | 144 | 1.27 dB | 52.3 | 48.8 | 1.28 dB |

Square Averaging

| Distance Horn Aperture to Measured Plane | <i>Prad</i> ¹ (mW) | Max E-field (V/m) | Uncertainty (k = 2) | Avg Power Density (W/m ²) | | Uncertainty (k = 2) |
|--|-------------------------------|-------------------|---------------------|--|--|---------------------|
| | | | | Avg (psPD _{tot} , psPD _{tot} , psPD _{mod}) | Avg (psPD _{tot} , psPD _{tot} , psPD _{mod}) | |
| | | | | 1 cm ² | 4 cm ² | |
| 10 mm | 86.1 | 144 | 1.27 dB | 52.5 | 48.7 | 1.28 dB |

¹ Assessed ohmic and mismatch loss plus numerical offset: 0.55 dB

DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | 5N: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|--------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

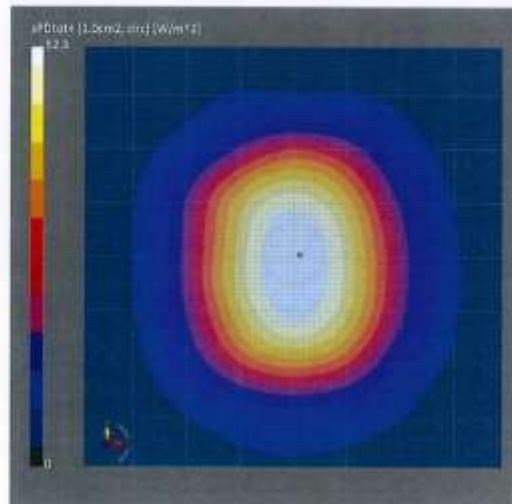
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|--------------------------|
| mmWave Phantom - 1002 | Air | ELmmWV3 - 5N9374_F1-55GHz, 2021-12-21 | DAE4p Sn1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAMA | MAMA not used |

Measurement Results

| | 5G Scan |
|------------------------------|-------------------|
| Date | 2022-07-18, 12:17 |
| Avg. Area [cm ²] | 1.00 |
| psPDn+ [W/m ²] | 52.2 |
| psPDtot+ [W/m ²] | 52.3 |
| psPDmod+ [W/m ²] | 52.5 |
| E _{max} [V/m] | 144 |
| Power Drift [dB] | -0.04 |



DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | SN: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|-------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

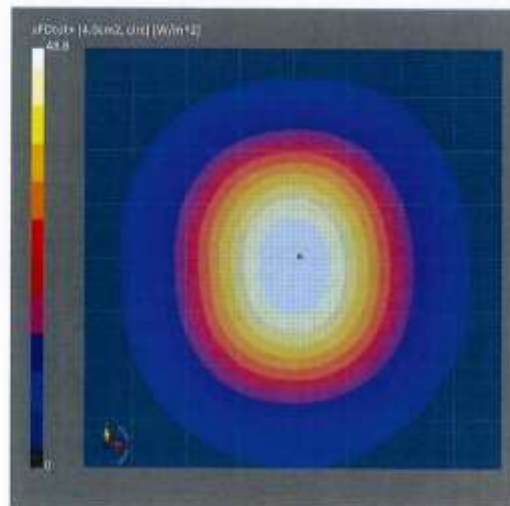
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|---------------------------|
| mmWave Phantom - 1002 | Air | EUmmWV3 - SN9374_F1-55GHz, 2021-12-21 | DAE4ip Sn1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAIA | MAIA not used |

Measurement Results

| | 5G Scan |
|------------------------------|-------------------|
| Date | 2022-07-18, 12:17 |
| Avg. Area [cm ²] | 4.00 |
| psPDn+ [W/m ²] | 48.6 |
| psPDtot+ [W/m ²] | 48.8 |
| psPDmod+ [W/m ²] | 48.9 |
| E _{max} [V/m] | 144 |
| Power Drift [dB] | -0.04 |



DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | SN: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|--------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

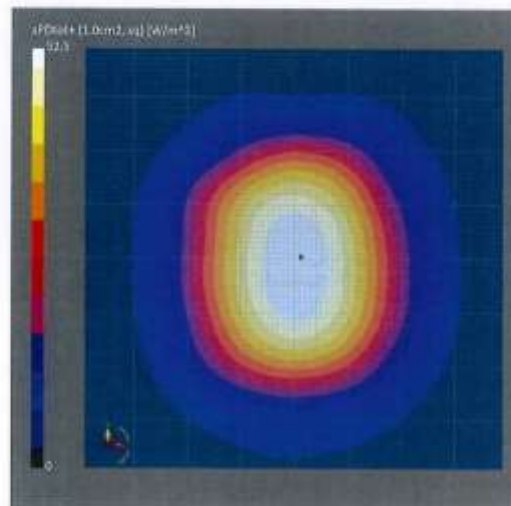
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|---------------------------|
| mmWave Phantom - 1002 | Air | EUmmWV3 - SN9374_F1-55GHz, 2021-12-21 | DAE4ip Sn1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAIA | MAIA not used |

Measurement Results

| | 5G Scan |
|------------------------------|-------------------|
| Date | 2022-07-18, 12:17 |
| Avg. Area [cm ²] | 1.00 |
| psPDin+ [W/m ²] | 52.3 |
| psPDtot+ [W/m ²] | 52.5 |
| psPDmod+ [W/m ²] | 52.7 |
| E _{max} [V/m] | 144 |
| Power Drift [dB] | -0.04 |



DASY Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | SN: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|--------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

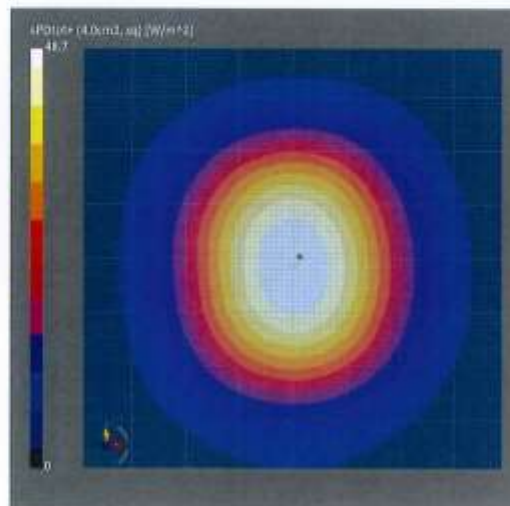
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|---------------------------|
| mmWave Phantom - 1002 | Air | EUmmWV3 - SN9374_F1-55GHz, 2021-12-21 | DAE4ip Sn1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAIA | MAIA not used |

Measurement Results

| | 5G Scan |
|------------------------------|-------------------|
| Date | 2022-07-18, 12:17 |
| Avg. Area [cm ²] | 4.00 |
| psPDn+ [W/m ²] | 48.5 |
| psPDtot+ [W/m ²] | 48.7 |
| psPDmod+ [W/m ²] | 48.9 |
| E _{max} [V/m] | 144 |
| Power Drift [dB] | -0.04 |



Appendix: Source Evaluation for Relative System Check

Measurement Equipment

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

| Item | ID# | Cal Date (Certificate No.) |
|---------------|----------|----------------------------|
| Probe EUmmWV4 | SN: 9423 | July 18, 2022 |

Measurement Conditions

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

| | | |
|--------------------------------|-------------------------------|------|
| DASY Version | DASY8 Module mmWave | V3.0 |
| Phantom | 5G Phantom | |
| Distance Horn Aperture - plane | 10 mm | |
| XY Scan Resolution | dx, dy = 7.5 mm | |
| Number of measured planes | 2 (10mm, 10mm + $\lambda/4$) | |
| Frequency | 10 GHz \pm 10 MHz | |

Calibration Parameters, 10 GHz

Circular Averaging

| Distance Horn Aperture to Measured Plane | <i>Prad</i> ² (mW) | Max E-field (V/m) | Uncertainty (k = 2) | Avg Power Density | | Uncertainty (k = 2) |
|--|-------------------------------|-------------------|---------------------|--|-------------------|---------------------|
| | | | | Avg (ρ_{sPDn+} , $\rho_{sPDtot+}$, $\rho_{sPDmod+}$) (W/m ²) | | |
| | | | | 1 cm ² | 4 cm ² | |
| 10 mm | 86.1 | 148 | 1.27 dB | 55.6 | 51.0 | 1.28 dB |

Square Averaging

| Distance Horn Aperture to Measured Plane | <i>Prad</i> ² (mW) | Max E-field (V/m) | Uncertainty (k = 2) | Avg Power Density | | Uncertainty (k = 2) |
|--|-------------------------------|-------------------|---------------------|--|-------------------|---------------------|
| | | | | Avg (ρ_{sPDn+} , $\rho_{sPDtot+}$, $\rho_{sPDmod+}$) (W/m ²) | | |
| | | | | 1 cm ² | 4 cm ² | |
| 10 mm | 86.1 | 148 | 1.27 dB | 55.7 | 50.9 | 1.28 dB |

² Assessed ohmic and mismatch loss: 0.55 dB

Appendix: DASy Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | 5N: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|--------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

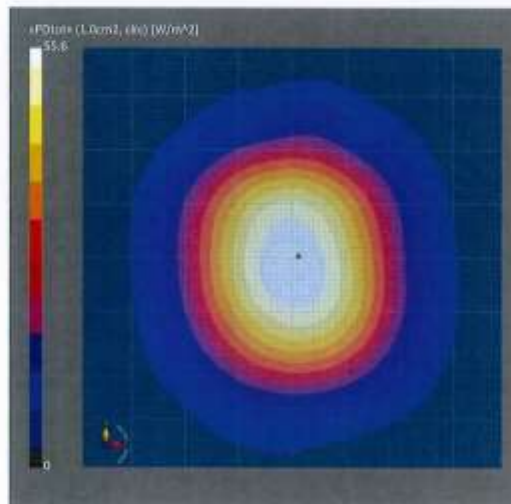
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|---------------------------|
| mmWave Phantom - 1002 | Air | EUmmWV4 - SN9423_F1-55GHz, 2022-07-18 | DAE4ip Sn1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAIA | MAIA not used |

Measurement Results

| | 5G Scan |
|---|-------------------|
| Date | 2022-07-18, 15:11 |
| Avg. Area [cm ²] | 1.00 |
| psPD _{av} [W/m ²] | 55.5 |
| psPD _{tot} [W/m ²] | 55.6 |
| psPD _{mod} [W/m ²] | 55.8 |
| E _{max} [V/m] | 148 |
| Power Drift [dB] | -0.06 |



Appendix: DASYS Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | SN: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|--------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

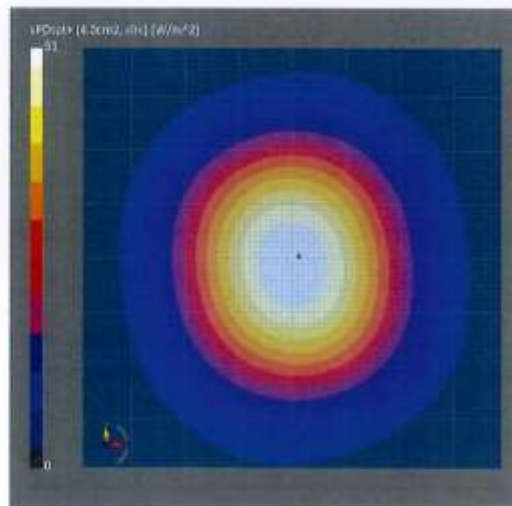
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|---------------------------|
| mmWave Phantom - 1002 | Air | EUmmWV4 - SN9423_F1-55GHz, 2022-07-18 | DAE4ip Sn1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAIA | MAIA not used |

Measurement Results

| | 5G Scan |
|------------------------------|-------------------|
| Date | 2022-07-18, 15:11 |
| Avg. Area [cm ²] | 4.00 |
| µsPDtot+ [W/m ²] | 50.8 |
| µsPDtot+ [W/m ²] | 51.0 |
| µsPDmod+ [W/m ²] | 51.2 |
| E _{max} [V/m] | 148 |
| Power Drift [dB] | -0.06 |



Appendix: DASYS Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | SN: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|-------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

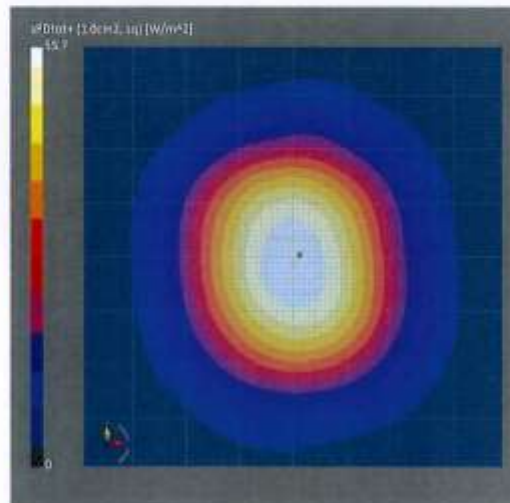
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|---------------------------|
| mmWave Phantom - 1002 | Air | EJmmWV4 - SN9423_F1-55GHz, 2022-07-18 | DAE4ip 5n1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAIA | MAIA not used |

Measurement Results

| | 5G Scan |
|------------------------------|-------------------|
| Date | 2022-07-18, 15:11 |
| Avg. Area [cm ²] | 1.00 |
| psPDn+ [W/m ²] | 55.5 |
| psPDtot+ [W/m ²] | 55.7 |
| psPDmod+ [W/m ²] | 55.9 |
| E _{max} [V/m] | 148 |
| Power Drift [dB] | -0.06 |



Appendix: DASYS Report

Measurement Report for 5G Verification Source 10 GHz, UID 0 -, Channel 10000 (10000.0MHz)

Device under Test Properties

| Name, Manufacturer | Dimensions [mm] | IMEI | DUT Type |
|-------------------------------|-----------------------|----------|----------|
| 5G Verification Source 10 GHz | 100.0 x 100.0 x 172.0 | 5N: 1027 | - |

Exposure Conditions

| Phantom Section | Position, Test Distance [mm] | Band | Group, | Frequency [MHz], Channel Number | Conversion Factor |
|-----------------|------------------------------|-----------------|--------|---------------------------------|-------------------|
| 5G - | 10.0 mm | Validation band | CW | 10000.0, 10000 | 1.0 |

Hardware Setup

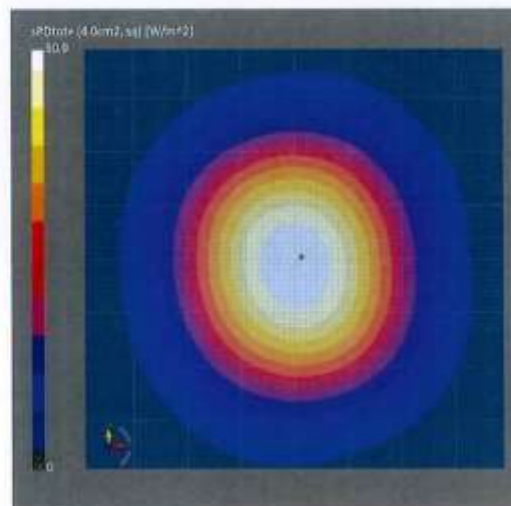
| Phantom | Medium | Probe, Calibration Date | DAE, Calibration Date |
|-----------------------|--------|---------------------------------------|---------------------------|
| mmWave Phantom - 1002 | Air | EUmmWV4 - SN9423_F1-55GHz, 2022-07-18 | DAE4ip Sn1602, 2022-06-27 |

Scan Setup

| | 5G Scan |
|---------------------|---------------|
| Grid Extents [mm] | 120.0 x 120.0 |
| Grid Steps [lambda] | 0.25 x 0.25 |
| Sensor Surface [mm] | 10.0 |
| MAIA | MAIA not used |

Measurement Results

| | 5G Scan |
|------------------------------|-------------------|
| Date | 2022-07-18, 15:11 |
| Avg. Area [cm ²] | 4.00 |
| psPDn+ [W/m ²] | 50.7 |
| psPDrot+ [W/m ²] | 50.9 |
| psPDmod+ [W/m ²] | 51.1 |
| E _{max} [V/m] | 148 |
| Power Drift [dB] | -0.06 |



Appendix D. – SAR Tissue Characterization

The brain and muscle mixtures consist of a viscous gel using hydrox-ethyl cellulose (HEC) gelling agent and saline solution Preservation with a bacteriacide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue. The mixture characterizations used for the brain and muscle tissue simulating liquids are according to the data by C. Gabriel and G. Harts grove.

$$Y = \frac{j2\omega\epsilon_r\epsilon_0}{[\ln(b/a)]^2} \int_a^b \int_a^b \int_0^\pi \cos\phi' \frac{\exp[-j\omega r(\mu_0\epsilon_r'\epsilon_0)^{1/2}]}{r} d\phi' d\rho' d\rho$$

Where Y is the admittance of the probe in contact with the sample, the primed and unprimed coordinates refer to source and observation points, respectively, $r^2 = \rho^2 + \rho'^2 - 2\rho\rho' \cos\phi'$ ω is the angular frequency, and $j=(-1)^{1/2}$

3 Composition / Information on ingredients

3.2 Mixtures

Description: Aqueous solution with surfactants and inhibitors

Declarable, or hazardous components:

| | | |
|--|--|-----------|
| CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28-0000 | Ethenediol STOT RE 2, H373; Acute Tox. 4, H302 | >1.0-4.9% |
| CAS: 68608-26-4 EINECS: 271-781-5 Reg.nr.: 01-2119527859-22-0000 | Sodium petroleum sulfonate Eye Irrit. 2, H319 | < 2.9% |
| CAS: 107-41-5 EINECS: 203-489-0 Reg.nr.: 01-2119539582-35-0000 | Hexylene Glycol / 2-Methyl-pentane-2,4-diol Skin Irrit. 2, H315; Eye Irrit. 2, H319 | < 2.9% |
| CAS: 68920-66-1 NLP: 500-236-9 Reg.nr.: 01-2119489407-26-0000 | Alkoxylated alcohol, > C₁₆ Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319 | < 2.0% |

Additional information:

For the wording of the listed risk phrases refer to section 16.

Not mentioned CAS-, EINECS- or registration numbers are to be regarded as Proprietary/Confidential.

The specific chemical identity and/or exact percentage concentration of proprietary components is withheld as a trade secret.

Liquid recipes are Proprietary SPEAG. Since the composition is approximate to the actual liquids utilized, the manufacture tissue-equivalent liquid data sheets are provided below

Schmid & Partner Engineering AG

s p e a g

Zeughausstrasse 43, 8004 Zurich, Switzerland
 Phone +41 44 245 9700, Fax +41 44 245 9779
 www.speag.swiss, info@speag.swiss

Measurement Certificate / Material Test

| | |
|--------------|---|
| Item Name | Head Tissue Simulating Liquid (HBBL800-10000V6) |
| Product No. | SL AAH U16 BC (Batch: 210727-3) |
| Manufacturer | SPEAG |

Measurement Method

TSL dielectric parameters measured using calibrated DAK probe.

Target Parameters

Target parameters as defined in the IEEE 1528 and IEC 62209 compliance standards.

Test Condition

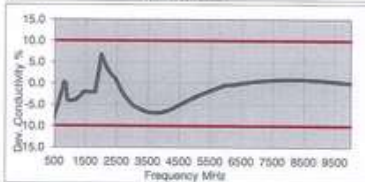
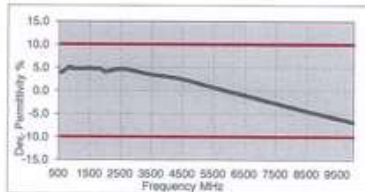
Ambient Condition: 22°C ; 30% humidity
 TSL Temperature: 22°C
 Test Date: 29-Jul-21
 Operator: WM

Additional Information

TSL Density
 TSL Heat-capacity

Results

| f (MHz) | Measured | | | Target | | Diff. to Target [%] | |
|---------|-------------|--------------|-------|--------|-------|---------------------|--------------------|
| | ϵ' | ϵ'' | sigma | eps | sigma | $\Delta\epsilon'$ | $\Delta\epsilon''$ |
| 600 | 44.4 | 25.0 | 0.84 | 42.7 | 0.88 | 3.9 | -4.7 |
| 750 | 43.9 | 21.2 | 0.80 | 41.9 | 0.89 | 4.7 | -1.5 |
| 800 | 43.5 | 20.2 | 0.90 | 41.7 | 0.90 | 5.1 | 0.3 |
| 825 | 43.7 | 19.9 | 0.91 | 41.8 | 0.91 | 5.1 | 0.4 |
| 835 | 43.7 | 19.6 | 0.92 | 41.5 | 0.91 | 5.2 | 0.9 |
| 850 | 43.6 | 18.4 | 0.92 | 41.5 | 0.92 | 5.1 | 0.4 |
| 900 | 43.5 | 18.7 | 0.94 | 41.5 | 0.97 | 4.8 | -3.1 |
| 1400 | 42.6 | 14.8 | 1.15 | 40.0 | 1.18 | 4.9 | -2.5 |
| 1450 | 42.5 | 14.8 | 1.18 | 40.5 | 1.20 | 4.9 | -1.7 |
| 1600 | 42.2 | 14.1 | 1.28 | 40.3 | 1.28 | 4.7 | -1.9 |
| 1625 | 42.2 | 14.1 | 1.27 | 40.3 | 1.30 | 4.8 | -2.2 |
| 1640 | 42.2 | 14.0 | 1.28 | 40.3 | 1.31 | 4.8 | -2.0 |
| 1650 | 42.1 | 14.0 | 1.28 | 40.2 | 1.31 | 4.6 | -2.5 |
| 1700 | 42.1 | 13.9 | 1.31 | 40.2 | 1.34 | 4.8 | -2.4 |
| 1750 | 42.0 | 13.8 | 1.34 | 40.1 | 1.37 | 4.8 | -2.3 |
| 1800 | 41.9 | 13.7 | 1.37 | 40.0 | 1.40 | 4.7 | -2.1 |
| 1810 | 41.9 | 13.7 | 1.38 | 40.0 | 1.40 | 4.7 | -1.4 |
| 1825 | 41.9 | 13.7 | 1.38 | 40.0 | 1.40 | 4.7 | -0.7 |
| 1850 | 41.8 | 13.6 | 1.40 | 40.0 | 1.40 | 4.5 | 0.0 |
| 1900 | 41.8 | 13.6 | 1.43 | 40.0 | 1.40 | 4.5 | 2.1 |
| 1950 | 41.7 | 13.5 | 1.46 | 40.0 | 1.40 | 4.3 | 4.3 |
| 2000 | 41.6 | 13.4 | 1.49 | 40.0 | 1.40 | 4.0 | 6.4 |
| 2050 | 41.6 | 13.4 | 1.53 | 39.9 | 1.44 | 4.2 | 5.9 |
| 2100 | 41.5 | 13.4 | 1.56 | 39.8 | 1.49 | 4.2 | 4.8 |
| 2150 | 41.4 | 13.3 | 1.60 | 39.7 | 1.53 | 4.2 | 4.3 |
| 2200 | 41.4 | 13.3 | 1.63 | 39.6 | 1.58 | 4.4 | 3.9 |
| 2250 | 41.3 | 13.3 | 1.67 | 39.5 | 1.62 | 4.4 | 2.9 |
| 2300 | 41.3 | 13.3 | 1.70 | 39.5 | 1.67 | 4.6 | 2.0 |
| 2350 | 41.2 | 13.3 | 1.74 | 39.4 | 1.71 | 4.6 | 1.7 |
| 2400 | 41.1 | 13.3 | 1.78 | 39.3 | 1.76 | 4.6 | 1.4 |
| 2450 | 41.0 | 13.4 | 1.82 | 39.2 | 1.80 | 4.6 | 1.1 |
| 2500 | 41.0 | 13.4 | 1.86 | 39.1 | 1.85 | 4.8 | 0.3 |
| 2550 | 40.9 | 13.4 | 1.90 | 39.1 | 1.91 | 4.7 | -0.5 |
| 2600 | 40.8 | 13.4 | 1.94 | 39.0 | 1.96 | 4.8 | -1.2 |



| | | | | | | | |
|-------|------|------|-------|------|-------|------|------|
| 3500 | 39.2 | 14.0 | 2.72 | 37.9 | 2.91 | 3.5 | -6.7 |
| 3700 | 38.9 | 14.1 | 2.90 | 37.7 | 3.12 | 3.3 | -7.0 |
| 3900 | 38.4 | 15.7 | 4.53 | 36.0 | 4.66 | 1.2 | -2.6 |
| 41250 | 36.3 | 15.7 | 4.59 | 35.9 | 4.71 | 1.1 | -2.5 |
| 5300 | 36.2 | 15.8 | 4.65 | 35.9 | 4.76 | 1.0 | -2.3 |
| 5500 | 35.9 | 15.9 | 4.95 | 35.8 | 4.96 | 0.6 | -1.7 |
| 5800 | 35.7 | 16.0 | 4.99 | 35.5 | 5.07 | 0.5 | -1.4 |
| 5700 | 35.5 | 16.1 | 5.11 | 35.4 | 5.17 | 0.3 | -1.2 |
| 5800 | 35.3 | 16.2 | 5.22 | 35.3 | 5.27 | 0.1 | -0.9 |
| 6000 | 35.0 | 16.3 | 5.45 | 35.1 | 5.48 | -0.2 | -0.4 |
| 6500 | 34.1 | 16.8 | 6.07 | 34.5 | 6.07 | -1.0 | 0.0 |
| 7000 | 33.2 | 17.2 | 6.68 | 33.9 | 6.65 | -1.9 | 0.5 |
| 7500 | 32.4 | 17.8 | 7.30 | 33.3 | 7.24 | -2.8 | 0.8 |
| 8000 | 31.5 | 17.8 | 7.91 | 32.7 | 7.84 | -3.6 | 0.9 |
| 8500 | 30.7 | 18.0 | 8.53 | 32.1 | 8.45 | -4.4 | 0.9 |
| 9000 | 29.9 | 18.3 | 9.14 | 31.5 | 9.08 | -5.2 | 0.7 |
| 9500 | 29.1 | 18.4 | 9.75 | 31.0 | 9.71 | -6.0 | 0.4 |
| 10000 | 28.3 | 18.6 | 10.38 | 30.4 | 10.36 | -6.8 | 0.0 |

TSL Dielectric Parameters

Appendix E. – SAR System Validation

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

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

| Probe | Probe Type | Probe Calibration Point | Dipole | Date | Dielectric Parameters | | CW Validation | | | Modulation Validation | | |
|--------|------------|-------------------------|--------|------------|-----------------------|-----------------------|---------------|-----------------|----------------|-----------------------|-------------|------|
| | | | | | Measured Permittivity | Measured Conductivity | Sensitivity | Probe Linearity | Probe Isotropy | MOD. Type | Duty Factor | PAR |
| EX3DV4 | 3968 | 6500 | 1012 | 2022-10-11 | 34.3 | 6.08 | PASS | PASS | PASS | OFDM | N/A | PASS |

SAR System Validation Summary 1g

Note;

All measurements were performed using probes calibrated for CW signal only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664 D01v01r04. SAR system were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5 dB), such as OFDM according to KDB 865664 D01v01r04.