

TEST REPORT

Applicant Aava Mobile Oy
FCC ID 2ABVH-INARI10E1
Product 10" Tablet Computer
Brand AAVA
Model INARI-E-10-WIG-1
Report No. R2406A0726-S1
Issue Date September 11, 2024

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528-2013, IEC/IEEE 62209-1528:2020, ANSI C95.1: 1992, IEEE C95.1: 1991**. The test results show that the equipment tested can demonstrate the compliance with the requirements as documented in this report.

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Table of Contents

1	Test Laboratory	4
1.1	Notes of the Test Report.....	4
1.2	Test Facility.....	4
1.3	Testing Location.....	4
1.4	Laboratory Environment	4
2	Statement of Compliance.....	5
3	Description of Equipment Under Test	6
4	Test Specification, Methods and Procedures	8
5	Operational Conditions during Test.....	9
5.1	Test Positions	9
5.2	Measurement Variability	11
5.3	Test Configuration	12
5.2.1	Wi-Fi Test Configuration	12
5.2.2	Bluetooth Test Configuration.....	13
5.2.3	Proximity Sensor Power Reduction Description.....	14
5.2.4	SAR Detection Mechanism Specification	23
6	Test System Configuration	28
6.1	Test System Set-up	28
6.2	Probe Specification.....	29
6.3	Measurement Procedure	31
6.4	PD Measurement Procedure	35
7	Main Test Equipment.....	37
8	Tissue Dielectric Parameter Measurements & System Check.....	39
8.1	Tissue Verification	39
8.2	System Check.....	40
8.2.1	System Cheek Configuration	40
8.2.2	SAR&APD System Check Results.....	42
8.2.3	PD System Cheek Result	43
9	Normal and Maximum Output Power.....	44
9.1	WLAN Mode.....	44
9.1.1	Wi-Fi 2.4G Mode.....	44
9.1.2	Wi-Fi 5G Mode	48
9.1.3	Wi-Fi 6G Mode	67
9.2	Bluetooth Mode.....	77
10	Test Results.....	78
10.1	EUT Antenna Locations.....	78
10.2	SAR & APD Test Results.....	79
10.3	PD Test Results	85
10.4	Simultaneous Transmission Analysis.....	86
11	Measurement Uncertainty.....	89
	ANNEX A: Test Layout	92

ANNEX B: System Check Results	94
ANNEX C: Highest Graph Results	110
ANNEX D: Probe Calibration Certificate (SN: 7689)	121
ANNEX E: Probe Calibration Certificate (SN: 9642).....	143
ANNEX F: D2450V2 Dipole Calibration Certificate.....	161
ANNEX G: D5GHzV2 Dipole Calibration Certificate.....	167
ANNEX H: D6.5GHzV2 Dipole Calibration Certificate	176
ANNEX I: CLA13 Dipole Calibration Certificate.....	182
ANNEX J: 5G Verification Source 10 GHz Calibration Certificate	188
ANNEX K: DAE4 Calibration Certificate (SN: 1317).....	195
ANNEX L: The EUT Appearance	200
ANNEX M: Test Setup Photos.....	201

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

1.3 Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
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1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 20%, Max. = 80%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) and PD found during testing for the EUT are as follows:

Table 1: Highest Reported SAR and PD

Mode	Highest Reported SAR (W/kg)	
	1g SAR Body (Separation 0mm)	
Wi-Fi 2.4G	1.478	
Wi-Fi 5G	1.433	
Wi-Fi 6G	0.850	
Bluetooth	0.207	
Mode	Highest PD (W/m ² @4cm ²)	
	Test Distance: 2 mm	Test Distance: $\lambda/5$ mm
Wi-Fi 6G	9.947	8.366
Date of Testing: July 23, 2024 ~ August 13, 2024		
Date of Sample Received: June 24, 2024		
Note:		
<ol style="list-style-type: none"> The device is in compliance with Uncontrolled Environment /General Population exposure limits (1.6 W/kg for SAR / 10 W/m²@4 cm² for PD) specified in ANSI C95.1: 1992/IEEE C95.1: 1991, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and IEC/IEEE 62209-1528:2020. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. 		

Table 2: Highest Simultaneous Transmission SAR

Exposure Configuration	1g SAR Body (Separation 0mm)
Highest Simultaneous Transmission SAR (W/kg)	1.560
Note: The detail for simultaneous transmission consideration is described in chapter 10.4.	

3 Description of Equipment Under Test

Client Information

Applicant	Aava Mobile Oy
Applicant address	Nahkatehtaankatu 2, FI-90130 Oulu, Finland
Manufacturer	Aava Mobile Oy
Manufacturer address	Nahkatehtaankatu 2, FI-90130 Oulu, Finland

General Technologies

EUT Stage	Identical Prototype	
Model	INARI-E-10-WIG-1	
SN	XBBA2FC1700002	
Hardware Version	EV1	
Software Version	007	
Antenna Type	NFC	Internal Antenna
	Other Band	Chip Antenna
Wi-Fi Hotspot	Wi-Fi 2.4G	
	Wi-Fi 5G	
EUT Accessory		
Battery	Manufacturer: Shenzhen Guangwei Electronic Technology Co., Ltd. Model: AMME5260	
<p>Note:</p> <ol style="list-style-type: none"> The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. 		

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)	Rx (MHz)
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20/ax HE20	2412 ~ 2462	2412 ~ 2462
		OFDM	802.11n HT40/ax HE40	2422 ~ 2452	2422 ~ 2452
	5G	OFDM; OFDMA	802.11a	5150 ~ 5250	5150 ~ 5250
			802.11n HT20/ HT40	5250 ~ 5350	5250 ~ 5350
			802.11ac VHT20/ VHT40/ VHT80/ VHT160	5470 ~ 5725	5470 ~ 5725
6G	OFDMA	802.11ax HE20/ HE40/ HE80/ HE160	5725 ~ 5850	5725 ~ 5850	
		802.11ax HE20/ HE40/ HE80/ HE160	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125	
Does this device support MIMO <input checked="" type="checkbox"/> Yes(2TX, 2RX) <input type="checkbox"/> No					
Bluetooth	2.4G	Version 5.3 BR/EDR + LE		2402 ~2480	2402 ~2480
NFC	13.56MHz				

4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, ANSI C95.1: 1992, IEEE C95.1: 1991, the following FCC Published RF exposure KDB procedures:

IEEE 1528- 2013

IEC 62479:2010

IEC/IEEE 62209-1528:2020

DASY8 MODULE SAR SYSTEM HANDBOOK

DASY8 MODULE mmWAVE SYSTEM HANDBOOK

KDB 248227 D01 802.11Wi-Fi SAR v02r02

KDB 447498 D01 General RF Exposure Guidance v06

KDB 690783 D01 SAR Listings on Grants v01r03

KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04

KDB 865664 D02 RF Exposure Reporting v01r02

KDB 941225 D06 Hotspot Mode v02r01

KDB 616217 D04 SAR for laptop and tablets v01r02

5 Operational Conditions during Test

5.1 Test Positions

According to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.

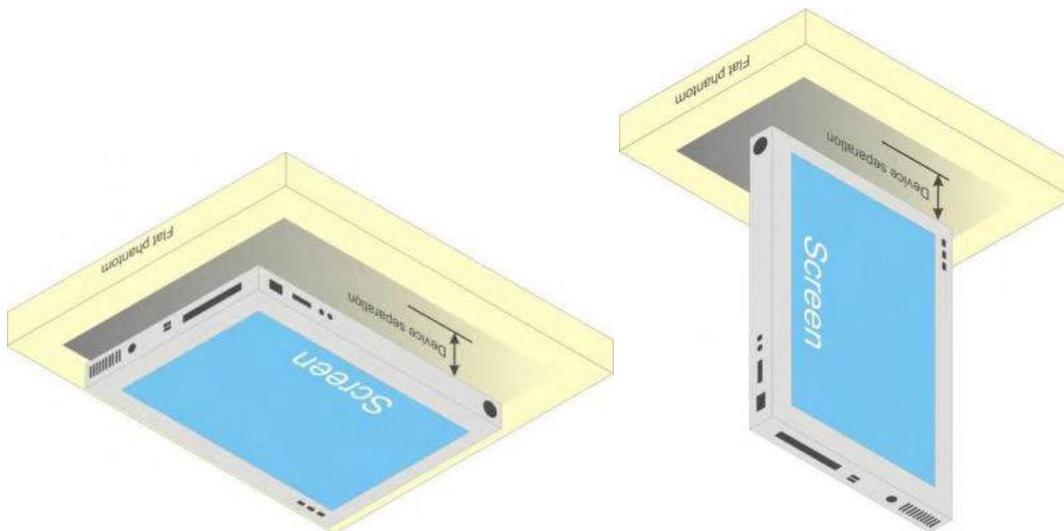


Illustration for Tablet Setup

According to KDB 447498 D01, the SAR test exclusion condition is based on source-based time-averaged maximum conducted output power, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions. The SAR exclusion threshold is determined by the following formula.

(1) The SAR exclusion threshold for distances $\leq 50\text{mm}$ is defined by the following equation:

$$\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} * \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

(2) The SAR exclusion threshold for distances $> 50\text{mm}$ is defined by the following equation, as illustrated in KDB 447498 D01 Appendix B:

a) at 100 MHz to 1500 MHz

$$\text{[Power allowed at numeric Threshold at 50 mm in step 1) + (test separation distance - 50 mm) \cdot (f (MHz)/150)] mW}$$

b) at > 1500 MHz and ≤ 6 GHz

$$\text{[Power allowed at numeric Threshold at 50 mm in step 1) + (test separation distance - 50 mm) \cdot 10] mW}$$

The Detailed Antenna Locations refer to *Antenna Locations*.

Band	Frequency (MHz)	Max. Tune-up Power (dBm)	Back Side			Left Edge			Right Edge			Top Edge			Bottom Edge		
			Ant. To Surgace (mm)	Evaluation	SAR Test	Ant. To Surgace (mm)	Evaluation	SAR Test	Ant. To Surgace (mm)	Evaluation	SAR Test	Ant. To Surgace (mm)	Evaluation	SAR Test	Ant. To Surgace (mm)	Evaluation	SAR Test
Wi-Fi 2.4G Ant 1	2462	21.00	2.85	69.31	Yes	261.92	2123.15	No	3.97	49.76	Yes	24	8.23	Yes	146.5	968.95	No
Wi-Fi 5G Ant 1	5850	18.50	2.85	60.08	Yes	261.92	2122.62	No	3.97	43.13	Yes	24	7.13	Yes	146.5	968.42	No
Wi-Fi 6G Ant 1	7125	14.00	2.85	23.53	Yes	261.92	2120.54	No	3.97	16.89	Yes	24	2.79	No	146.5	966.34	No
Bluetooth Ant 1	2480	8.50	2.85	3.91	Yes	261.92	2119.42	No	3.97	2.81	No	24	0.46	No	146.5	965.22	No
Wi-Fi 2.4G Ant 2	2462	20.00	2.85	55.06	Yes	261.92	2122.34	No	3.97	39.52	Yes	103	533.14	No	67.5	178.14	No
Wi-Fi 5G Ant 2	5850	17.50	2.85	47.72	Yes	261.92	2121.92	No	3.97	34.26	Yes	103	532.72	No	67.5	177.72	No
Wi-Fi 6G Ant 2	7125	14.50	2.85	26.40	Yes	261.92	2120.70	No	3.97	18.95	Yes	103	531.50	No	67.5	176.50	No
Bluetooth Ant 2	2480	8.50	2.85	3.91	Yes	261.92	2119.42	No	3.97	2.81	No	103	530.22	No	67.5	175.22	No

5.2 Measurement Variability

Per FCC KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

- 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
- 2) A second repeated measurement was performed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
- 3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20 .
- 4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

5.3 Test Configuration

5.2.1 Wi-Fi Test Configuration

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; These are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the *initial test position(s)* by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The *initial test position(s)* is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the *reported SAR* for the *initial test position* is:

- ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the *initial test position* to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the *reported SAR* is ≤ 0.8 W/kg or all required test positions are tested.
 - ✧ For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
 - ✧ When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the *initial test position* and subsequent test positions, when the *reported SAR* is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the *reported SAR* is ≤ 1.2 W/kg or all required test channels are considered.
 - ✧ The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.

To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

A Wi-Fi device must be 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 for SAR measurement.

According to 201904 TCBC workshop KDB 248227 D01 can be used for SAR initial test configurations and test reduction for 802.11ax.

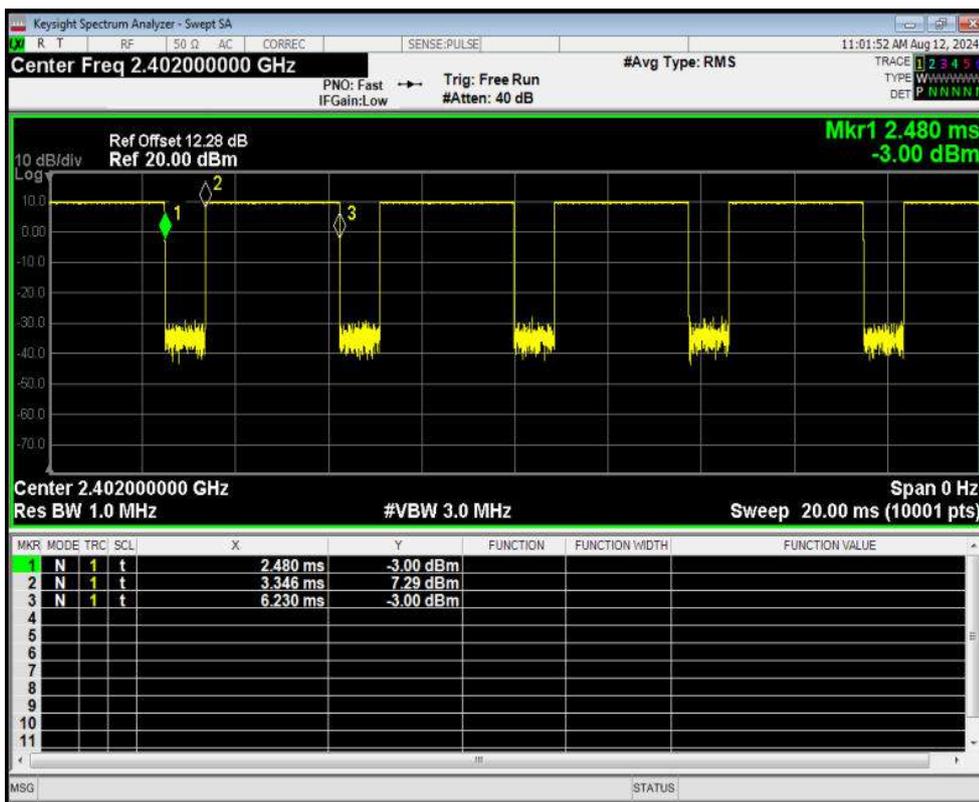
KDB 248227 D01 section 5.3.2 a) should be applied for SAR test configuration selection with maximum output power. The 802.11ax should be considered as the highest 801.11 mode for the appropriate frequency bands.

5.2.2 Bluetooth Test Configuration

For Bluetooth SAR testing, Bluetooth engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power. And the CBT control the EUT operating with hopping off and data rate set for DH5.

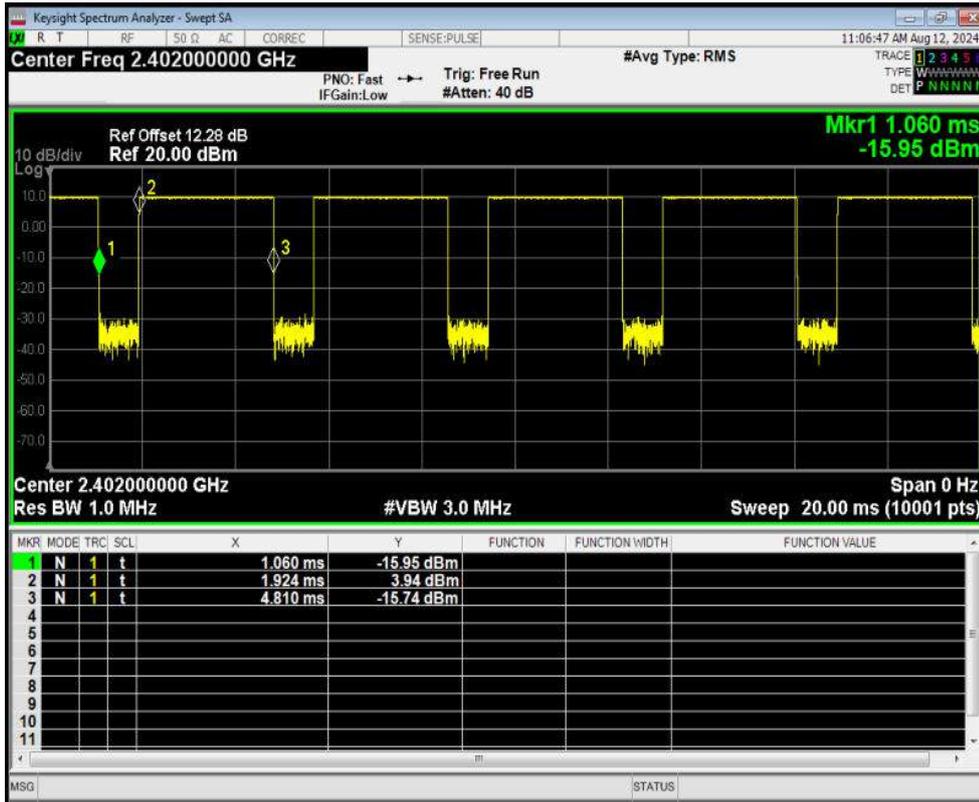
The SAR measurement takes full account of the Bluetooth duty cycle and is reflected in the report, and the duty factor of the device is as follow:

Ant 1



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=76.9%

Ant 2



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=76.9%

5.2.3 Proximity Sensor Power Reduction Description

Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of Antenna 1 and Antenna 2 to ensure SAR compliance. It is also set an output power leveled to the lowest one to make sure that in any case of SAR sensor hardware failure, the SAR requirements can still be satisfied.

The following tables summarize the key power reduction information for proximity sensor. The test procedures be applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions. To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

Antenna 1				
Bands	Test position	Sensor Trigger Distance range (DUT to Phantom)	Power reduction amount (dB)	Sensor
WIFI 2.4G	Back side	0mm≤distance≤23mm	11.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off

	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	11.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	11.5	Sensor on
		7.5mm<distance	0	Sensor off
Bottom Edge	/	0	Sensor off	
WIFI 5G U-NII-1	Back side	0mm≤distance≤23mm	6.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	6.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	6.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 5G U-NII-2A	Back side	0mm≤distance≤23mm	6.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	6.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	6.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 5G U-NII-2C	Back side	0mm≤distance≤23mm	8.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	8.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	8.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 5G U-NII-3	Back side	0mm≤distance≤23mm	8	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	8	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	8	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 6G	Back side	0mm≤distance≤23mm	3.5	Sensor on

U-NII-5		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	3.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	3.5	Sensor on
		7.5mm<distance	0	Sensor off
Bottom Edge	/	0	Sensor off	
WIFI 6G U-NII-6	Back side	0mm≤distance≤23mm	3.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	3.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	3.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 6G U-NII-7	Back side	0mm≤distance≤23mm	3.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	3.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	3.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 6G U-NII-8	Back side	0mm≤distance≤23mm	4.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	4.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	4.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
Antenna 2				
Bands	Test position	Sensor Trigger Distance range (DUT to Phantom)	Power reduction amount(dB)	Sensor
WIFI 2.4G	Back side	0mm≤distance≤23mm	10.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	10.5	Sensor on

		8mm<distance	0	Sensor off
		Top edge	0mm≤distance≤7.5mm	10.5
		7.5mm<distance	0	Sensor off
	Bottom Edge	/	0	Sensor off
WIFI 5G U-NII-1	Back side	0mm≤distance≤23mm	6	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	6	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	6	Sensor on
		7.5mm<distance	0	Sensor off
Bottom Edge	/	0	Sensor off	
WIFI 5G U-NII-2A	Back side	0mm≤distance≤23mm	6	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	6	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	6	Sensor on
		7.5mm<distance	0	Sensor off
Bottom Edge	/	0	Sensor off	
WIFI 5G U-NII-2C	Back side	0mm≤distance≤23mm	7	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	7	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	7	Sensor on
		7.5mm<distance	0	Sensor off
Bottom Edge	/	0	Sensor off	
WIFI 5G U-NII-3	Back side	0mm≤distance≤23mm	8	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	8	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	8	Sensor on
		7.5mm<distance	0	Sensor off
Bottom Edge	/	0	Sensor off	
WIFI 6G U-NII-5	Back side	0mm≤distance≤23mm	2.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off

	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	2.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	2.5	Sensor on
		7.5mm<distance	0	Sensor off
Bottom Edge	/	0	Sensor off	
WIFI 6G U-NII-6	Back side	0mm≤distance≤23mm	3.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	3.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	3.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 6G U-NII-7	Back side	0mm≤distance≤23mm	2.5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	2.5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	2.5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	
WIFI 6G U-NII-8	Back side	0mm≤distance≤23mm	5	Sensor on
		23mm<distance	0	Sensor off
	Front side	/	0	Sensor off
	Left edge	/	0	Sensor off
	Right edge	0mm≤distance≤8mm	5	Sensor on
		8mm<distance	0	Sensor off
	Top edge	0mm≤distance≤7.5mm	5	Sensor on
7.5mm<distance		0	Sensor off	
Bottom Edge	/	0	Sensor off	

Note:

To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering and sensor coverage for normal and tilt positions for all usage conditions and applicable sides, minus 1 mm, must be used as the test separation distance for additional SAR testing of each higher power stage.

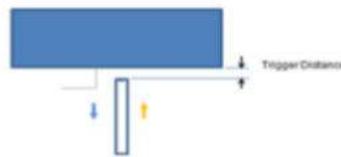
Procedures for determining proximity sensor triggering distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the Back side, Right edge and Top edge of the device. To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering minus 1 mm, must be used as the test separation distance for SAR testing.

The Proximity sensor triggering distance measurement method are as below:



Picture : Proximity sensor triggering distances assessment(Back side)



Picture : Proximity sensor triggering distances assessment(Right/Top edge)

Table: Summary of Trigger Distances for Antenna 1:

Bands	Trigger distance- Back Side		Trigger distance- Right Edge		Trigger distance- Top Edge	
	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom
WIFI 2.4G	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 5G U-NII-1	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 5G U-NII-2A	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 5G U-NII-2C	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 5G U-NII-3	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-5	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-6	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-7	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-8	23mm	23mm	8mm	8mm	7.5mm	7.5mm

Table: Summary of Trigger Distances for Antenna 2:

Bands	Trigger distance- Back Side		Trigger distance- Right Edge		Trigger distance- Top Edge	
	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom
WIFI 2.4G	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 5G U-NII-1	23mm	23mm	8mm	8mm	7.5mm	7.5mm

WIFI 5G U-NII-2A	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 5G U-NII-2C	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 5G U-NII-3	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-5	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-6	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-7	23mm	23mm	8mm	8mm	7.5mm	7.5mm
WIFI 6G U-NII-8	23mm	23mm	8mm	8mm	7.5mm	7.5mm

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the body exposure condition (WIFI 2.4G, WIFI 5G U-NII-1/2A/2C/3, WIFI 6G U-NII-5/6/7/8 with Antenna 1; WIFI 2.4G, WIFI 5G U-NII-1/2A/2C/3, WIFI 6G U-NII-5/6/7/8 with Antenna 2)

The detailed condition power measurement data to determine the triggering distances is as below:

Table: Power Reduction Status (Moving toward phantom)

Position	Ant	Band	Power Reduction Status(dBm)																											
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
Back Side	Antenna 1	WIFI 2.4G	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10	9.10
Back Side	Antenna 1	WIFI 5G U-NII-1	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32	10.32
Back Side	Antenna 1	WIFI 5G U-NII-2A	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91	9.91
Back Side	Antenna 1	WIFI 5G U-NII-2C	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30	9.30
Back Side	Antenna 1	WIFI 5G U-NII-3	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98
Back Side	Antenna 1	WIFI 6G U-NII-5	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41	8.41
Back Side	Antenna 1	WIFI 6G U-NII-6	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63	8.63
Back Side	Antenna 1	WIFI 6G U-NII-7	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06
Back Side	Antenna 1	WIFI 6G U-NII-8	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98

Table: Power Reduction Status (Moving away from phantom)

Position	Ant	Band	Power Reduction Status(dBm)																																		
			43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	14	9	5	2	1				
Back Side	Antenna 1	WIFI 2.4G	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94

Position	Ant	Band	Power Reduction Status(dBm)																																			
			28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1								
Right Edge	Antenna 1	WIFI 2.4G	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94

Position	Ant	Band	Power Reduction Status(dBm)																																			
			28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8.5	8	7.5	7	6.5	6	5	4	3	2	1					
Top Edge	Antenna 1	WIFI 2.4G	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94	20.94

Position	Ant	Band	Power Reduction Status(dBm)																																			
			43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	14	9	5	2	1					
Back Side	Antenna 2	WIFI 2.4G	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94

Position	Ant	Band	Power Reduction Status(dBm)																																			
			28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1								
Right Edge	Antenna 2	WIFI 2.4G	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94

Position	Ant	Band	Power Reduction Status(dBm)																																			
			28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8.5	8	7.5	7	6.5	6	5	4	3	2	1					
Top Edge	Antenna 2	WIFI 2.4G	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94	18.94

Procedures for determining device tilt angle influences to proximity sensor triggering

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Right edge and Top edge parallel to the base of the flat phantom for each band.

The EUT was rotated about Right edge and Top edge for angles up to + 60° - 45° . If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to + 60° - 45° .

The proximity sensor triggering tilt angle measurement method are as below:

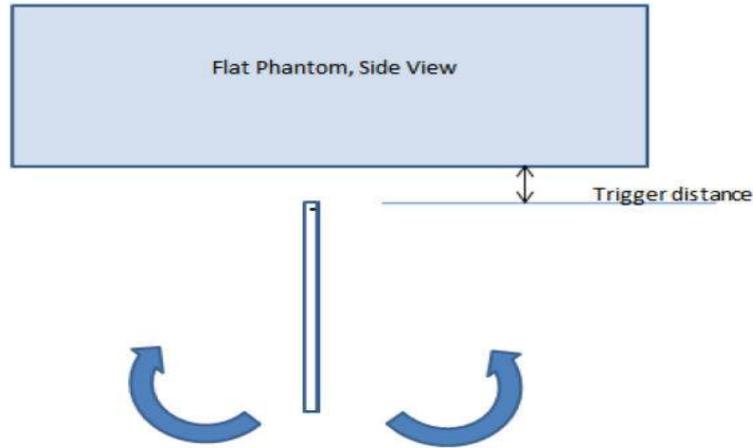


Table: Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering (Right/Top edge)

Bands (MHz)	Position	Minimum trigger distance at which power reduction was maintained over +60° -45°	Power Reduction Status												
			-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°	50°	60°
WIFI 2.4G	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-1	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-2A	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-2C	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-3	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-5	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-6	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-7	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-8	Right Edge	8mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 2.4G	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-1	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-2A	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-2C	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 5G U-NII-3	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-5	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-6	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-7	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
WIFI 6G U-NII-8	Top Edge	7.5mm	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the DUT tilt coverage exposure condition.

5.2.4 SAR Detection Mechanism Specification

Mode	Band	Sensor off (Tune up)	Antenna	Body SAR(Sensor on)			
				Standalone	Simultaneous transmission		
					WLAN+WLAN	WLAN+ WLAN+BT	WLAN+ WLAN+NFC
2.4G	802.11b	21.0	Ant.1	11.5	11.5	11.5	11.5
	802.11g	20.0		10.5	10.5	10.5	10.5
	802.11n-HT20	20.0		10.5	10.5	10.5	10.5
	802.11n-HT40	20.0		10.5	10.5	10.5	10.5
	802.11ax-HE20	20.0		10.5	10.5	10.5	10.5
	802.11ax-HE40	20.0		10.5	10.5	10.5	10.5
	802.11b	20.0	Ant.2	10.5	10.5	10.5	10.5
	802.11g	19.0		9.5	9.5	9.5	9.5
	802.11n-HT20	19.0		9.5	9.5	9.5	9.5
	802.11n-HT40	19.0		9.5	9.5	9.5	9.5
	802.11ax-HE20	19.0		9.5	9.5	9.5	9.5
	802.11ax-HE40	19.0		9.5	9.5	9.5	9.5
	802.11b	20.0	MIMO	7.5	7.5	7.5	7.5
	802.11g	19.5		7.0	7.0	7.0	7.0
	802.11n-HT20	19.5		7.0	7.0	7.0	7.0
	802.11n-HT40	19.5		7.0	7.0	7.0	7.0
	802.11ax-HE20	19.5		7.0	7.0	7.0	7.0
	802.11ax-HE40	19.5		7.0	7.0	7.0	7.0
5G U-NII-1	802.11a	17.5	Ant.1	6.5	6.5	6.5	6.5
	802.11n-HT20	17.0		6.5	6.5	6.5	6.5
	802.11n-HT40	17.0		6.5	6.5	6.5	6.5
	802.11ac-VHT20	17.0		6.5	6.5	6.5	6.5
	802.11ac-VHT40	17.0		6.5	6.5	6.5	6.5
	802.11ac-VHT80	17.0		6.5	6.5	6.5	6.5
	802.11ax-HE20	17.0		6.5	6.5	6.5	6.5
	802.11ax-HE40	17.0		6.5	6.5	6.5	6.5
	802.11ax-HE80	17.0	6.5	6.5	6.5	6.5	
	802.11a	17.0	Ant.2	5.5	5.5	5.5	5.5
	802.11n-HT20	17.0		6.0	6.0	6.0	6.0
	802.11n-HT40	17.0		6.0	6.0	6.0	6.0
	802.11ac-VHT20	17.0		6.0	6.0	6.0	6.0
	802.11ac-VHT40	17.0		6.0	6.0	6.0	6.0
	802.11ac-VHT80	17.0		6.0	6.0	6.0	6.0
	802.11ax-HE20	17.0		6.0	6.0	6.0	6.0
	802.11ax-HE40	17.0		6.0	6.0	6.0	6.0
	802.11ax-HE80	17.0	6.0	6.0	6.0	6.0	
802.11a	21.5	MIMO	9.0	9.0	9.0	9.0	

	802.11n-HT20	20.5		8.5	8.5	8.5	8.5	
	802.11n-HT40	20.5		8.5	8.5	8.5	8.5	
	802.11ac-VHT20	20.5		8.5	8.5	8.5	8.5	
	802.11ac-VHT40	20.5		8.5	8.5	8.5	8.5	
	802.11ac-VHT80	17.5		5.5	5.5	5.5	5.5	
	802.11ax-HE20	20.5		8.5	8.5	8.5	8.5	
	802.11ax-HE40	20.5		8.5	8.5	8.5	8.5	
	802.11ax-HE80	17.5		5.5	5.5	5.5	5.5	
5G U-NII-2A	802.11a	17.5	Ant.1	6.5	6.5	6.5	6.5	
	802.11n-HT20	17.0		6.5	6.5	6.5	6.5	
	802.11n-HT40	17.0		6.5	6.5	6.5	6.5	
	802.11ac-VHT20	17.0		6.5	6.5	6.5	6.5	
	802.11ac-VHT40	17.0		6.5	6.5	6.5	6.5	
	802.11ac-VHT80	17.0		6.5	6.5	6.5	6.5	
	802.11ac-VHT160	16.0		5.5	5.5	5.5	5.5	
	802.11ax-HE20	17.0		6.5	6.5	6.5	6.5	
	802.11ax-HE40	17.0		6.5	6.5	6.5	6.5	
	802.11ax-HE80	17.0		6.5	6.5	6.5	6.5	
	802.11ax-HE160	16.0		5.5	5.5	5.5	5.5	
	802.11a	17.0		Ant.2	5.5	5.5	5.5	5.5
	802.11n-HT20	17.0	6.0		6.0	6.0	6.0	
	802.11n-HT40	17.0	6.0		6.0	6.0	6.0	
	802.11ac-VHT20	17.0	6.0		6.0	6.0	6.0	
	802.11ac-VHT40	17.0	6.0		6.0	6.0	6.0	
	802.11ac-VHT80	17.0	6.0		6.0	6.0	6.0	
	802.11ac-VHT160	16.0	5.0		5.0	5.0	5.0	
	802.11ax-HE20	17.0	6.0		6.0	6.0	6.0	
	802.11ax-HE40	17.0	6.0		6.0	6.0	6.0	
	802.11ax-HE80	17.0	6.0		6.0	6.0	6.0	
	802.11ax-HE160	16.0	5.0		5.0	5.0	5.0	
	5G U-NII-2C	802.11a	21.5		MIMO	9.0	9.0	9.0
		802.11n-HT20	20.5	8.5		8.5	8.5	8.5
		802.11n-HT40	20.5	8.5		8.5	8.5	8.5
		802.11ac-VHT20	20.5	8.5		8.5	8.5	8.5
		802.11ac-VHT40	20.5	8.5		8.5	8.5	8.5
		802.11ac-VHT80	17.5	5.5		5.5	5.5	5.5
		802.11ac-VHT160	17.0	5.0		5.0	5.0	5.0
		802.11ax-HE20	20.5	8.5		8.5	8.5	8.5
		802.11ax-HE40	20.5	8.5		8.5	8.5	8.5
		802.11ax-HE80	16.5	4.5		4.5	4.5	4.5
802.11ax-HE160		16.0	4.0	4.0		4.0	4.0	
5G U-NII-2C		802.11a	18.5	Ant.1		8.5	8.5	8.5
	802.11n-HT20	17.5	8.0		8.0	8.0	8.0	

	802.11n-HT40	18.0		8.5	8.5	8.5	8.5
	802.11ac-VHT20	17.5		8.0	8.0	8.0	8.0
	802.11ac-VHT40	18.0		8.5	8.5	8.5	8.5
	802.11ac-VHT80	17.5		8.0	8.0	8.0	8.0
	802.11ac-VHT160	16.0		6.5	6.5	6.5	6.5
	802.11ax-HE20	17.5		8.0	8.0	8.0	8.0
	802.11ax-HE40	18.0		8.5	8.5	8.5	8.5
	802.11ax-HE80	17.5		8.0	8.0	8.0	8.0
	802.11ax-HE160	16.0		6.5	6.5	6.5	6.5
	802.11a	17.0		7.0	7.0	7.0	7.0
	Ant.2	802.11n-HT20	16.5	7.0	7.0	7.0	7.0
		802.11n-HT40	16.5	7.0	7.0	7.0	7.0
		802.11ac-VHT20	16.5	7.0	7.0	7.0	7.0
		802.11ac-VHT40	16.5	7.0	7.0	7.0	7.0
		802.11ac-VHT80	16.5	7.0	7.0	7.0	7.0
		802.11ac-VHT160	16.0	6.5	6.5	6.5	6.5
		802.11ax-HE20	16.5	7.0	7.0	7.0	7.0
		802.11ax-HE40	16.5	7.0	7.0	7.0	7.0
		802.11ax-HE80	16.5	7.0	7.0	7.0	7.0
		802.11ax-HE160	16.0	6.5	6.5	6.5	6.5
	MIMO	802.11a	19.5	7.5	7.5	7.5	7.5
		802.11n-HT20	20.5	9.0	9.0	9.0	9.0
		802.11n-HT40	20.5	9.0	9.0	9.0	9.0
		802.11ac-VHT20	20.5	9.0	9.0	9.0	9.0
		802.11ac-VHT40	20.5	9.0	9.0	9.0	9.0
		802.11ac-VHT80	20.5	9.0	9.0	9.0	9.0
		802.11ac-VHT160	17.0	5.5	5.5	5.5	5.5
		802.11ax-HE20	20.5	9.0	9.0	9.0	9.0
		802.11ax-HE40	20.5	9.0	9.0	9.0	9.0
		802.11ax-HE80	20.5	9.0	9.0	9.0	9.0
802.11ax-HE160	15.0	3.5	3.5	3.5	3.5		
5G U-NII-3	802.11a	17.5	Ant.1	8.0	8.0	8.0	8.0
	802.11n-HT20	17.0		8.0	8.0	8.0	8.0
	802.11n-HT40	17.0		8.0	8.0	8.0	8.0
	802.11ac-VHT20	17.0		8.0	8.0	8.0	8.0
	802.11ac-VHT40	17.0		8.0	8.0	8.0	8.0
	802.11ac-VHT80	17.0		8.0	8.0	8.0	8.0
	802.11ax-HE20	17.0		8.0	8.0	8.0	8.0
	802.11ax-HE40	17.0		8.0	8.0	8.0	8.0
	802.11ax-HE80	17.0		8.0	8.0	8.0	8.0
	802.11a	17.5		Ant.2	8.0	8.0	8.0
	802.11n-HT20	17.0	8.0		8.0	8.0	8.0
	802.11n-HT40	17.0	8.0		8.0	8.0	8.0

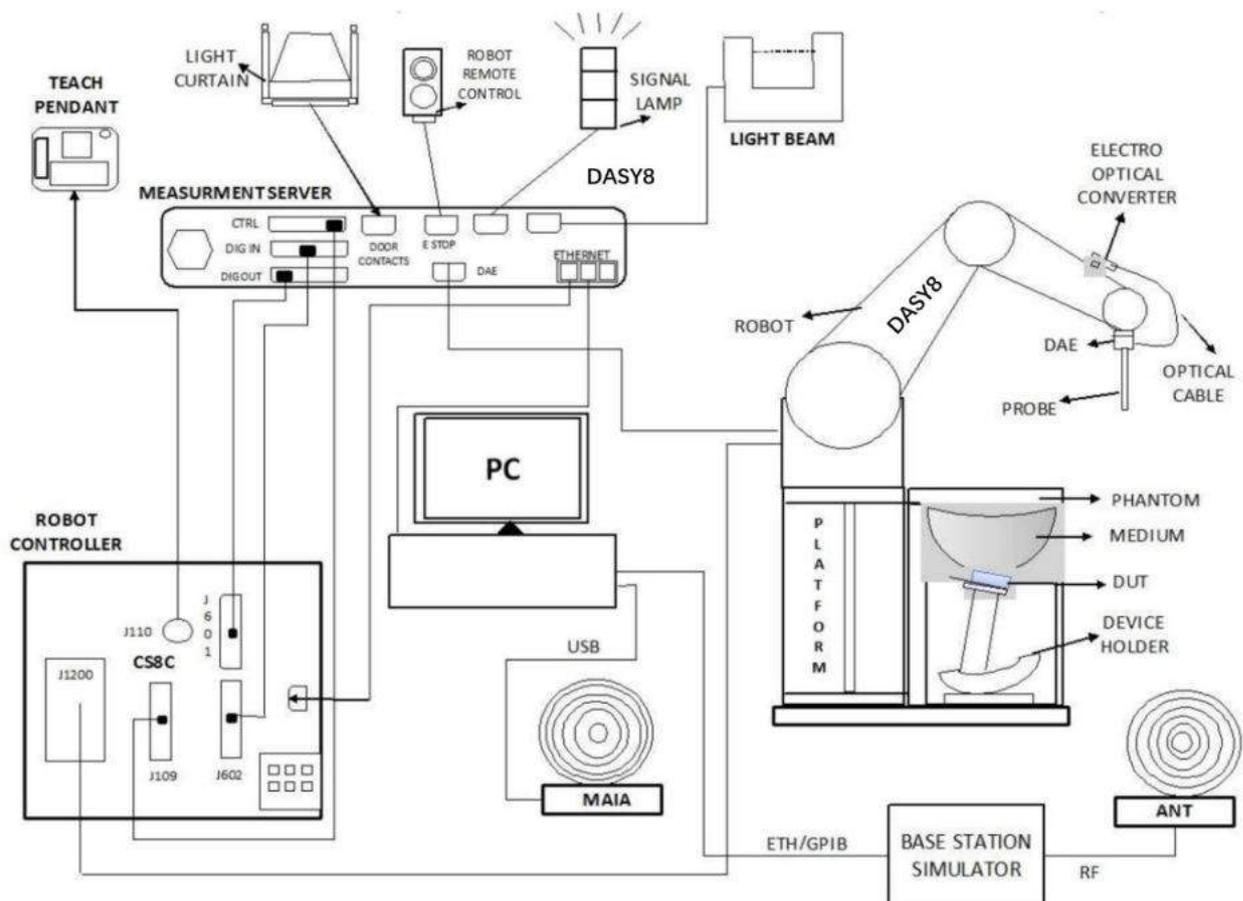
	802.11ac-VHT20	17.0	MIMO	8.0	8.0	8.0	8.0
	802.11ac-VHT40	17.0		8.0	8.0	8.0	8.0
	802.11ac-VHT80	17.0		8.0	8.0	8.0	8.0
	802.11ax-HE20	17.0		8.0	8.0	8.0	8.0
	802.11ax-HE40	17.0		8.0	8.0	8.0	8.0
	802.11ax-HE80	17.0		8.0	8.0	8.0	8.0
	802.11a	19.5		8.0	8.0	8.0	8.0
	802.11n-HT20	20.0		9.0	9.0	9.0	9.0
	802.11n-HT40	20.0		9.0	9.0	9.0	9.0
	802.11ac-VHT20	20.0		9.0	9.0	9.0	9.0
	802.11ac-VHT40	20.0		9.0	9.0	9.0	9.0
	802.11ac-VHT80	20.0		9.0	9.0	9.0	9.0
	802.11ax-HE20	20.0		9.0	9.0	9.0	9.0
	802.11ax-HE40	20.0		9.0	9.0	9.0	9.0
	802.11ax-HE80	20.0		9.0	9.0	9.0	9.0
	6G U-NII-5	802.11ax-HE20		9.0	Ant.1	0.0	0.0
802.11ax-HE40		11.5	2.5	2.5		2.5	2.5
802.11ax-HE80		12.5	3.5	3.5		3.5	3.5
802.11ax-HE160		12.5	2.5	2.5		2.5	2.5
802.11ax-HE20		10.0	Ant.2	0.0	0.0	0.0	0.0
802.11ax-HE40		11.5		1.5	1.5	1.5	1.5
802.11ax-HE80		12.5		2.5	2.5	2.5	2.5
802.11ax-HE160		12.5		2.5	2.5	2.5	2.5
802.11ax-HE20		8.5	MIMO	0.0	0.0	0.0	0.0
802.11ax-HE40		11.5		0.0	0.0	0.0	0.0
802.11ax-HE80		14.5		1.5	1.5	1.5	1.5
802.11ax-HE160		15.5		2.5	2.5	2.5	2.5
6G U-NII-6	802.11ax-HE20	10.0	Ant.1	0.0	0.0	0.0	0.0
	802.11ax-HE40	10.5		0.5	0.5	0.5	0.5
	802.11ax-HE80	12.5		2.5	2.5	2.5	2.5
	802.11ax-HE160	13.0		3.5	3.5	3.5	3.5
	802.11ax-HE20	9.5	Ant.2	0.0	0.0	0.0	0.0
	802.11ax-HE40	9.5		0.0	0.0	0.0	0.0
	802.11ax-HE80	13.0		3.0	3.0	3.0	3.0
	802.11ax-HE160	13.0		3.5	3.5	3.5	3.5
	802.11ax-HE20	9.0	MIMO	0.0	0.0	0.0	0.0
	802.11ax-HE40	12.0		0.0	0.0	0.0	0.0
	802.11ax-HE80	15.0		2.0	2.0	2.0	2.0
	802.11ax-HE160	16.0		3.0	3.0	3.0	3.0
6G U-NII-7	802.11ax-HE20	10.0	Ant.1	0.5	0.5	0.5	0.5
	802.11ax-HE40	13.0		3.5	3.5	3.5	3.5
	802.11ax-HE80	13.0		3.5	3.5	3.5	3.5
	802.11ax-HE160	13.0		3.0	3.0	3.0	3.0

	802.11ax-HE20	9.0	Ant.2	0.0	0.0	0.0	0.0
	802.11ax-HE40	12.5		2.0	2.0	2.0	2.0
	802.11ax-HE80	13.5		2.5	2.5	2.5	2.5
	802.11ax-HE160	13.5		2.5	2.5	2.5	2.5
	802.11ax-HE20	9.0	MIMO	0.0	0.0	0.0	0.0
	802.11ax-HE40	12.5		0.0	0.0	0.0	0.0
	802.11ax-HE80	15.0		1.5	1.5	1.5	1.5
	802.11ax-HE160	16.0		2.5	2.5	2.5	2.5
6G U-NII-8	802.11ax-HE20	8.0	Ant.1	0.0	0.0	0.0	0.0
	802.11ax-HE40	10.0		0.5	0.5	0.5	0.5
	802.11ax-HE80	13.5		4.0	4.0	4.0	4.0
	802.11ax-HE160	14.0		4.5	4.5	4.5	4.5
	802.11ax-HE20	8.0	Ant.2	0.0	0.0	0.0	0.0
	802.11ax-HE40	10.0		0.5	0.5	0.5	0.5
	802.11ax-HE80	13.5		4.0	4.0	4.0	4.0
	802.11ax-HE160	14.5		5.0	5.0	5.0	5.0
	802.11ax-HE20	7.0	MIMO	0.0	0.0	0.0	0.0
	802.11ax-HE40	10.0		0.0	0.0	0.0	0.0
	802.11ax-HE80	13.0		0.0	0.0	0.0	0.0
	802.11ax-HE160	16.0		3.0	3.0	3.0	3.0

6 Test System Configuration

6.1 Test System Set-up

The DASY system for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the

probe positioning.

- A computer running Windows 10 64-bit Operating System and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

6.2 Probe Specification

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

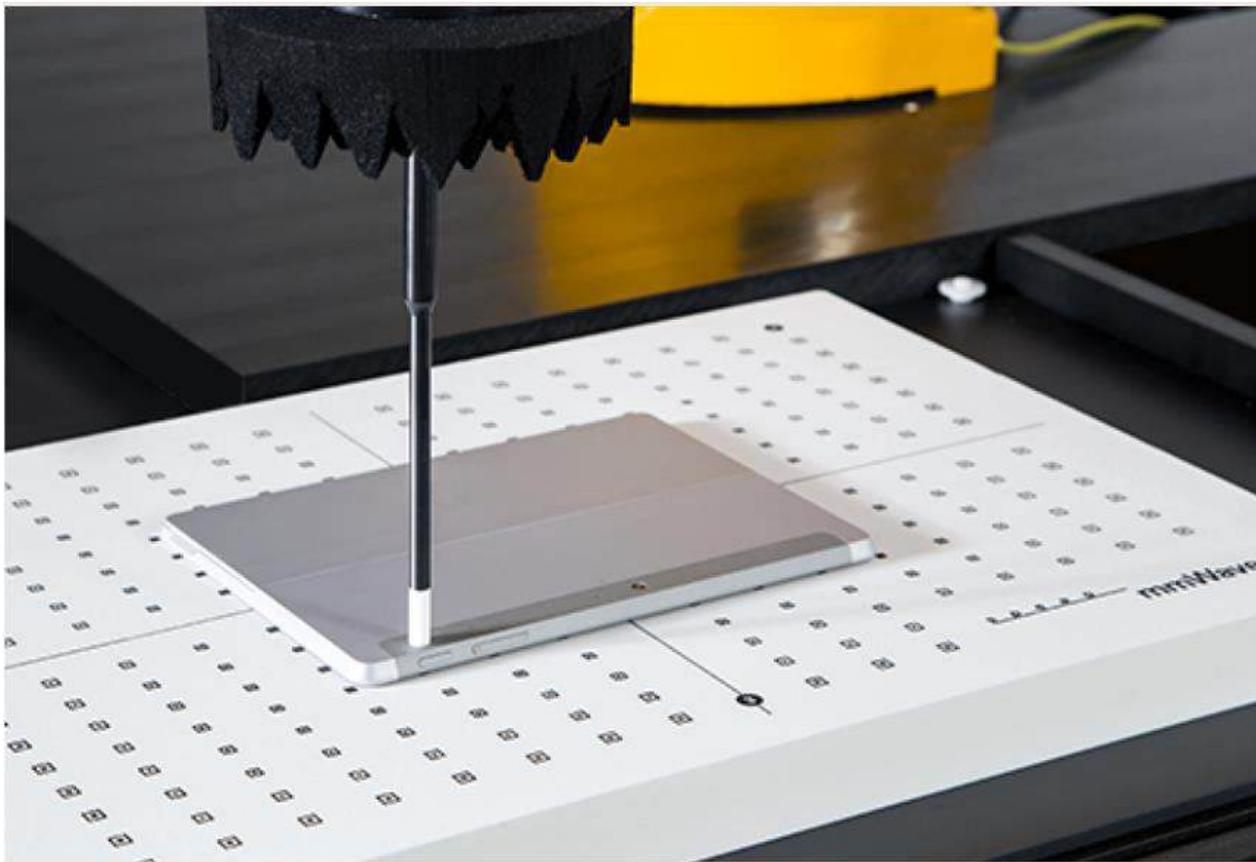
EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure Scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.



EUmmWV4 Probe Specification

Frequency Range	750MHz-110GHz
Dynamic Range	< 50-3000V/m (up to 10000V/m with additional PER-10 voltage divider)
Dimensions	Probe Overall Length: 320 mm Probe Body Diameter: 8 mm Probe Tip Length: 23 mm Probe Tip Diameter: Encapsulation 8 mm Distance from Probe Tip to Sensor X Calibration Point: 1.5 mm Distance from Probe Tip to Sensor Y Calibration Point: 1.5 mm
Applications	E-field measurements of 5G devices and other mm-wave transmitters operating above 10 GHz in < 2 mm distance from device (free-space) Power density, H-field and far-field analysis using total field reconstruction
Compatibility	DASY8: Full file compatibility



6.3 Measurement Procedure

Fast Area Scan

Fast Area Scan is a novel scan available in DASY8. The sensor voltages are sampled continuously while the robot is moving which reduces the scan duration to <30 s for most configurations.

The Fast Area Scan provides an easy, time efficient and accurate way to define the optimal power reference location. The location of the power reference and power drift measurements for the subsequent Area, Fast Volume and Zoom Scans will be automatically set at the maximum of the Fast Area Scan.

The Fast Area Scan is mainly used to assess psSAR1g/10g values:

- 1) The post processing algorithm used for regular Area Scans is applied to Fast Area Scans as well to compute psSAR1g/10 values.
- 2) The measured pattern of the given test configuration is compared to the ones measured previously in the project. If a similar pattern shape (matching configuration) is found, a scaling factor defined as difference in amplitude of the two configurations is computed. The Area Scan and Zoom Scan results available for the matching configuration are then scaled to assess the psSAR1g/10g of the measured configuration.

Fast Area Scans default grid settings are the same as Area Scans. They are described in Table(a) and Table (b)

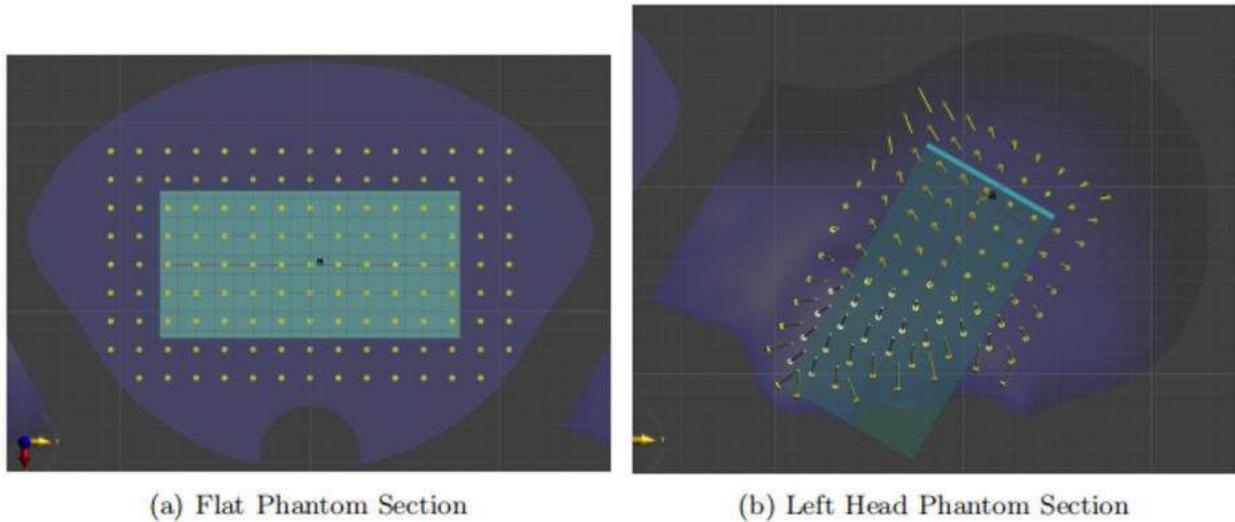
Area Scan

Area Scans are used to determine the peak location of the measured field before doing a finer measurement around the hotspot. Peak location can be found accurately even on coarse grids using the advanced interpolation routines implemented in DASY8. Area Scans measure a two dimensional volume covering the full device under test area. DASY8 uses Fast Averaged SAR algorithm to compute the 1g and 10g of simulated tissue from the Area Scan.

DASY8 automatically generates Area Scan grid settings based on device dimensions. The scan extent is defined by the device dimensions plus additional 15 mm on each side.

For Flat phantom sections both the device under test and the area scan are centered around the phantom device reference point. For Left Head and Right Head phantom sections, Area Scans are anchored to the ERP (Ear Reference Point) and oriented along the Ear Mouth line. The device under test position on this line is given by the speaker position which is always placed at the ERP. The scans extents are defined by the device height and width increased by 15 mm on each side.

Figure (a) and Figure (b) show a typical area scan grid for Flat and Left Head phantom sections.



Measurement Grid for Area Scans

Table A describe the Area Scan grid extents used in Flat, Left Head and Right Head phantom sections.

Area Scan grid steps and distance sensor to surface are defined in Table B. Please note that the settings are sufficient to determine accurately the position of the maximum SAR. For accurate psSAR estimation, finer settings might be used.

Table A: Area Scan Grid Extents in Flat, Left Head and Right Head Phantom Sections

Section	Position	Extent X [mm]	Extent Y [mm]
Flat	TOP	Width + 30	Height + 30
Flat	BOTTOM	Width + 30	Height + 30
Flat	EDGE TOP	Thickness + 30	Width + 30
Flat	EDGE BOTTOM	Thickness + 30	Width + 30
Flat	EDGE LEFT	Thickness + 30	Height + 30
Flat	EDGE RIGHT	Thickness + 30	Height + 30
Left / Right Head	CHEEK	Width + 30	Height + 30
Left / Right Head	TILT	Width + 30	Height + 30

Table B: Area Scan Grid Steps in Flat, Left Head and Right Head Phantom Sections

f [GHz]	d sensor-surface [mm]	Step X, Y [mm]
0 - 2	3	15
2 - 3	3	15
3 - 4	3	10
4 - 6	3	10
6 - 7	3	8.5
7 - 8	3	7.5
8 - 9	3	6.5
9 - 10	3	6

In DASY8 user defined grid settings can be applied as well. In the scan properties of the measurement the grid extent, grid step and grid offset can be changed after changing the default selection 'DUT dimensions + 15 mm' to 'User defined' (see Figure (c) and Figure (d)).

Figure (c): Default grid settings based on DUT dimensions.

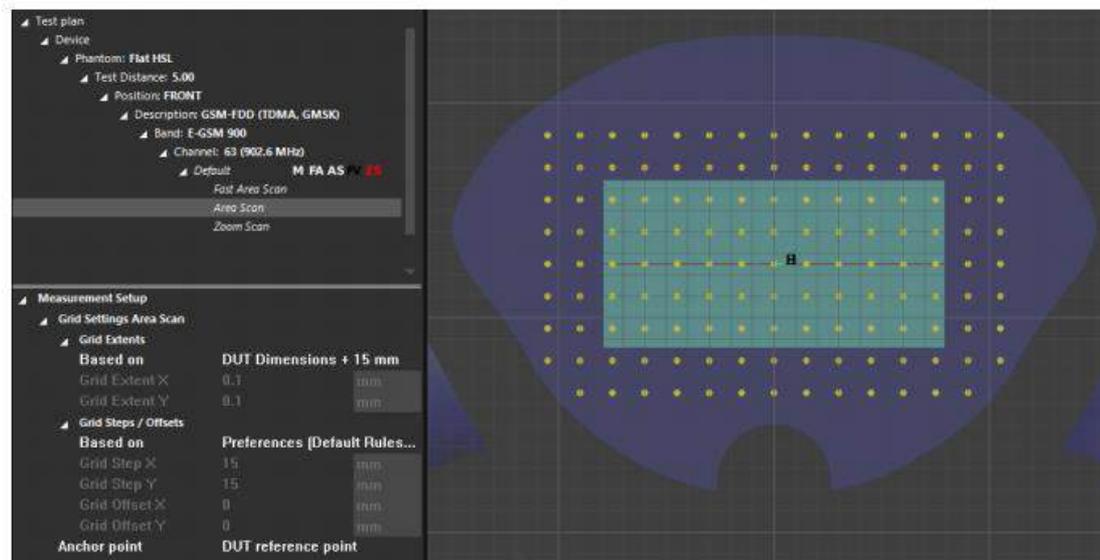
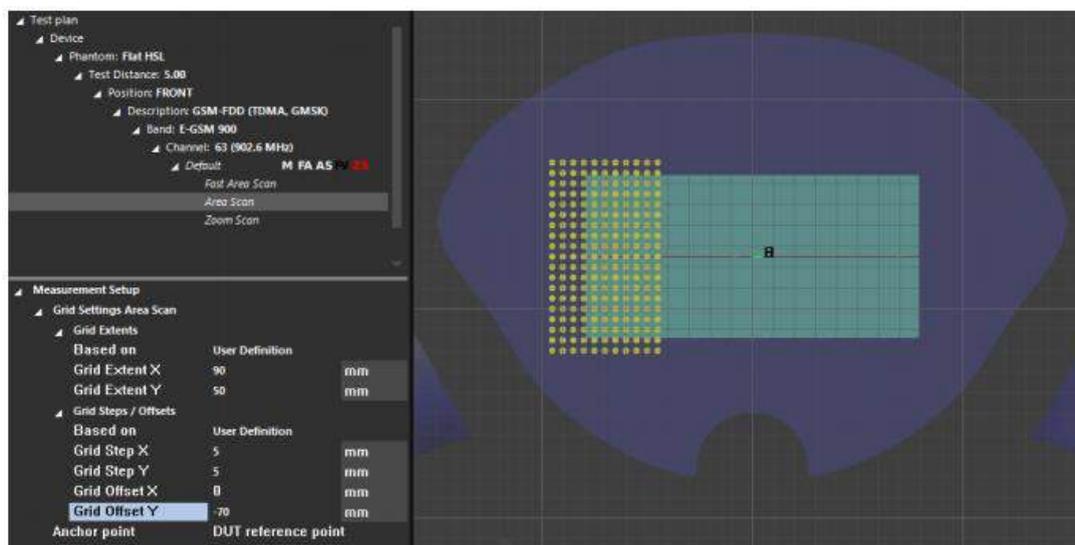


Figure (d): Grid settings as specified by the user



Fast Volume Scan

Fast Volume Scans are 3D scans used to assess the peak spatial SAR values within an averaging volume containing 1g and 10g of simulated tissue. It is compatible with any phantom. For regular phantoms, the measurement grid is generated by projecting a plane onto the phantom surface as for Area and Zoom scans. For specific phantoms, the measurement grid is generated by a conformal offset to the phantom surface at the desired distances. The grid extents can be set by the end user to cover the DUT dimensions or the whole measurable area of the phantom.

The grid extents are defined as for the area scan. The number of measured layers and the spacing between the points are optimized based on measurement frequency as shown in Table C.

Table C: Fast Volume Scan Grid Settings

Frequency [GHz]	Phantom Type	d sensor-surface [mm]	Step X, Y [mm]
0 - 4	Regular	2, 5, 8, 15	10
0 - 4	Specific	3, 7, 15	10
4 - 10	Regular	2, 5, 8, 15	5
4 - 10	Specific	3, 7, 15	5

For regular phantoms, the grid extents are based on the DUT dimensions as for the Area Scans (see Area Scan).

Zoom Scan

Zoom scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1g and 10g of simulated tissue. Zoom scans measure a three dimensional volume (cube). The bottom face of the cube is centered on the maximum of the preceding Area Scan in the same measurement group. For maxima at border of the phantom, Auto extend zoom scan when maxima on boundary feature can be enabled in Application Preferences _x001D_ Scan Settings with Administrator access level.

Zoom Scans can be performed in two different modes:

- (1) Smart Mode: the grid settings are adjusted on the fly based on the distribution being measured to fulfill to the IEC/IEEE 62209-1528 criteria on grid resolution. This is the recommended operating mode.
- (2) Custom Mode: the user specifies the grid settings to be used.

In both modes, Zoom Scans are always anchored to the peak location of the preceding Fast Area / Area / Fast Volume Scan. The sensor distance to the surface depends on the probe type used during measurement: 1.4 mm for EX probes and 3 mm for ES probes.

The Smart Zoom Scan is the highly recommended measurement mode as it minimizes the number of measured points, ensures that all standard requirements are met and guarantees that the uncertainty budget provided by SPEAG is always valid.

In this mode, a 2D Scan on a fine grid resolution of 30 mm x 30 mm with grid step of 5 mm is performed before each Zoom Scan at the maximum location of the preceding Area Scan. The 3 dB

requirement of the IEC/IEEE 62209-1528 standard is then calculated. Based on these measurements, the zoom grid parameters are determined:

(1) the grid step in XY-planes (planes parallel to phantom surface) for the following Zoom Scan is determined to ensure minimal number of points while meeting the requirements for DASYS uncertainty budget and the 3 dB requirement of the IEC/IEEE 62209-1528 standard.

(2) the grid step normal to the surface, is also determined to ensure minimal number of z-planes while meeting the requirements for DASYS uncertainty budget and the requirements of IEC/IEEE 62209-1528 standard.

The Zoom Scan is then performed with the optimized grid settings computed above. In all cases, the grid steps will not exceed the ones presented in Table D.

Table D: Default Zoom Scan Grid Settings

Frequency [GHz]	Extend XYZ [mm]	Step XY [mm]	Step Z [mm]	Graded	Grading Ratio [mm]
0 - 2	30 x 30 x 30	6	1.5	Yes	1.5
2 - 3	30 x 30 x 30	5	1.5	Yes	1.5
3 - 4	28 x 28 x 28	5	1.4	Yes	1.5
4 - 5	25 x 25 x 25	4	1.4	Yes	1.4
5 - 6	22 x 22 x 22	4	1.4	Yes	1.4
6 - 7	22 x 22 x 22	3.4	1.4	Yes	1.4
7 - 8	22 x 22 x 22	3	1.4	Yes	1.4
8 - 9	22 x 22 x 22	2.7	1.3	Yes	1.4
9 - 10	22 x 22 x 22	2.4	1.2	Yes	1.4

In Custom mode, the user can specify the grid settings to be used. This mode can be useful for trouble shooting purposes. A warning will be issued if the specified settings do not fulfill the DASYS uncertainty budget and the 3 dB requirement of IEC/IEEE 62209-1528 standard.

Power Monitoring Scan

Power monitoring scans are used to monitor the power drift of the device under test. The local SAR strength is measured at a reference position at the beginning and at the end of the scan. The power drift is computed using the below formula:

$$P_{drift}[dB] = 10 \cdot \log_{10}(SAR \text{ beginning} / SAR \text{ end})$$

Power monitoring scans are available for fully integrated in Area and Zoom Scans. They can be enabled in Application Preferences_x001D_Scan Settings. For Area Scans, the reference point is defined as the maximum location of the preceding Fast Scan. A Fast Scan will be automatically performed if none has been performed and power monitoring is enabled. For Zoom Scans, it is defined at the first point of the measured grid. If the power drifts more than 5%, the SAR will be retested.

6.4 PD Measurement Procedure

The measurements to be performed are selected in the Project Overview window. DASYS8 supports

five different scan types:

- **Fast Area Scan** – a measurement scan where sensor voltages are sampled continuously while the robot is moving – is used to determine the radiation pattern and the E-field maximum location.
- **Generic Scan** – a flexible measurement scan – is used to measure the E-field on a 1D, 2D, or 3D grid. The PD, valid in the far-field only, is calculated as $S = E^2 / 120 \cdot \pi$.
- **5G Scan** – a fine resolution scan performed on two different planes – is used to reconstruct the E and H-fields as well as the PD on the measurement plane; the average PD is derived from this measurement.
- **Forward Transform Scan** – a fine resolution scan performed on three different planes – is used to reconstruct the E- and H- fields as well as the PD. In addition to the 5G Scan, the PD can be evaluated on any surface in the half space above the measurement plane.
Forward Transform (FT) Scans are also used as input of the MEO (Maximum Exposure Optimizer) option which assesses the maximized spatial averaged power density (mpsPD) for phased array antennas with a complex codebook from a reduced set of measurements.
- **Time-Averaged Scan** – a measurement scan where sensor voltages are sampled continuously at a fixed probe location – is used for compliance testing of devices that can monitor the transmitted power during a certain time interval.

7 Main Test Equipment

Name of Equipment	Manufacturer	Type/Model	Serial Number	Software Version	Last Cal.	Cal. Due Date
Network Analyzer	Agilent	E5071B	MY42404014	/	2024-05-07	2025-05-06
Dielectric Probe Kit	SPEAG	DAK-12	1171	/	2024-07-15	2025-07-14
Dielectric Probe Kit	SPEAG	DAK-3.5	1332	/	2024-07-15	2025-07-14
Power Meter	Agilent	E4417A	GB41291714	/	2024-05-07	2025-05-06
Power Sensor	Agilent	N8481H	MY50350004	/	2024-05-07	2025-05-06
Power Sensor	Agilent	E9327A	US40441622	/	2024-05-07	2025-05-06
Signal Generator	KEYSIGHT	N5182B-X07	MY51350303	/	2023-12-05	2024-12-04
Dual Directional Coupler	UCL	UCL-DDC05 6G-S	20010600118	/	/	/
KEYSIGHT	87300B	US55141494	KEYSIGHT	/	/	/
Amplifier	R&S	SCU18F	101022	/	/	/
Wireless Communication Tester	R&S	CMW 500	146734	/	2024-05-07	2025-05-06
E-field Probe	SPEAG	EX3DV4	7689	/	2024-06-04	2025-06-03
DAE	SPEAG	DAE4	1317	/	2023-09-13	2024-09-12
PD Probe	SPEAG	EUmmWV4	9642	/	2024-07-10	2025-07-09
5G Verification Source 10GHz	SPEAG	5G Veri10	1054	/	2022-09-09	2025-09-08
Validation Kit 2450MHz	SPEAG	D2450V2	786	/	2023-09-12	2026-09-11
Validation Kit 5GHz	SPEAG	D5GHzV2	1203	/	2022-12-09	2025-12-08
Validation Kit 6.5GHz	SPEAG	D6.5GHzV2	1046	/	2021-10-04	2024-10-03
13MHz System Validation Kit	SPEAG	CLA13	1024	/	2022-09-12	2025-09-11
Test Software for Tissue	SPEAG	/	/	DAK 3.0.4.1	/	/
Temperature Probe	Auden	DTM3000	3905	/	2023-12-05	2024-12-04
Twin ELI Phantom	SPEAG	ELI v4.0	1179	/	/	/
Hygrothermograph	Anymetr	HTC - 1	TA2024A034	/	2024-05-06	2025-05-05
TX90 XL	SPEAG	Staubli TX90 XL	/	/	/	/
DASY5 Test System	SPEAG	TX90 XLspeag	F08/5AH5A1/A/01	52.10.4.1527	/	/

DASY8 Module SAR Test System	SPEAG	TX2-90 XLspe	/	16.2.4.2524	/	/
Tissue test software	SPEAG	DAK 3.0.4.1	/	3.0.4.1	/	/

8 Tissue Dielectric Parameter Measurements & System Check

8.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 24 hours of use; or earlier if the dielectric parameters can become out of tolerance.

Target values

Frequency (MHz)	ϵ_r	σ (s/m)
2450	39.2	1.80
5250	35.9	4.71
5750	35.4	5.22
6500	34.5	6.07

Measurements results

Frequency (MHz)	Test Date	Temp °C	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ϵ_r	σ (s/m)	ϵ_r	σ (s/m)	Dev ϵ_r (%)	Dev σ (%)
2450	2024/8/13	21.5	40.76	1.78	39.2	1.80	3.98	-1.11
5250	2024/8/8	21.5	34.65	4.49	35.9	4.71	-3.48	-4.67
5600	2024/8/7	21.5	34.02	4.87	35.9	4.71	-5.24	3.40
5750	2024/8/9	21.5	33.77	5.05	35.4	5.22	-4.60	-3.26
6500	2024/8/3	21.5	32.49	5.91	34.5	6.07	-5.83	-2.64
6500	2024/8/12	21.5	32.48	5.94	34.5	6.07	-5.86	-2.14
6500	2024/8/13	21.5	32.48	5.96	34.5	6.07	-5.86	-1.81
13	2024/7/23	21.5	54.18	0.73	55.0	0.75	-1.49	-2.67

Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm.

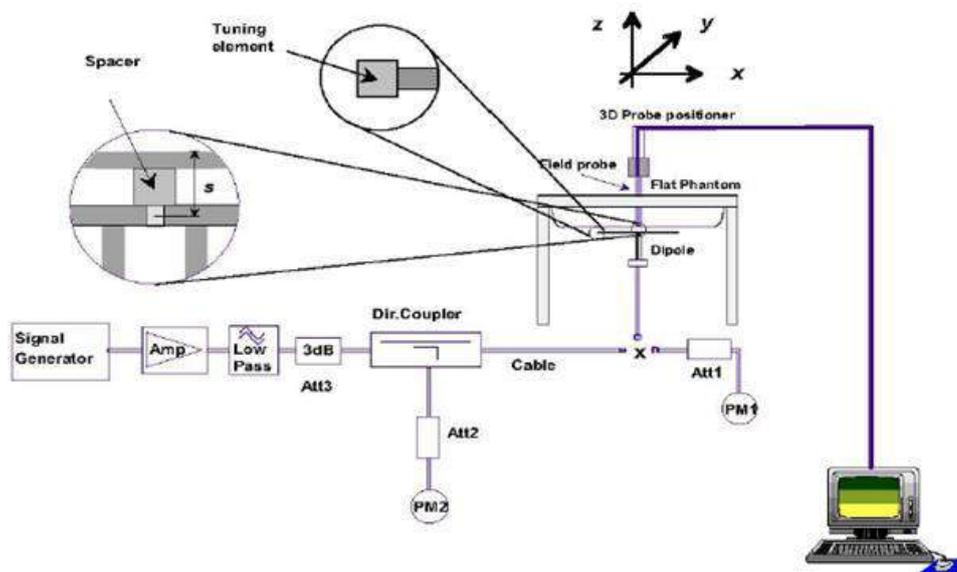
8.2 System Check

Note: The test data in this report is jointly completed by DASY5 and DASY8, and only the measurement procedure/set up of the DASY8 test system is put in this report.

8.2.1 System Check Configuration

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured using the dielectric probe kit and the network analyzer. A system check measurement for every day was made following the determination of the dielectric parameters of the Tissue simulates, using the dipole validation kit. The dipole antenna was placed under the flat section of the twin SAM phantom.

System check is performed regularly on all frequency bands where tests are performed with the DASY system.



Picture 1 System Check setup



Picture 2 Setup Photo

Justification for Extended SAR Dipole Calibrations

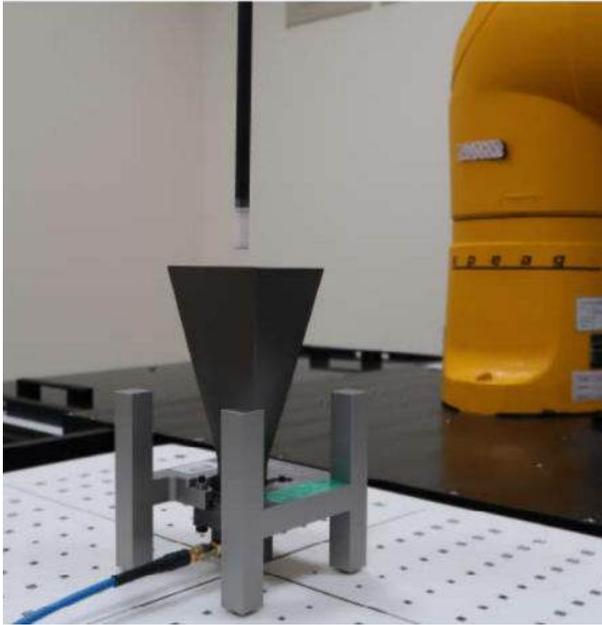
Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (>20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

Dipole		Date of Measurement	Return Loss (dB)	Δ %	Impedance (Ω)			
					Real	ΔΩ	Imaginary	ΔΩ
Dipole D5GHzV2 (5250 MHz) SN: 1203	Head Liquid	12/9/2022	29.0	/	48.5	/	-3.20	/
		12/8/2023	28.4	-2.1	48.4	-0.1	-3.4	-0.2
Dipole D5GHzV2 (5600 MHz) SN: 1203	Head Liquid	12/9/2022	30.4	/	51.7	/	2.60	/
		12/8/2023	30.5	0.3%	51.5	-0.2	2.4	-0.2
Dipole D5GHzV2 (5750 MHz) SN: 1203	Head Liquid	12/9/2022	25.3	/	53.6	/	4.30	/
		12/8/2023	25.7	1.6%	53.1	-0.5	4.7	0.4
Dipole D6.5GHzV2 SN: 1046	Head Liquid	10/4/2021	42.5	/	50.5	/	0.6	/
		10/3/2022	41.2	-3.2	50.1	-0.4	0.8	0.2
		10/2/2023	40.5	-1.7	52.1	2	0.4	-0.4
13MHz System Validation Kit	Head Liquid	9/12/2022	26.9	/	46.3	/	2.4	/
		9/11/2023	26.8	-0.4	46.1	-0.2	2.5	0.1

8.2.2 SAR&APD System Check Results

Frequency (MHz)	Test Date	Temp °C	250mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
2450	2024/8/13	21.5	13.52	54.80	52.60	4.18	1
Frequency (MHz)	Test Date	Temp °C	100mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
5250	2024/8/8	21.5	7.54	75.40	77.70	-2.96	2
5600	2024/8/7	21.5	7.67	76.70	80.30	-4.48	3
5750	2024/8/9	21.5	7.66	76.60	76.80	-0.26	4
6500	2024/8/3	21.5	30.40	304.00	291.00	4.47	5
6500	2024/8/12	21.5	30.34	303.40	291.00	4.26	6
6500	2024/8/13	21.5	30.35	303.50	291.00	4.30	7
Frequency (MHz)	Test Date	Temp °C	1W Measured SAR _{1g}		1W Target SAR _{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
13	2024/7/23	21.5	0.532		0.571	-6.83	8
Frequency (MHz)	Test Date	Temp °C	100mW Measured 4cm ² APD (W/m ²)	1W Normalized 4cm ² APD (W/m ²)	1W Target 4cm ² APD (W/m ²)	Limit For APD (±10%)	Plot No.
6500	2024/8/12	22.0	128	1280	1330	-4	9
Note: Target Values used derive from the calibration certificate data storage and evaluation.							

8.2.3 PD System Check Result



Frequency (GHz)	5G Verification Source	Test Date	Distance (mm)	Measured 4cm ² (W/m ²)	Targeted 4cm ² (W/m ²)	Deviation (dB)	Plot No.
10	10GHz-	2024/8/13	10	51.6	50	0.03	10

9 Normal and Maximum Output Power

KDB 447498 D01 at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit.

9.1 WLAN Mode

9.1.1 Wi-Fi 2.4G Mode

Wi-Fi 2.4G Sensor off- Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	21.00	19.03
	6/2437	21.00	20.19
	11/2462	21.00	20.94
802.11g (6M)	1/2412	20.00	18.18
	6/2437	20.00	18.60
	11/2462	20.00	18.82
802.11n-HT20 (MCS0)	1/2412	20.00	18.01
	6/2437	20.00	18.61
	11/2462	20.00	18.67
802.11n-HT40 (MCS0)	3/2422	20.00	18.68
	6/2437	20.00	19.07
	9/2452	20.00	18.55
802.11ax-HE20 (MCS0)	1/2412	20.00	17.98
	6/2437	20.00	18.67
	11/2462	20.00	18.78
802.11ax-HE40 (MCS0)	3/2422	20.00	18.59
	6/2437	20.00	19.05
	9/2452	20.00	18.53

Note: Initial test configuration is 802.11b mode.

Wi-Fi 2.4G Sensor off- Ant2 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	20.00	18.16
	6/2437	20.00	18.61
	11/2462	20.00	18.94
802.11g (6M)	1/2412	19.00	18.10
	6/2437	19.00	18.25
	11/2462	19.00	18.49

802.11n-HT20 (MCS0)	1/2412	19.00	17.92
	6/2437	19.00	18.27
	11/2462	19.00	18.37
802.11n-HT40 (MCS0)	3/2422	19.00	17.74
	6/2437	19.00	17.60
	9/2452	19.00	17.18
802.11ax-HE20 (MCS0)	1/2412	19.00	18.01
	6/2437	19.00	18.16
	11/2462	19.00	17.70
802.11ax-HE40 (MCS0)	3/2422	19.00	17.58
	6/2437	19.00	17.59
	9/2452	19.00	17.16

Note: Initial test configuration is 802.11b mode.

Wi-Fi 2.4G Sensor off- MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11b (1M)	1/2412	20.00	19.07	15.72	16.38
	6/2437	20.00	19.06	15.44	16.58
	11/2462	19.00	17.49	14.41	14.54
802.11g (6M)	1/2412	19.50	18.89	15.53	16.21
	6/2437	19.50	18.94	15.26	16.51
	11/2462	19.50	19.12	15.54	16.61
802.11n-HT20 (MCS0)	1/2412	19.50	18.78	15.37	16.14
	6/2437	19.50	18.79	15.19	16.30
	11/2462	19.50	19.01	15.38	16.55
802.11n-HT40 (MCS0)	3/2422	19.50	18.45	15.45	15.42
	6/2437	19.50	19.12	15.47	16.67
	9/2452	19.50	18.08	15.07	15.07
802.11ax VHT20 (MCS0)	1/2412	19.50	18.79	15.39	16.14
	6/2437	19.50	18.81	15.15	16.37
	11/2462	19.50	18.97	15.33	16.51
802.11ax VHT40 (MCS0)	3/2422	19.50	18.40	15.45	15.33
	6/2437	19.50	19.02	15.44	16.52
	9/2452	19.50	18.52	15.06	15.92

Note: Initial test configuration is 802.11b mode.

Wi-Fi 2.4G Sensor on- Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	9.50	8.83
	6/2437	9.50	8.86
	11/2462	9.50	9.10
802.11g (6M)	1/2412	9.50	8.55
	6/2437	9.50	8.75
	11/2462	9.50	8.78
802.11n-HT20 (MCS0)	1/2412	9.50	8.37
	6/2437	9.50	8.63
	11/2462	9.50	8.70
802.11n-HT40 (MCS0)	3/2422	9.50	8.94
	6/2437	9.50	8.91
	9/2452	9.50	8.36
802.11ax-HE20 (MCS0)	1/2412	9.50	8.43
	6/2437	9.50	8.78
	11/2462	9.50	8.79
802.11ax-HE40 (MCS0)	3/2422	9.50	8.78
	6/2437	9.50	8.79
	9/2452	9.50	8.19

Note: Initial test configuration is 802.11b mode.

Wi-Fi 2.4G Sensor on- Ant2 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	9.50	9.40
	6/2437	9.00	8.49
	11/2462	9.00	8.84
802.11g (6M)	1/2412	9.50	9.29
	6/2437	9.00	8.62
	11/2462	9.00	8.80
802.11n-HT20 (MCS0)	1/2412	9.50	9.15
	6/2437	9.00	8.51
	11/2462	9.00	8.80
802.11n-HT40 (MCS0)	3/2422	9.50	8.95
	6/2437	9.00	8.80
	9/2452	9.00	8.37
802.11ax-HE20	1/2412	9.50	9.17

(MCS0)	6/2437	9.00	8.58
	11/2462	9.00	8.85
802.11ax-HE40 (MCS0)	3/2422	9.50	8.81
	6/2437	9.00	8.68
	9/2452	9.00	8.31

Note: Initial test configuration is 802.11b mode.

Wi-Fi 2.4G Sensor on- MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11b (1M)	1/2412	12.50	12.13	8.83	9.40
	6/2437	12.50	11.69	8.86	8.49
	11/2462	12.50	11.98	9.10	8.84
802.11g (6M)	1/2412	12.50	11.95	8.55	9.29
	6/2437	12.50	11.70	8.75	8.62
	11/2462	12.50	11.80	8.78	8.80
802.11n-HT20 (MCS0)	1/2412	12.50	11.79	8.37	9.15
	6/2437	12.50	11.58	8.63	8.51
	11/2462	12.50	11.76	8.70	8.80
802.11n-HT40 (MCS0)	3/2422	12.50	11.96	8.94	8.95
	6/2437	12.50	11.87	8.91	8.80
	9/2452	12.50	11.38	8.36	8.37
802.11ax VHT20 (MCS0)	1/2412	12.50	11.83	8.43	9.17
	6/2437	12.50	11.69	8.78	8.58
	11/2462	12.50	11.83	8.79	8.85
802.11ax VHT40 (MCS0)	3/2422	12.50	11.81	8.78	8.81
	6/2437	12.50	11.75	8.79	8.68
	9/2452	12.50	11.26	8.19	8.31

Note: Initial test configuration is 802.11b mode.

9.1.2 Wi-Fi 5G Mode

Wi-Fi 5G (U-NII-1) Sensor off- Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	17.50	17.38
	40/5200	17.50	17.28
	48/5240	17.50	17.18
802.11n-HT20 (MCS0)	36/5180	17.00	16.30
	40/5200	17.00	16.15
	48/5240	17.00	16.10
802.11n-HT40 (MCS0)	38/5190	17.00	16.35
	46/5230	17.00	16.39
802.11ac-VHT20 (MCS0)	36/5180	17.00	16.29
	40/5200	17.00	16.14
	48/5240	17.00	16.05
802.11ac-VHT40 (MCS0)	38/5190	17.00	16.35
	46/5230	17.00	16.36
802.11ac-VHT80 (MCS0)	42/5210	17.00	16.36
802.11ax-HE20 (MCS0)	36/5180	17.00	16.31
	40/5200	17.00	16.18
	48/5240	17.00	16.08
802.11ax-HE40 (MCS0)	38/5190	17.00	16.25
	46/5230	17.00	16.14
802.11ax-HE80 (MCS0)	42/5210	17.00	16.42

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-1) Sensor off- Ant2 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	17.00	15.53
	40/5200	17.00	15.44
	48/5240	17.00	15.43
802.11n-HT20 (MCS0)	36/5180	17.00	16.20
	40/5200	17.00	15.97
	48/5240	17.00	15.73
802.11n-HT40 (MCS0)	38/5190	17.00	16.34
	46/5230	17.00	15.87
802.11ac-VHT20	36/5180	17.00	16.18

(MCS0)	40/5200	17.00	15.95
	48/5240	17.00	15.67
802.11ac-VHT40 (MCS0)	38/5190	17.00	16.33
	46/5230	17.00	16.03
802.11ac-VHT80 (MCS0)	42/5210	17.00	16.14
802.11ax-HE20 (MCS0)	36/5180	17.00	16.21
	40/5200	17.00	15.97
	48/5240	17.00	15.71
802.11ax-HE40 (MCS0)	38/5190	17.00	16.11
	46/5230	17.00	15.83
802.11ax-HE80 (MCS0)	42/5210	17.00	16.22

Note. Initial test configuration is 802.11ac-VHT80 mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-1) Sensor off- MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	36/5180	21.50	19.74	17.22	16.17
	40/5200	21.50	21.09	18.46	17.66
	48/5240	21.50	20.97	18.40	17.47
802.11n-HT20 (MCS0)	36/5180	20.50	20.10	17.50	16.63
	40/5200	20.50	20.02	17.38	16.60
	48/5240	20.50	19.94	17.28	16.55
802.11n-HT40 (MCS0)	38/5190	18.00	16.36	13.27	13.43
	46/5230	20.50	20.17	17.50	16.80
802.11ac-VHT20 (MCS0)	36/5180	20.50	20.11	17.51	16.64
	40/5200	20.50	20.01	17.36	16.61
	48/5240	20.50	19.93	17.28	16.53
802.11ac-VHT40 (MCS0)	38/5190	20.50	20.29	17.69	16.84
	46/5230	20.50	20.09	17.43	16.71
802.11ac-VHT80 (MCS0)	42/5210	17.50	16.25	13.16	13.32
802.11ax-HE20 (MCS0)	36/5180	20.50	20.13	17.54	16.66
	40/5200	20.50	20.05	17.40	16.64
	48/5240	20.50	19.97	17.32	16.56
802.11ax-HE40 (MCS0)	38/5190	18.00	16.30	13.10	13.47
	46/5230	20.50	20.06	17.38	16.70
802.11ax-HE80 (MCS0)	42/5210	17.50	15.51	12.44	12.56

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2A) Sensor off- Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	17.50	17.19
	60/5300	17.50	16.88
	64/5320	17.50	17.06
802.11n-HT20 (MCS0)	52/5260	17.00	16.09
	60/5300	17.00	15.72
	64/5320	17.00	16.02
802.11n-HT40 (MCS0)	54/5270	17.00	16.34
	62/5310	17.00	16.36
802.11ac-VHT20 (MCS0)	52/5260	17.00	16.03
	60/5300	17.00	15.70
	64/5320	17.00	16.04
802.11ac-VHT40 (MCS0)	54/5270	17.00	16.29
	62/5310	17.00	16.39
802.11ac-VHT80 (MCS0)	58/5290	17.00	16.24
802.11ac-VHT160 (MCS0)	50/5250	16.00	14.56
802.11ax-HE20 (MCS0)	52/5260	17.00	16.13
	60/5300	17.00	15.78
	64/5320	17.00	16.08
802.11ax-HE40 (MCS0)	54/5270	17.00	16.25
	62/5310	17.00	16.33
802.11ax-HE80 (MCS0)	58/5290	17.00	16.29
802.11ax-HE160 (MCS0)	50/5250	16.00	14.53

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2A) Sensor off- Ant2 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	17.00	15.57
	60/5300	17.00	15.20
	64/5320	17.00	15.28
802.11n-HT20	52/5260	17.00	16.17

(MCS0)	60/5300	17.00	16.01
	64/5320	17.00	16.28
802.11n-HT40 (MCS0)	54/5270	17.00	16.12
	62/5310	17.00	16.35
802.11ac-VHT20 (MCS0)	52/5260	17.00	16.14
	60/5300	17.00	15.97
	64/5320	17.00	16.26
802.11ac-VHT40 (MCS0)	54/5270	17.00	16.07
	62/5310	17.00	16.23
802.11ac-VHT80 (MCS0)	58/5290	17.00	16.21
802.11ac-VHT160 (MCS0)	50/5250	16.00	15.52
802.11ax-HE20 (MCS0)	52/5260	17.00	15.91
	60/5300	17.00	15.76
	64/5320	17.00	16.04
802.11ax-HE40 (MCS0)	54/5270	17.00	16.04
	62/5310	17.00	16.22
802.11ax-HE80 (MCS0)	58/5290	17.00	16.31
802.11ax-HE160 (MCS0)	50/5250	16.00	15.49

Note. Initial test configuration is 802.11ac-VHT80 mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2A) Sensor off- MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	52/5260	21.50	20.92	18.27	17.52
	60/5300	21.50	20.87	18.18	17.51
	64/5320	21.50	20.98	18.40	17.50
802.11n-HT20 (MCS0)	52/5260	20.50	20.06	17.40	16.66
	60/5300	20.50	19.81	17.12	16.46
	64/5320	20.50	19.99	17.36	16.55
802.11n-HT40 (MCS0)	54/5270	20.50	20.14	17.51	16.72
	62/5310	17.00	15.08	11.62	12.48
802.11ac-VHT20 (MCS0)	52/5260	20.50	20.03	17.38	16.62
	60/5300	20.50	19.77	17.06	16.45
	64/5320	20.50	19.94	17.32	16.50
802.11ac-VHT40 (MCS0)	54/5270	20.50	20.09	17.47	16.66
	62/5310	20.50	20.12	17.48	16.71

802.11ac-VHT80 (MCS0)	58/5290	17.50	15.76	12.31	13.15
802.11ac-VHT160 (MCS0)	50/5250	17.00	15.24	12.10	12.35
802.11ax-HE20 (MCS0)	52/5260	20.50	20.02	17.36	16.63
	60/5300	20.50	19.68	16.96	16.35
	64/5320	20.50	19.88	17.25	16.46
802.11ax-HE40 (MCS0)	54/5270	20.50	20.04	17.41	16.61
	62/5310	17.50	16.06	12.52	13.53
802.11ax-HE80 (MCS0)	58/5290	16.50	14.80	11.44	12.12
802.11ax-HE160 (MCS0)	50/5250	16.00	14.22	11.12	11.29
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-2C) Sensor off- Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	18.50	17.86
	116/5580	18.50	17.98
	140/5700	18.50	17.72
	144/5720	18.00	16.52
802.11n-HT20 (MCS0)	100/5500	17.50	16.90
	116/5580	17.50	17.02
	140/5700	17.50	16.70
	144/5720	17.00	15.45
802.11n-HT40 (MCS0)	102/5510	18.00	17.15
	110/5550	18.00	17.53
	134/5670	18.00	16.84
	142/5710	17.50	16.24
802.11ac-VHT20 (MCS0)	100/5500	17.50	16.90
	116/5580	17.50	17.02
	140/5700	17.50	16.65
	144/5720	17.00	15.42
802.11ac-VHT40 (MCS0)	102/5510	18.00	17.26
	110/5550	18.00	17.62
	134/5670	18.00	16.84
	142/5710	17.50	16.17
802.11ac-VHT80 (MCS0)	106/5530	17.50	17.11
	138/5690	17.50	16.37

802.11ac-VHT160 (MCS0)	114/5570	16.00	15.58
802.11ax-HE20 (MCS0)	100/5500	17.50	16.95
	116/5580	17.50	17.04
	140/5700	17.50	16.73
	144/5720	17.00	15.40
802.11ax-HE40 (MCS0)	102/5510	18.00	17.02
	110/5550	18.00	17.37
	134/5670	18.00	16.64
	142/5710	17.50	16.00
802.11ax-HE80 (MCS0)	106/5530	17.50	17.13
	138/5690	17.50	16.41
802.11ax-HE160 (MCS0)	114/5570	16.00	15.40

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2C) Sensor off- Ant2 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	17.00	16.23
	116/5580	17.00	16.31
	140/5700	17.00	16.16
	144/5720	17.00	16.45
802.11n-HT20 (MCS0)	100/5500	16.50	15.29
	116/5580	16.50	15.34
	140/5700	16.50	15.22
	144/5720	16.50	15.40
802.11n-HT40 (MCS0)	102/5510	16.50	15.47
	110/5550	16.50	15.83
	134/5670	16.50	15.72
	142/5710	16.50	16.08
802.11ac-VHT20 (MCS0)	100/5500	16.50	15.31
	116/5580	16.50	15.33
	140/5700	16.50	15.22
	144/5720	16.50	15.37
802.11ac-VHT40 (MCS0)	102/5510	16.50	15.50
	110/5550	16.50	15.85
	134/5670	16.50	15.50
	142/5710	16.50	16.07
802.11ac-VHT80	106/5530	16.50	15.31

(MCS0)	138/5690	16.50	16.34
802.11ac-VHT160 (MCS0)	114/5570	16.00	15.31
802.11ax-HE20 (MCS0)	100/5500	16.50	15.35
	116/5580	16.50	15.34
	140/5700	16.50	15.24
	144/5720	16.50	15.35
802.11ax-HE40 (MCS0)	102/5510	16.50	15.32
	110/5550	16.50	15.66
	134/5670	16.50	15.50
802.11ax-HE80 (MCS0)	142/5710	16.50	15.98
	106/5530	16.50	15.39
802.11ax-HE160 (MCS0)	138/5690	16.50	16.37
	114/5570	16.00	15.29

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2C) Sensor off- MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	100/5500	19.50	18.42	15.50	15.32
	116/5580	19.50	18.10	15.00	15.17
	140/5700	19.50	17.68	14.86	14.47
	144/5720	19.50	17.84	15.05	14.59
802.11n-HT20 (MCS0)	100/5500	19.00	17.23	14.10	14.33
	116/5580	20.50	19.22	16.81	15.52
	140/5700	15.00	13.36	10.40	10.30
	144/5720	20.00	18.37	15.68	15.02
802.11n-HT40 (MCS0)	102/5510	17.00	15.27	11.98	12.53
	110/5550	20.50	20.03	17.45	16.55
	134/5670	20.50	19.59	16.89	16.24
	142/5710	20.50	19.22	16.50	15.89
802.11ac-VHT20 (MCS0)	100/5500	20.50	19.49	17.03	15.86
	116/5580	20.50	19.40	16.98	15.70
	140/5700	20.50	19.46	16.79	16.07
	144/5720	20.00	18.37	15.68	15.02
802.11ac-VHT40 (MCS0)	102/5510	20.50	19.73	17.26	16.10
	110/5550	20.50	20.13	17.54	16.65
	134/5670	20.50	19.57	16.86	16.24
	142/5710	20.50	19.13	16.40	15.81

802.11ac-VHT80 (MCS0)	106/5530	15.50	14.14	10.96	11.29
	138/5690	20.50	19.35	16.64	16.01
802.11ac-VHT160 (MCS0)	114/5570	17.00	15.55	12.36	12.72
802.11ax-HE20 (MCS0)	100/5500	19.00	17.27	14.20	14.31
	116/5580	20.50	19.40	16.97	15.71
	140/5700	15.00	13.51	10.70	10.30
	144/5720	20.00	18.31	15.63	14.95
802.11ax-HE40 (MCS0)	102/5510	16.00	14.33	11.04	11.59
	110/5550	20.50	19.99	17.40	16.52
	134/5670	17.50	15.70	12.57	12.81
	142/5710	20.50	19.00	16.26	15.70
802.11ax-HE80 (MCS0)	106/5530	16.00	14.15	10.98	11.30
	138/5690	20.50	19.39	16.69	16.05
802.11ax-HE160 (MCS0)	114/5570	15.00	13.53	10.46	10.57

Note. Initial test configuration is 802.11ac-VHT80 mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-3) Sensor off- Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	17.50	16.97
	157/5785	17.50	16.83
	165/5825	17.50	16.87
802.11n-HT20 (MCS0)	149/5745	17.00	16.11
	157/5785	17.00	15.85
	165/5825	17.00	15.75
802.11n-HT40 (MCS0)	151/5755	17.00	16.25
	159/5795	17.00	16.12
802.11ac-VHT20 (MCS0)	149/5745	17.00	16.09
	157/5785	17.00	15.82
	165/5825	17.00	15.76
802.11ac-VHT40 (MCS0)	151/5755	17.00	16.20
	159/5795	17.00	16.06
802.11ac-VHT80 (MCS0)	155/5775	17.00	16.08
802.11ax-HE20 (MCS0)	149/5745	17.00	16.15
	157/5785	17.00	15.91
	165/5825	17.00	15.82
802.11ax-HE40	151/5755	17.00	16.14

(MCS0)	159/5795	17.00	15.95
802.11ax-HE80 (MCS0)	155/5775	17.00	16.18

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-3) Sensor off- Ant2 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	17.50	17.36
	157/5785	17.50	17.10
	165/5825	17.50	16.90
802.11n-HT20 (MCS0)	149/5745	17.00	16.40
	157/5785	17.00	16.02
	165/5825	17.00	15.91
802.11n-HT40 (MCS0)	151/5755	17.00	16.57
	159/5795	17.00	16.26
802.11ac-VHT20 (MCS0)	149/5745	17.00	16.36
	157/5785	17.00	15.99
	165/5825	17.00	15.86
802.11ac-VHT40 (MCS0)	151/5755	17.00	16.63
	159/5795	17.00	16.21
802.11ac-VHT80 (MCS0)	155/5775	17.00	16.24
802.11ax-HE20 (MCS0)	149/5745	17.00	16.42
	157/5785	17.00	16.02
	165/5825	17.00	15.92
802.11ax-HE40 (MCS0)	151/5755	17.00	16.44
	159/5795	17.00	16.09
802.11ax-HE80 (MCS0)	155/5775	17.00	16.29

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-3) Sensor off- MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	149/5745	19.50	17.62	14.88	14.32
	157/5785	19.50	17.65	14.90	14.36
	165/5825	19.50	17.82	14.92	14.69
802.11n-HT20 (MCS0)	149/5745	20.00	19.38	16.54	16.19
	157/5785	20.00	19.11	16.28	15.92

	165/5825	20.00	18.87	16.13	15.58
802.11n-HT40 (MCS0)	151/5755	20.00	18.97	16.06	15.86
	159/5795	20.00	18.73	15.84	15.61
802.11ac-VHT20 (MCS0)	149/5745	20.00	19.37	16.52	16.20
	157/5785	20.00	19.08	16.25	15.89
	165/5825	20.00	18.86	16.12	15.55
802.11ac-VHT40 (MCS0)	151/5755	20.00	18.99	16.07	15.89
	159/5795	20.00	18.68	15.77	15.58
802.11ac-VHT80 (MCS0)	155/5775	20.00	18.80	15.89	15.70
802.11ax-HE20 (MCS0)	149/5745	20.00	19.39	16.55	16.21
	157/5785	20.00	18.59	15.68	15.47
	165/5825	20.00	18.36	15.53	15.15
802.11ax-HE40 (MCS0)	151/5755	20.00	18.94	16.02	15.84
	159/5795	20.00	18.65	15.73	15.55
802.11ax-HE80 (MCS0)	155/5775	20.00	18.88	15.96	15.78
Note. Initial test configuration is 802.11ac-VHT80 mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-1) Sensor on- Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	11.00	10.32
	40/5200	11.00	10.16
	48/5240	11.00	9.90
802.11n-HT20 (MCS0)	36/5180	10.50	9.78
	40/5200	10.50	9.66
	48/5240	10.50	9.44
802.11n-HT40 (MCS0)	38/5190	10.50	9.78
	46/5230	10.50	9.64
802.11ac-VHT20 (MCS0)	36/5180	10.50	9.83
	40/5200	10.50	9.68
	48/5240	10.50	9.41
802.11ac-VHT40 (MCS0)	38/5190	10.50	9.87
	46/5230	10.50	9.67
802.11ac-VHT80 (MCS0)	42/5210	10.50	9.71
802.11ax-HE20 (MCS0)	36/5180	10.50	9.84
	40/5200	10.50	9.76
	48/5240	10.50	9.50

802.11ax-HE40 (MCS0)	38/5190	10.50	9.77
	46/5230	10.50	9.50
802.11ax-HE80 (MCS0)	42/5210	10.50	9.81

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-1) Sensor on- Ant2 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	11.50	10.78
	40/5200	11.50	10.71
	48/5240	11.50	10.44
802.11n-HT20 (MCS0)	36/5180	11.00	10.38
	40/5200	11.00	10.30
	48/5240	11.00	10.21
802.11n-HT40 (MCS0)	38/5190	11.00	10.53
	46/5230	11.00	10.31
802.11ac-VHT20 (MCS0)	36/5180	11.00	10.36
	40/5200	11.00	10.32
	48/5240	11.00	10.23
802.11ac-VHT40 (MCS0)	38/5190	11.00	10.46
	46/5230	11.00	10.42
802.11ac-VHT80 (MCS0)	42/5210	11.00	10.38
802.11ax-HE20 (MCS0)	36/5180	11.00	10.30
	40/5200	11.00	10.26
	48/5240	11.00	10.16
802.11ax-HE40 (MCS0)	38/5190	11.00	10.28
	46/5230	11.00	10.26
802.11ax-HE80 (MCS0)	42/5210	11.00	10.45

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-1) Sensor on- MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	36/5180	12.50	11.51	8.28	8.70
	40/5200	12.50	11.51	8.34	8.65
	48/5240	12.50	11.13	7.86	8.36
802.11n-HT20	36/5180	12.00	11.10	7.82	8.34

(MCS0)	40/5200	12.00	10.98	7.56	8.34
	48/5240	12.00	10.94	7.54	8.29
802.11n-HT40 (MCS0)	38/5190	12.00	11.18	7.84	8.47
	46/5230	12.00	11.11	7.76	8.41
802.11ac-VHT20 (MCS0)	36/5180	12.00	11.15	8.01	8.26
	40/5200	12.00	11.13	7.78	8.44
	48/5240	12.00	10.92	7.59	8.21
802.11ac-VHT40 (MCS0)	38/5190	12.00	11.21	7.99	8.40
	46/5230	12.00	11.07	7.69	8.40
802.11ac-VHT80 (MCS0)	42/5210	12.00	11.14	7.75	8.48
802.11ax-HE20 (MCS0)	36/5180	12.00	11.19	7.86	8.48
	40/5200	12.00	11.07	7.82	8.28
	48/5240	12.00	10.87	7.60	8.10
802.11ax-HE40 (MCS0)	38/5190	12.00	11.13	7.81	8.40
	46/5230	12.00	10.92	7.50	8.28
802.11ax-HE80 (MCS0)	42/5210	12.00	11.15	7.85	8.41

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2A) Sensor on- Ant1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	11.00	9.91
	60/5300	11.00	9.62
	64/5320	11.00	9.77
802.11n-HT20 (MCS0)	52/5260	10.50	9.85
	60/5300	10.50	9.51
	64/5320	10.50	9.58
802.11n-HT40 (MCS0)	54/5270	10.50	9.91
	62/5310	10.50	9.86
802.11ac-VHT20 (MCS0)	52/5260	10.50	9.87
	60/5300	10.50	9.55
	64/5320	10.50	9.61
802.11ac-VHT40 (MCS0)	54/5270	10.50	9.92
	62/5310	10.50	9.80
802.11ac-VHT80 (MCS0)	58/5290	10.50	9.51
802.11ac-VHT160 (MCS0)	50/5250	10.50	10.08

802.11ax-HE20 (MCS0)	52/5260	10.50	9.92
	60/5300	10.50	9.53
	64/5320	10.50	9.68
802.11ax-HE40 (MCS0)	54/5270	10.50	9.84
	62/5310	10.50	9.72
802.11ax-HE80 (MCS0)	58/5290	10.50	9.59
802.11ax-HE160 (MCS0)	50/5250	10.50	10.08
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2A) Sensor on- Ant2 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	11.50	10.74
	60/5300	11.50	10.38
	64/5320	11.50	10.12
802.11n-HT20 (MCS0)	52/5260	11.00	10.26
	60/5300	11.00	9.86
	64/5320	11.00	9.64
802.11n-HT40 (MCS0)	54/5270	11.00	10.25
	62/5310	11.00	9.99
802.11ac-VHT20 (MCS0)	52/5260	11.00	10.29
	60/5300	11.00	9.94
	64/5320	11.00	9.68
802.11ac-VHT40 (MCS0)	54/5270	11.00	10.20
	62/5310	11.00	9.86
802.11ac-VHT80 (MCS0)	58/5290	11.00	10.01
802.11ac-VHT160 (MCS0)	50/5250	11.00	10.29
802.11ax-HE20 (MCS0)	52/5260	11.00	10.26
	60/5300	11.00	9.95
	64/5320	11.00	9.70
802.11ax-HE40 (MCS0)	54/5270	11.00	10.19
	62/5310	11.00	9.76
802.11ax-HE80 (MCS0)	58/5290	11.00	10.05
802.11ax-HE160 (MCS0)	50/5250	11.00	10.24
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2A) Sensor on- MIMO Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	52/5260	12.50	11.20	7.79	8.56
	60/5300	12.50	11.05	7.56	8.48
	64/5320	12.50	11.27	7.73	8.74
802.11n-HT20 (MCS0)	52/5260	12.00	11.13	7.79	8.42
	60/5300	12.00	10.73	7.67	7.76
	64/5320	12.00	10.63	7.70	7.54
802.11n-HT40 (MCS0)	54/5270	12.00	11.00	7.83	8.15
	62/5310	12.00	10.93	7.90	7.93
802.11ac-VHT20 (MCS0)	52/5260	12.00	11.14	7.87	8.37
	60/5300	12.00	10.79	7.71	7.84
	64/5320	12.00	10.68	7.63	7.70
802.11ac-VHT40 (MCS0)	54/5270	12.00	11.08	8.06	8.08
	62/5310	12.00	10.88	7.88	7.86
802.11ac-VHT80 (MCS0)	58/5290	12.00	10.88	7.53	8.19
802.11ac-VHT160 (MCS0)	50/5250	12.00	11.24	8.20	8.25
802.11ax-HE20 (MCS0)	52/5260	12.00	11.23	8.10	8.34
	60/5300	12.00	10.70	7.41	7.95
	64/5320	12.00	10.81	7.82	7.78
802.11ax-HE40 (MCS0)	54/5270	12.00	11.08	7.76	8.35
	62/5310	12.00	10.73	7.80	7.64
802.11ax-HE80 (MCS0)	58/5290	12.00	10.90	7.63	8.13
802.11ax-HE160 (MCS0)	50/5250	12.00	11.22	8.10	8.31

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2C) Sensor on- Ant1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	10.00	9.18
	116/5580	10.00	9.30
	140/5700	10.00	8.61
	144/5720	10.00	9.25
802.11n-HT20	100/5500	9.50	8.62

(MCS0)	116/5580	9.50	8.06
	140/5700	9.50	8.29
	144/5720	9.50	8.55
802.11n-HT40 (MCS0)	102/5510	9.50	8.78
	110/5550	9.50	8.64
	134/5670	9.50	8.43
	142/5710	9.50	8.13
802.11ac-VHT20 (MCS0)	100/5500	9.50	8.66
	116/5580	9.50	8.33
	140/5700	9.50	8.06
	144/5720	9.50	8.68
802.11ac-VHT40 (MCS0)	102/5510	9.50	8.82
	110/5550	9.50	8.65
	134/5670	9.50	8.46
	142/5710	9.50	8.15
802.11ac-VHT80 (MCS0)	106/5530	9.50	8.50
	138/5690	9.50	8.04
802.11ac-VHT160 (MCS0)	114/5570	9.50	8.68
802.11ax-HE20 (MCS0)	100/5500	9.50	8.71
	116/5580	9.50	8.39
	140/5700	9.50	8.05
	144/5720	9.50	8.74
802.11ax-HE40 (MCS0)	102/5510	9.50	8.63
	110/5550	9.50	8.59
	134/5670	9.50	8.34
	142/5710	9.50	8.04
802.11ax-HE80 (MCS0)	106/5530	9.50	8.56
	138/5690	9.50	8.37
802.11ax-HE160 (MCS0)	114/5570	9.50	8.68

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2C) Sensor on- Ant2	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Mode			
802.11a (6M)	100/5500	10.00	9.27
	116/5580	10.00	9.24
	140/5700	10.00	8.51
	144/5720	10.00	9.33

802.11n-HT20 (MCS0)	100/5500	9.50	9.15
	116/5580	9.50	8.64
	140/5700	9.50	7.93
	144/5720	9.50	8.23
802.11n-HT40 (MCS0)	102/5510	9.50	8.97
	110/5550	9.50	9.22
	134/5670	9.50	8.29
	142/5710	9.50	8.00
802.11ac-VHT20 (MCS0)	100/5500	9.50	9.12
	116/5580	9.50	8.66
	140/5700	9.50	7.82
	144/5720	9.50	8.12
802.11ac-VHT40 (MCS0)	102/5510	9.50	9.26
	110/5550	9.50	9.32
	134/5670	9.50	8.42
	142/5710	9.50	8.03
802.11ac-VHT80 (MCS0)	106/5530	9.50	9.03
	138/5690	9.50	7.92
802.11ac-VHT160 (MCS0)	114/5570	9.50	9.16
802.11ax-HE20 (MCS0)	100/5500	9.50	9.16
	116/5580	9.50	8.72
	140/5700	9.50	7.90
	144/5720	9.50	8.30
802.11ax-HE40 (MCS0)	102/5510	9.50	9.14
	110/5550	9.50	9.19
	134/5670	9.50	8.41
	142/5710	9.50	7.85
802.11ax-HE80 (MCS0)	106/5530	9.50	9.12
	138/5690	9.50	8.01
802.11ax-HE160 (MCS0)	114/5570	9.50	9.18

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-2C) Sensor on- MIMO Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	100/5500	12.00	11.04	7.92	8.14
	116/5580	12.00	10.58	7.49	7.64
	140/5700	12.00	10.14	7.17	7.09

	144/5720	12.00	10.57	7.89	7.20
802.11n-HT20 (MCS0)	100/5500	11.50	11.01	7.64	8.33
	116/5580	11.50	10.37	6.98	7.70
	140/5700	11.50	10.02	7.21	6.81
	144/5720	11.50	10.54	7.73	7.33
802.11n-HT40 (MCS0)	102/5510	11.50	10.88	7.78	7.95
	110/5550	11.50	10.95	7.78	8.10
	134/5670	11.50	10.30	7.35	7.23
	142/5710	11.50	10.02	7.05	6.96
802.11ac-VHT20 (MCS0)	100/5500	11.50	11.02	7.78	8.22
	116/5580	11.50	10.49	7.25	7.70
	140/5700	11.50	9.95	7.14	6.74
	144/5720	11.50	10.49	7.68	7.28
802.11ac-VHT40 (MCS0)	102/5510	11.50	11.02	7.82	8.20
	110/5550	11.50	10.99	7.75	8.20
	134/5670	11.50	10.37	7.40	7.32
	142/5710	11.50	10.17	7.15	7.17
802.11ac-VHT80 (MCS0)	106/5530	11.50	10.76	7.38	8.09
	138/5690	11.50	9.91	7.00	6.80
802.11ac-VHT160 (MCS0)	114/5570	11.50	11.01	7.84	8.16
802.11ax-HE20 (MCS0)	100/5500	11.50	10.97	7.79	8.12
	116/5580	11.50	10.70	7.51	7.86
	140/5700	11.50	10.07	7.09	7.02
	144/5720	11.50	10.59	7.72	7.44
802.11ax-HE40 (MCS0)	102/5510	11.50	10.78	7.51	8.02
	110/5550	11.50	11.08	7.75	8.37
	134/5670	11.50	10.28	7.22	7.31
	142/5710	11.50	10.06	7.06	7.03
802.11ax-HE80 (MCS0)	106/5530	11.50	10.85	7.66	8.02
	138/5690	11.50	10.21	7.31	7.09
802.11ax-HE160 (MCS0)	114/5570	11.50	10.98	7.68	8.24

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-3) Sensor on- Ant1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	9.50	8.98
	157/5785	9.00	8.02

	165/5825	9.00	7.96
802.11n-HT20 (MCS0)	149/5745	9.00	8.12
	157/5785	9.00	8.40
	165/5825	9.00	8.42
802.11n-HT40 (MCS0)	151/5755	9.00	8.58
	159/5795	9.00	8.48
802.11ac-VHT20 (MCS0)	149/5745	9.00	8.40
	157/5785	9.00	8.41
	165/5825	9.00	8.15
802.11ac-VHT40 (MCS0)	151/5755	9.00	8.56
	159/5795	9.00	8.50
802.11ac-VHT80 (MCS0)	155/5775	9.00	8.40
802.11ax-HE20 (MCS0)	149/5745	9.00	8.50
	157/5785	9.00	8.45
	165/5825	9.00	8.22
802.11ax-HE40 (MCS0)	151/5755	9.00	8.44
	159/5795	9.00	8.42
802.11ax-HE80 (MCS0)	155/5775	9.00	8.47

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-3) Sensor on- Ant2 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	9.50	8.82
	157/5785	9.50	8.56
	165/5825	9.50	8.76
802.11n-HT20 (MCS0)	149/5745	9.00	8.25
	157/5785	9.00	8.44
	165/5825	9.00	8.87
802.11n-HT40 (MCS0)	151/5755	9.00	8.38
	159/5795	9.00	8.64
802.11ac-VHT20 (MCS0)	149/5745	9.00	8.24
	157/5785	9.00	8.45
	165/5825	9.00	8.86
802.11ac-VHT40 (MCS0)	151/5755	9.00	8.42
	159/5795	9.00	8.70
802.11ac-VHT80 (MCS0)	155/5775	9.00	8.46

802.11ax-HE20 (MCS0)	149/5745	9.00	8.32
	157/5785	9.00	8.54
	165/5825	9.00	8.93
802.11ax-HE40 (MCS0)	151/5755	9.00	8.33
	159/5795	9.00	8.59
802.11ax-HE80 (MCS0)	155/5775	9.00	8.56

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-3) Sensor on- MIMO Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	149/5745	11.50	10.35	7.54	7.12
	157/5785	11.50	10.34	7.57	7.08
	165/5825	11.50	10.27	7.46	7.04
802.11n-HT20 (MCS0)	149/5745	11.00	9.91	7.04	6.75
	157/5785	11.00	10.16	7.42	6.86
	165/5825	11.00	10.57	7.60	7.51
802.11n-HT40 (MCS0)	151/5755	11.00	10.21	7.56	6.80
	159/5795	11.00	10.32	7.58	7.02
802.11ac-VHT20 (MCS0)	149/5745	11.00	10.04	7.40	6.62
	157/5785	11.00	10.30	7.49	7.07
	165/5825	11.00	10.42	7.31	7.50
802.11ac-VHT40 (MCS0)	151/5755	11.00	10.26	7.50	6.98
	159/5795	11.00	10.45	7.64	7.22
802.11ac-VHT80 (MCS0)	155/5775	11.00	10.24	7.56	6.88
802.11ax-HE20 (MCS0)	149/5745	11.00	10.26	7.52	6.96
	157/5785	11.00	10.19	7.37	6.98
	165/5825	11.00	10.33	7.18	7.45
802.11ax-HE40 (MCS0)	151/5755	11.00	10.16	7.46	6.81
	159/5795	11.00	10.37	7.44	7.27
802.11ax-HE80 (MCS0)	155/5775	11.00	10.33	7.51	7.12

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

9.1.3 Wi-Fi 6G Mode

Wi-Fi 6GHz (U-NII-5) Sensor off- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	1/5955	9.00	7.92
	45/6175	9.00	7.88
	93/6415	9.00	8.04
802.11ax-HE40 (MCS0)	3/5965	11.50	10.56
	43/6165	11.50	10.60
	91/6405	11.50	10.71
802.11ax-HE80 (MCS0)	7/5985	12.50	11.09
	39/6145	12.50	10.89
	87/6385	12.50	11.24
802.11ax-HE160 (MCS0)	15/6025	12.50	10.81
	47/6185	12.50	10.88
	79/6345	12.50	11.68

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-5) Sensor off- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	1/5955	10.00	9.60
	45/6175	10.00	9.38
	93/6415	10.00	9.19
802.11ax-HE40 (MCS0)	3/5965	11.50	10.36
	43/6165	11.50	10.29
	91/6405	11.50	10.33
802.11ax-HE80 (MCS0)	7/5985	12.50	11.21
	39/6145	12.50	10.66
	87/6385	12.50	11.35
802.11ax-HE160 (MCS0)	15/6025	12.50	10.91
	47/6185	12.50	11.00
	79/6345	12.50	10.58

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-5) Sensor off- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	1/5955	8.50	7.73	4.59	4.85
	49/6195	8.50	7.70	4.54	4.83
	93/6415	8.50	7.98	5.01	4.92
802.11ax-HE40 (MCS0)	3/5965	11.50	10.68	7.57	7.77
	51/6205	11.50	10.62	7.52	7.69
	91/6405	11.50	10.86	7.72	7.97
802.11ax-HE80	7/5985	14.50	13.45	10.15	10.71

(MCS0)	55/6225	14.50	13.64	10.49	10.76
	87/6385	14.50	13.72	10.83	10.58
802.11ax-HE160 (MCS0)	15/6025	15.50	13.87	10.81	10.91
	47/6185	15.50	13.95	10.88	11.00
	79/6345	15.50	14.77	11.63	11.88

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-6) Sensor off- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	97/6435	10.00	8.79
	105/6475	10.00	8.99
	113/6515	10.00	9.62
802.11ax-HE40 (MCS0)	99/6445	10.50	9.00
	107/6485	10.50	8.82
	115/6525	10.50	9.36
802.11ax-HE80 (MCS0)	103/6465	12.50	11.02
	119/6545	9.50	8.62
802.11ax-HE160 (MCS0)	111/6505	13.00	11.35

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-6) Sensor off- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	97/6435	9.50	8.46
	105/6475	9.50	8.06
	113/6515	9.50	8.72
802.11ax-HE40 (MCS0)	99/6445	9.50	8.21
	107/6485	9.50	8.01
	115/6525	9.50	8.42
802.11ax-HE80 (MCS0)	103/6465	13.00	11.09
	119/6545	8.50	7.61
802.11ax-HE160 (MCS0)	111/6505	13.00	11.31

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-6) Sensor off- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	97/6435	9.00	8.43	5.41	5.42
	105/6475	9.00	8.03	4.98	5.06
	113/6515	9.00	8.09	5.05	5.10
802.11ax-HE40 (MCS0)	99/6445	12.00	11.17	8.18	8.14
	107/6485	12.00	11.24	8.26	8.20
	115/6525	8.00	7.51	4.33	4.66

802.11ax-HE80 (MCS0)	103/6465	15.00	14.32	11.20	11.42
	119/6545	8.00	7.22	4.08	4.33
802.11ax-HE160 (MCS0)	111/6505	16.00	14.34	11.35	11.31

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-7) Sensor off- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	117/6535	10.00	9.54
	149/6695	10.00	8.96
	181/6855	10.00	8.72
	185/6875	4.00	3.45
802.11ax-HE40 (MCS0)	115/6525	10.00	8.96
	123/6565	13.00	12.14
	147/6685	13.00	12.63
	179/6845	13.00	12.58
802.11ax-HE80 (MCS0)	187/6885	4.00	2.70
	119/6545	13.00	11.81
	135/6625	13.00	12.00
	151/6705	13.00	12.24
802.11ax-HE160 (MCS0)	167/6785	13.00	12.23
	183/6865	11.50	10.71
	111/6505	11.50	10.53
	143/6665	13.00	12.31
	175/6825	13.00	12.12

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-7) Sensor off- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	117/6535	9.00	8.15
	149/6695	9.00	8.28
	181/6855	9.00	8.18
	185/6875	4.00	3.18
802.11ax-HE40 (MCS0)	115/6525	10.00	8.26
	123/6565	12.50	11.22
	147/6685	12.50	11.15
	179/6845	12.50	11.10
802.11ax-HE80 (MCS0)	187/6885	4.00	2.63
	119/6545	13.50	11.95
	135/6625	13.50	11.84
	151/6705	13.50	12.34
	167/6785	13.50	12.24
	183/6865	11.50	10.47

802.11ax-HE160 (MCS0)	111/6505	11.50	10.32
	143/6665	13.50	13.06
	175/6825	13.50	11.82
Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.			

Wi-Fi 6GHz (U-NII-7) Sensor off- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	117/6535	9.00	7.73	4.69	4.75
	149/6695	9.00	8.27	4.84	5.65
	181/6855	9.00	8.31	5.07	5.52
	185/6875	4.50	3.26	-0.12	0.59
802.11ax-HE40 (MCS0)	115/6525	9.00	7.77	4.65	4.86
	123/6565	12.50	11.00	7.72	8.24
	147/6685	12.50	11.05	7.75	8.31
	179/6845	12.50	11.35	8.07	8.60
	187/6885	3.50	2.67	-0.75	0.03
802.11ax-HE80 (MCS0)	119/6545	14.00	12.69	9.70	9.65
	135/6625	15.00	14.39	10.98	11.75
	151/6705	15.00	13.84	10.34	11.27
	167/6785	15.00	14.19	11.28	11.07
	183/6865	11.00	10.28	7.14	7.39
802.11ax-HE160 (MCS0)	111/6505	13.50	12.59	9.75	9.40
	143/6665	16.00	15.71	12.31	13.06
	175/6825	16.00	14.98	12.12	11.82
Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.					

Wi-Fi 6GHz (U-NII-8) Sensor off- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	185/6875	5.00	3.53
	189/6895	8.00	6.52
	209/6995	8.00	6.65
	229/7095	8.00	6.69
802.11ax-HE40 (MCS0)	187/6885	10.00	8.18
	203/6965	10.00	9.16
	227/7085	10.00	9.52
802.11ax-HE80 (MCS0)	183/6865	8.50	7.82
	199/6945	13.50	12.32
	215/7025	13.50	12.43
802.11ax-HE160 (MCS0)	175/6825	8.00	7.12
	207/6985	14.00	13.50
Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.			

Wi-Fi 6GHz (U-NII-8) Sensor off- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	185/6875	5.00	3.33
	189/6895	8.00	6.28
	209/6995	8.00	6.31
	229/7095	8.00	6.50
802.11ax-HE40 (MCS0)	187/6885	10.00	8.13
	203/6965	10.00	9.18
	227/7085	10.00	9.50
802.11ax-HE80 (MCS0)	183/6865	8.50	7.75
	199/6945	13.50	12.39
	215/7025	13.50	12.03
802.11ax-HE160 (MCS0)	175/6825	8.00	6.96
	207/6985	14.50	13.97

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-8) Sensor off- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	185/6875	4.50	3.38	0.09	0.64
	189/6895	7.00	6.35	3.01	3.65
	209/6995	7.00	6.27	3.06	3.45
	229/7095	7.00	5.93	2.84	2.99
802.11ax-HE40 (MCS0)	187/6885	10.00	8.21	4.82	5.54
	203/6965	10.00	9.17	5.68	6.59
	227/7085	10.00	8.93	5.63	6.20
802.11ax-HE80 (MCS0)	183/6865	8.50	7.44	4.33	4.52
	199/6945	13.00	12.01	8.78	9.20
	215/7025	13.00	12.18	9.16	9.18
802.11ax-HE160 (MCS0)	175/6825	8.50	7.84	4.73	4.92
	207/6985	16.00	15.32	12.07	12.54

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-5) Sensor on- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	1/5955	9.00	7.92
	45/6175	9.00	7.88
	93/6415	9.00	8.04
802.11ax-HE40 (MCS0)	3/5965	9.00	8.05
	43/6165	9.00	7.94
	91/6405	9.00	8.38
802.11ax-HE80 (MCS0)	7/5985	9.00	7.98
	39/6145	9.00	8.05

	87/6385	9.00	8.10
802.11ax-HE160 (MCS0)	15/6025	10.00	8.02
	47/6185	10.00	8.45
	79/6345	10.00	8.41

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-5) Sensor on- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	1/5955	10.00	9.60
	45/6175	10.00	9.38
	93/6415	10.00	9.19
802.11ax-HE40 (MCS0)	3/5965	10.00	9.29
	43/6165	10.00	9.10
	91/6405	10.00	9.25
802.11ax-HE80 (MCS0)	7/5985	10.00	9.27
	39/6145	10.00	9.13
	87/6385	10.00	9.42
802.11ax-HE160 (MCS0)	15/6025	10.00	9.26
	47/6185	10.00	9.28
	79/6345	10.00	9.24

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-5) Sensor on- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	1/5955	8.50	7.73	4.59	4.85
	45/6175	8.50	7.70	4.54	4.83
	93/6415	8.50	7.98	5.01	4.92
802.11ax-HE40 (MCS0)	3/5965	11.50	10.68	7.57	7.77
	43/6165	11.50	10.62	7.52	7.69
	91/6405	11.50	10.86	7.72	7.97
802.11ax-HE80 (MCS0)	7/5985	13.00	11.14	7.98	8.27
	39/6145	13.00	11.18	8.05	8.29
	87/6385	13.00	11.28	8.10	8.44
802.11ax-HE160 (MCS0)	15/6025	13.00	11.27	8.52	7.98
	47/6185	13.00	11.17	8.55	7.73
	79/6345	13.00	11.52	8.55	8.46

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-6) Sensor on- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	97/6435	10.00	8.79
	105/6475	10.00	8.99
	113/6515	10.00	9.62

802.11ax-HE40 (MCS0)	99/6445	10.00	9.00
	107/6485	10.00	8.82
	115/6525	10.00	9.01
802.11ax-HE80 (MCS0)	103/6465	10.00	9.18
	119/6545	10.00	9.15
802.11ax-HE160 (MCS0)	111/6505	9.50	8.63
Note. Initial test configuration is 802.11ax-HE80 mode, since the highest maximum output power.			

Wi-Fi 6GHz (U-NII-6) Sensor on- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	97/6435	9.50	8.46
	105/6475	9.50	8.06
	113/6515	9.50	8.72
802.11ax-HE40 (MCS0)	99/6445	9.50	8.21
	107/6485	9.50	8.01
	115/6525	9.50	8.10
802.11ax-HE80 (MCS0)	103/6465	10.00	9.28
	119/6545	9.50	8.12
802.11ax-HE160 (MCS0)	111/6505	9.50	8.36
Note. Initial test configuration is 802.11ax-HE80 mode, since the highest maximum output power.			

Wi-Fi 6GHz (U-NII-6) Sensor on- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	97/6435	9.00	8.43	5.41	5.42
	105/6475	9.00	8.03	4.98	5.06
	113/6515	9.00	8.09	5.05	5.10
802.11ax-HE40 (MCS0)	99/6445	12.00	11.17	8.18	8.14
	107/6485	12.00	11.24	8.26	8.20
	115/6525	8.00	7.51	4.33	4.66
802.11ax-HE80 (MCS0)	103/6465	13.00	12.03	8.99	9.05
	119/6545	8.00	7.22	4.08	4.33
802.11ax-HE160 (MCS0)	111/6505	13.00	12.06	9.30	8.79
Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.					

Wi-Fi 6GHz (U-NII-7) Sensor on- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	117/6535	9.50	8.62
	149/6695	9.50	8.96
	181/6855	9.50	8.72
	185/6875	4.00	3.45

802.11ax-HE40 (MCS0)	115/6525	9.50	8.23
	123/6565	9.50	8.45
	147/6685	9.50	8.88
	179/6845	9.50	8.91
	187/6885	9.50	8.45
802.11ax-HE80 (MCS0)	135/6625	9.50	8.72
	151/6705	9.50	8.87
	167/6785	9.50	9.10
	183/6865	9.50	8.52
802.11ax-HE160 (MCS0)	111/6505	10.00	8.53
	143/6665	10.00	9.06
	175/6825	9.50	8.92

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-7) Sensor on- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	117/6535	9.00	8.15
	149/6695	9.00	8.28
	181/6855	9.00	8.18
	185/6875	4.00	3.18
802.11ax-HE40 (MCS0)	115/6525	10.50	9.35
	123/6565	10.50	9.51
	147/6685	10.50	9.90
	179/6845	10.50	9.14
	187/6885	10.50	8.92
802.11ax-HE80 (MCS0)	135/6625	11.00	10.21
	151/6705	11.00	10.71
	167/6785	11.00	9.93
	183/6865	10.50	9.40
802.11ax-HE160 (MCS0)	111/6505	11.00	9.60
	143/6665	11.00	10.49
	175/6825	11.00	9.40

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-7) Sensor on- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	117/6535	9.00	7.73	4.69	4.75
	149/6695	9.00	8.27	4.84	5.65
	181/6855	9.00	8.31	5.07	5.52
	185/6875	4.50	3.26	-0.12	0.59
802.11ax-HE40 (MCS0)	115/6525	9.00	7.77	4.65	4.86
	123/6565	12.50	11.00	7.72	8.24
	147/6685	12.50	11.05	7.75	8.31

	179/6845	12.50	11.35	8.07	8.60
	187/6885	3.50	2.67	-0.75	0.03
802.11ax-HE80 (MCS0)	135/6625	13.50	12.54	8.72	10.21
	151/6705	13.50	12.90	8.87	10.71
	167/6785	13.50	12.55	9.10	9.93
	183/6865	11.00	10.28	7.14	7.39
802.11ax-HE160 (MCS0)	111/6505	13.50	11.65	8.53	8.75
	143/6665	13.50	12.14	8.74	9.48
	175/6825	13.50	11.94	9.20	8.65

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-8) Sensor on- Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	185/6875	5.00	3.53
	189/6895	8.00	6.52
	209/6995	8.00	6.65
	229/7095	8.00	6.69
802.11ax-HE40 (MCS0)	187/6885	9.50	8.18
	203/6965	9.50	9.16
	227/7085	9.50	9.01
802.11ax-HE80 (MCS0)	183/6865	9.50	8.72
	199/6945	9.50	8.61
	215/7025	9.50	8.80
802.11ax-HE160 (MCS0)	175/6825	9.50	8.84
	207/6985	9.50	8.98

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-8) Sensor on- Ant2	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20 (MCS0)	185/6875	5.00	3.33
	189/6895	8.00	6.28
	209/6995	8.00	6.31
	229/7095	8.00	6.50
802.11ax-HE40 (MCS0)	187/6885	9.50	9.28
	203/6965	9.50	9.22
	227/7085	9.50	8.34
802.11ax-HE80 (MCS0)	183/6865	9.50	8.47
	199/6945	9.50	9.04
	215/7025	9.50	9.16
802.11ax-HE16 0 (MCS0)	175/6825	9.50	8.97
	207/6985	9.50	9.12

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

Wi-Fi 6GHz (U-NII-8) Sensor on- MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant1	Ant2
802.11ax-HE20 (MCS0)	185/6875	4.50	3.38	0.09	0.64
	189/6895	7.00	6.35	3.01	3.65
	209/6995	7.00	6.27	3.06	3.45
	229/7095	7.00	5.93	2.84	2.99
802.11ax-HE40 (MCS0)	187/6885	10.00	8.21	4.82	5.54
	203/6965	10.00	9.17	5.68	6.59
	227/7085	10.00	8.93	5.63	6.20
802.11ax-HE80 (MCS0)	183/6865	8.50	7.44	4.33	4.52
	199/6945	13.00	11.84	8.61	9.04
	215/7025	13.00	11.99	8.80	9.16
802.11ax-HE160 (MCS0)	175/6825	8.50	7.84	4.73	4.92
	207/6985	13.00	12.17	8.85	9.44

Note. Initial test configuration is 802.11ax-HE160 mode, since the highest maximum output power.

9.2 Bluetooth Mode

Bluetooth Ant1	Conducted Power(dBm)			Tune-up Limit (dBm)
	Channel/Frequency (MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	8.32	7.77	6.53	8.50
$\pi/4$ DQPSK	8.21	8.48	7.22	8.50
8DPSK	8.25	8.31	7.64	8.50
Bluetooth LE Ant1	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	5.83	6.02	4.81	8.00
GFSK(2M)	3.04	3.27	2.05	8.00
GFSK(S=2)	5.49	5.63	4.51	8.00
GFSK(S=8)	7.07	7.41	6.19	8.00

Bluetooth Ant2	Conducted Power(dBm)			Tune-up Limit (dBm)
	Channel/Frequency (MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	8.28	7.51	6.52	8.50
$\pi/4$ DQPSK	7.90	8.26	7.20	8.50
8DPSK	8.32	8.13	7.75	8.50
Bluetooth LE Ant2	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	5.43	5.83	4.86	8.00
GFSK(2M)	2.61	2.96	2.20	8.00
GFSK(S=2)	5.05	5.54	4.74	8.00
GFSK(S=8)	6.74	7.14	6.05	8.00

10 Test Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations Refer to *Antenna Locations*.

10.2 SAR & APD Test Results

Note:

- The value with blue color is the maximum SAR Value of each test band.
- When the reported SAR of the test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position on the highest maximum output power channel, until the report SAR is ≤ 0.8 W/kg or all required test position are tested.
- For all positions / configurations, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions / configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.
- SAR assessment for 6G-7.2G is according to IEC/IEEE 62209-1528:2020
- FCC Guidance for portable devices, TCBC workshop October 2020 and CBC workshop October 2022: Interim procedures allow for SAR measurement using the 2020 version of IEC/IEEE 62209-1528:2020 supplemented with absorbed(epithelial) power density derived from SAR measurements.
- Where supported by the test system, also report estimated absorbed (epithelial) power density (for reference purposes only, not specifically for compliance) derived from measured SAR, and estimated incident PD.

Body SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/Kg)	Plot No.	
Wi-Fi 2.4G	ANT1	Back Side	0	802.11b	Sensor on	100.0%	11/2462	9.50	9.10	0.439	-0.030	1.10	0.481	/	
		Front Side	0	802.11b	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Left Edge	0	802.11b	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Right Edge	0	802.11b	Sensor on	100.0%	11/2462	9.50	9.10	0.459	0.030	1.10	0.503	/	
		Top Edge	0	802.11b	Sensor on	100.0%	11/2462	9.50	9.10	0.096	0.190	1.10	0.105	/	
		Bottom Edge	0	802.11b	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT2	Back Side	0	802.11b	Sensor on	100.0%	1/2412	9.50	9.40	0.488	0.050	1.02	0.499	/	
		Front Side	0	802.11b	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11b	N/A	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11b	Sensor on	100.0%	1/2412	9.50	9.40	0.536	0.190	1.02	0.548	11	
		Top Edge	0	802.11b	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	802.11b	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	MIMO	Back Side	0	802.11b	Sensor on	100.0%	1/2412	12.50	12.13	0.410	0.012	1.09	0.446	/	
		Right Edge	0	802.11b	Sensor on	100.0%	1/2412	12.50	12.13	0.404	0.030	1.09	0.439	/	
Wi-Fi U-NII-2A	ANT1	Back Side	0	802.11a	Sensor on	100.0%	52/5260	11.00	9.91	0.212	0.100	1.29	0.272	/	
		Front Side	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11a	Sensor on	100.0%	52/5260	11.00	9.91	0.547	-0.116	1.29	0.703	/	
		Top Edge	0	802.11a	Sensor on	100.0%	52/5260	11.00	9.91	0.069	0.100	1.29	0.088	/	
		Bottom Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT2	Back Side	0	802.11a	Sensor on	100.0%	52/5260	11.50	10.74	0.297	0.033	1.19	0.354	/	
		Front Side	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/

		Left Edge	0	802.11a	N/A	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	/		
		Right Edge	0	802.11a	Sensor on	100.0%	52/5260	11.50	10.74	0.494	0.071	1.19	0.588	/	
		Top Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Bottom Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
Wi-Fi U-NII-2C	MIMO	Right Edge	0	802.11a	Sensor on	100.0%	64/5320	12.50	11.27	0.557	0.020	1.33	0.739	/	
	ANT1	Back Side	0	802.11a	Sensor on	100.0%	116/5580	10.00	9.30	0.338	0.056	1.17	0.397	/	
		Front Side	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Left Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Right Edge	0	802.11a	Sensor on	100.0%	116/5580	10.00	9.30	0.651	0.077	1.17	0.765	/	
		Top Edge	0	802.11a	Sensor on	100.0%	116/5580	10.00	9.30	0.110	-0.150	1.17	0.129	/	
		Bottom Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
	ANT2	Back Side	0	802.11a	Sensor on	100.0%	144/5720	10.00	9.33	0.255	0.055	1.17	0.298	/	
		Front Side	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Left Edge	0	802.11a	N/A	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Right Edge	0	802.11a	Sensor on	100.0%	144/5720	10.00	9.33	0.698	0.028	1.17	0.814	/	
		Top Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Bottom Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
	ANT2	Right Edge	0	802.11a	Sensor on	100.0%	100/5500	10.00	9.27	0.424	0.074	1.18	0.502	/	
		Right Edge	0	802.11a	Sensor on	100.0%	116/5580	10.00	9.24	0.520	-0.143	1.19	0.619	/	
		Right Edge	0	802.11a	Sensor on	100.0%	100/5500	12.00	11.04	0.675	0.060	1.25	0.842	/	
	MIMO	Right Edge	0	802.11a	Sensor on	100.0%	116/5580	12.00	10.58	0.542	0.029	1.39	0.752	/	
		Right Edge	0	802.11a	Sensor on	100.0%	140/5700	12.00	10.14	0.529	-0.100	1.53	0.812	/	
Right Edge		0	802.11a	Sensor on	100.0%	149/5745	9.50	8.98	0.277	0.126	1.13	0.312	/		
Wi-Fi U-NII-3	ANT1	Back Side	0	802.11a	Sensor on	100.0%	149/5745	9.50	8.98	0.277	0.126	1.13	0.312	/	
		Front Side	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Left Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Right Edge	0	802.11a	Sensor on	100.0%	149/5745	9.50	8.98	0.728	0.034	1.13	0.821	12	
		Top Edge	0	802.11a	Sensor on	100.0%	149/5745	9.50	8.98	0.110	0.100	1.13	0.124	/	
		Bottom Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
	ANT2	Back Side	0	802.11a	Sensor on	100.0%	149/5745	9.50	8.82	0.193	0.100	1.17	0.226	/	
		Front Side	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Left Edge	0	802.11a	N/A	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Right Edge	0	802.11a	Sensor on	100.0%	149/5745	9.50	8.82	0.354	0.057	1.17	0.414	/	
		Top Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Bottom Edge	0	802.11a	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
	ANT1	Right Edge	0	802.11a	Sensor on	100.0%	157/5785	9.00	8.02	0.621	0.100	1.25	0.778	/	
		Right Edge	0	802.11a	Sensor on	100.0%	165/5825	9.00	7.96	0.554	0.057	1.27	0.704	/	
	MIMO	Right Edge	0	802.11a	Sensor on	100.0%	149/5745	11.50	10.35	0.585	0.038	1.30	0.762	/	
	Bluetooth	ANT1	Back Side	0	DH5	Full power	76.9%	0/2402	8.50	8.32	0.118	-0.040	1.36	0.160	/
			Front Side	0	DH5	Full power	76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
			Left Edge	0	DH5	Full power	76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
Right Edge			0	DH5	Full power	76.9%	0/2402	8.50	8.32	0.117	0.030	1.36	0.159	/	
Top Edge			0	DH5	Full power	76.9%	0/2402	8.50	8.32	0.091	-0.150	1.36	0.124	/	
Bottom Edge			0	DH5	Full power	76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/

	ANT2	Back Side	0	DH5	Full power	76.9%	0/2402	8.50	8.28	0.109	0.040	1.37	0.149	/	
		Front Side	0	DH5	Full power	76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	DH5	Full power	76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	DH5	Full power	76.9%	0/2402	8.50	8.28	0.151	0.016	1.37	0.207	13	
		Top Edge	0	DH5	Full power	76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	DH5	Full power	76.9%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
NFC	NFC	Back Side	0	N/A	N/A	N/A	13.56	N/A	N/A	0.001	0.100	N/A	N/A	/	
		Front Side	0	N/A	N/A	N/A	13.56	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Left Edge	0	N/A	N/A	N/A	13.56	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Right Edge	0	N/A	N/A	N/A	13.56	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Top Edge	0	N/A	N/A	N/A	13.56	N/A	N/A	N/A	N/A	N/A	N/A	/	
		Bottom Edge	0	N/A	N/A	N/A	13.56	N/A	N/A	N/A	N/A	N/A	N/A	/	

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Measured APD (W/m ²)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/Kg)	Report APD (W/m ²)	Plot No.	
Wi-Fi U-NII-5	ANT1	Back Side	0	802.11ax HE160	Sensor on	100.0%	47/6185	10.00	8.45	0.267	1.530	-0.033	1.43	0.382	2.186	/	
		Front Side	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	47/6185	10.00	8.45	0.537	3.410	0.040	1.43	0.767	4.873	/	
		Top Edge	0	802.11ax HE160	Sensor on	100.0%	47/6185	10.00	8.45	0.055	0.434	-0.090	1.43	0.079	0.620	/	
		Bottom Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT2	Back Side	0	802.11ax HE160	Sensor on	100.0%	47/6185	10.00	9.28	0.171	1.010	-0.085	1.18	0.202	1.192	/	
		Front Side	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	47/6185	10.00	9.28	0.319	1.950	-0.025	1.18	0.377	2.302	/	
		Top Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
MIMO	Right Edge	0	802.11ax HE160	Sensor on	100.0%	79/6345	13.00	11.52	0.534	3.250	0.036	1.41	0.751	4.570	/		
Wi-Fi U-NII-6	ANT1	Back Side	0	802.11ax HE80	Sensor on	100.0%	103/6465	10.00	9.18	0.290	1.660	0.024	1.21	0.350	2.005	/	
		Front Side	0	802.11ax HE80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11ax HE80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11ax HE80	Sensor on	100.0%	103/6465	10.00	9.18	0.668	4.120	0.038	1.21	0.807	4.976	/	
		Top Edge	0	802.11ax HE80	Sensor on	100.0%	103/6465	10.00	9.18	0.059	0.481	-0.020	1.21	0.071	0.581	/	
		Bottom Edge	0	802.11ax HE80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT2	Back Side	0	802.11ax HE80	Sensor on	100.0%	103/6465	10.00	9.28	0.363	1.930	-0.120	1.18	0.428	2.278	/	
		Front Side	0	802.11ax HE80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11ax HE80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11ax HE80	Sensor on	100.0%	103/6465	10.00	9.28	0.628	3.770	0.130	1.18	0.741	4.450	/	
		Top Edge	0	802.11ax HE80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	802.11ax HE80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/

	ANT1	Right Edge	0	802.11ax HE80	Sensor on	100.0%	119/6545	10.00	9.15	0.699	5.530	-0.029	1.22	0.850	6.726	/	
	MIMO	Right Edge	0	802.11ax HE160	Sensor on	100.0%	111/6505	13.00	12.06	0.572	4.670	-0.011	1.24	0.710	5.799	/	
Wi-Fi U-NII-7	ANT1	Back Side	0	802.11ax HE160	Sensor on	100.0%	143/6665	10.00	9.06	0.437	2.270	-0.030	1.24	0.543	2.819	/	
		Front Side	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	143/6665	10.00	9.06	0.678	4.040	0.081	1.24	0.842	5.016	/	
		Top Edge	0	802.11ax HE160	Sensor on	100.0%	143/6665	10.00	9.06	0.071	0.594	-0.024	1.24	0.088	0.738	/	
		Bottom Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT2	Back Side	0	802.11ax HE160	Sensor on	100.0%	143/6665	11.00	10.49	0.430	2.210	0.050	1.12	0.484	2.485	/	
		Front Side	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	143/6665	11.00	10.49	0.629	3.830	0.078	1.12	0.707	4.307	/	
		Top Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT1	Right Edge	0	802.11ax HE160	Sensor on	100.0%	111/6505	10.00	8.53	0.552	3.480	-0.032	1.40	0.774	4.882	/	
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	175/6825	9.50	8.92	0.743	4.500	-0.180	1.14	0.849	5.143	14	
	MIMO	Back Side	0	802.11ax HE160	Sensor on	100.0%	143/6665	13.50	12.14	0.318	1.720	0.032	1.37	0.435	2.352	/	
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	143/6665	13.50	12.14	0.560	3.260	-0.110	1.37	0.766	4.459	/	
	Wi-Fi U-NII-8	ANT1	Back Side	0	802.11ax HE160	Sensor on	100.0%	207/6985	9.50	8.98	0.496	2.510	-0.080	1.13	0.559	1.403	/
			Front Side	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
Left Edge			0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/	
Right Edge			0	802.11ax HE160	Sensor on	100.0%	207/6985	9.50	8.98	0.696	4.100	0.027	1.13	0.785	4.622	/	
Top Edge			0	802.11ax HE160	Sensor on	100.0%	207/6985	9.50	8.98	0.061	0.489	-0.025	1.13	0.069	0.551	/	
Bottom Edge			0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
ANT2		Back Side	0	802.11ax HE160	Sensor on	100.0%	207/6985	9.50	9.12	0.525	2.540	0.000	1.09	0.573	2.772	/	
		Front Side	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Left Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	207/6985	9.50	9.12	0.722	4.370	0.084	1.09	0.788	4.770	/	
		Top Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Bottom Edge	0	802.11ax HE160	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
MIMO		Back Side	0	802.11ax HE160	Sensor on	100.0%	207/6985	13.00	12.17	0.292	1.230	0.031	1.21	0.354	1.491	/	
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	175/6825	8.50	7.84	0.382	2.460	0.018	1.16	0.445	2.864	/	
		Right Edge	0	802.11ax HE160	Sensor on	100.0%	207/6985	13.00	12.17	0.675	4.130	-0.110	1.21	0.818	5.005	/	

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/Kg)	Plot No.
Wi-Fi 2.4G	ANT1	Back Side	22	802.11b	Sensor off	100.0%	11/2462	21.00	20.94	0.189	-0.100	1.01	0.191	/
		Right Edge	7	802.11b	Sensor off	100.0%	11/2462	21.00	20.94	0.914	0.040	1.01	0.926	/
		Right Edge	7	802.11b	Sensor off	100.0%	1/2412	21.00	19.03	0.807	0.020	1.57	1.270	/
		Right Edge	7	802.11b	Sensor off	100.0%	6/2437	21.00	20.19	0.894	0.190	1.20	1.077	/
		Top Edge	6.5	802.11b	Sensor off	100.0%	11/2462	21.00	20.94	0.220	0.170	1.01	0.223	/

	ANT2	Back Side	22	802.11b	Sensor off	100.0%	11/2462	20.00	18.94	0.178	0.010	1.28	0.227	/	
		Right Edge	7	802.11b	Sensor off	100.0%	11/2462	20.00	18.94	1.140	0.030	1.28	1.455	/	
		Right Edge	7	802.11b	Sensor off	100.0%	1/2412	20.00	18.16	0.755	0.070	1.53	1.154	/	
		Right Edge	7	802.11b	Sensor off	100.0%	6/2437	20.00	18.61	0.985	0.020	1.38	1.356	/	
	MIMO	Back Side	22	802.11b	Sensor off	100.0%	1/2412	20.00	19.07	0.131	0.025	1.24	0.162	/	
		Right Edge	7	802.11b	Sensor off	100.0%	11/2462	19.00	17.49	0.908	0.022	1.42	1.286	/	
		Right Edge	7	802.11b	Sensor off	100.0%	1/2412	20.00	19.07	1.020	-0.090	1.24	1.264	/	
		Right Edge	7	802.11b	Sensor off	100.0%	6/2437	20.00	19.06	1.190	0.010	1.24	1.478	15	
		Right Edge Repeat	7	802.11b	Sensor off	100.0%	6/2437	20.00	19.06	1.120	0.021	1.24	1.391	/	
		Top Edge	6.5	802.11b	Sensor off	100.0%	1/2412	19.00	18.44	0.147	0.033	1.14	0.167	/	
Wi-Fi U-NII-2A	ANT1	Back Side	22	802.11a	Sensor off	100.0%	52/5260	17.50	17.19	0.153	0.016	1.07	0.164	/	
		Right Edge	7	802.11a	Sensor off	100.0%	52/5260	17.50	17.19	1.030	0.036	1.07	1.105	/	
		Right Edge	7	802.11a	Sensor off	100.0%	60/5300	17.50	16.88	0.989	0.087	1.15	1.140	/	
		Right Edge	7	802.11a	Sensor off	100.0%	64/5320	17.50	17.06	0.745	0.082	1.11	0.825	/	
		Top Edge	6.5	802.11a	Sensor off	100.0%	52/5260	17.50	17.19	0.204	-0.025	1.07	0.219	/	
	ANT2	Back Side	22	802.11ac VHT80	Sensor off	100.0%	58/5290	17.00	16.21	0.247	0.019	1.20	0.296	/	
		Right Edge	7	802.11ac VHT80	Sensor off	100.0%	58/5290	17.00	16.21	0.654	0.080	1.20	0.785	/	
	MIMO	Back Side	22	802.11a	Sensor off	100.0%	64/5320	21.50	20.98	0.321	0.012	1.13	0.362	/	
		Right Edge	7	802.11a	Sensor off	100.0%	64/5320	21.50	20.98	0.958	0.043	1.13	1.080	/	
		Right Edge	7	802.11a	Sensor off	100.0%	52/5260	21.50	20.92	1.030	0.145	1.14	1.177	/	
		Right Edge Repeat	7	802.11a	Sensor off	100.0%	52/5260	21.50	20.92	0.976	-0.170	1.14	1.115	/	
		Right Edge	7	802.11a	Sensor off	100.0%	60/5300	21.50	20.87	0.654	0.128	1.16	0.756	/	
		Top Edge	6.5	802.11a	Sensor off	100.0%	64/5320	21.50	20.98	0.247	0.023	1.13	0.278	/	
	Wi-Fi U-NII-2C	ANT1	Back Side	22	802.11a	Sensor off	100.0%	116/5580	18.50	17.98	0.278	-0.059	1.13	0.314	/
Right Edge			7	802.11a	Sensor off	100.0%	116/5580	18.50	17.98	1.090	0.076	1.13	1.230	/	
Right Edge			7	802.11a	Sensor off	100.0%	100/5500	18.50	17.86	1.160	0.051	1.16	1.345	/	
Right Edge			7	802.11a	Sensor off	100.0%	140/5700	18.50	17.72	1.040	0.150	1.20	1.244	/	
Top Edge			6.5	802.11a	Sensor off	100.0%	116/5580	18.50	17.98	0.334	0.029	1.13	0.377	/	
ANT2		Back Side	22	802.11a	Sensor off	100.0%	144/5720	17.00	16.45	0.810	0.017	1.14	0.919	/	
		Back Side	22	802.11a	Sensor off	100.0%	100/5500	17.00	16.23	0.488	-0.020	1.19	0.582	/	
		Back Side	22	802.11a	Sensor off	100.0%	116/5580	17.00	16.31	0.654	0.048	1.17	0.767	/	
		Right Edge	7	802.11a	Sensor off	100.0%	144/5720	17.00	16.45	0.692	0.074	1.14	0.785	/	
		Right Edge	7	802.11a	Sensor off	100.0%	100/5500	17.00	16.23	1.190	0.113	1.19	1.420	16	
		Right Edge Repeat	7	802.11a	Sensor off	100.0%	100/5500	17.00	16.23	1.120	0.020	1.19	1.336	/	
		Right Edge	7	802.11a	Sensor off	100.0%	116/5580	17.00	16.31	1.060	0.194	1.17	1.243	/	
MIMO		Back Side	22	802.11ac VHT80	Sensor off	100.0%	138/5690	20.50	19.35	0.369	0.036	1.30	0.481	/	
		Right Edge	7	802.11ac VHT80	Sensor off	100.0%	138/5690	20.50	19.35	1.100	0.076	1.30	1.433	/	
		Right Edge	7	802.11ac VHT80	Sensor off	100.0%	106/5530	15.50	14.14	0.385	0.153	1.37	0.527	/	
		Top Edge	6.5	802.11ac VHT80	Sensor off	100.0%	138/5690	20.50	19.35	0.296	0.021	1.30	0.386	/	
Wi-Fi		ANT1	Back Side	22	802.11a	Sensor off	100.0%	149/5745	17.50	16.97	0.167	0.060	1.13	0.189	/

SAR Test Report

Report No.: R2406A0726-S1

U-NII-3		Right Edge	7	802.11a	Sensor off	100.0%	149/5745	17.50	16.97	0.991	0.072	1.13	1.120	/
		Right Edge	7	802.11a	Sensor off	100.0%	157/5785	17.50	16.83	1.080	0.181	1.17	1.260	/
		Right Edge Repeat	7	802.11a	Sensor off	100.0%	157/5785	17.50	16.83	1.160	0.046	1.17	1.353	/
		Right Edge	7	802.11a	Sensor off	100.0%	165/5825	17.50	16.87	1.000	0.192	1.16	1.156	/
		Top Edge	6.5	802.11a	Sensor off	100.0%	149/5745	17.50	16.97	0.322	0.080	1.13	0.364	/
	ANT2	Back Side	22	802.11a	Sensor off	100.0%	149/5745	17.50	17.36	0.418	0.193	1.03	0.432	/
		Right Edge	7	802.11a	Sensor off	100.0%	149/5745	17.50	17.36	0.751	0.168	1.03	0.776	/
	MIMO	Back Side	22	802.11ac VHT80	Sensor off	100.0%	155/5775	20.00	18.80	0.648	0.010	1.32	0.854	/
		Right Edge	7	802.11ac VHT80	Sensor off	100.0%	155/5775	20.00	18.80	1.070	0.116	1.32	1.411	/
		Top Edge	6.5	802.11ac VHT80	Sensor off	100.0%	155/5775	20.00	18.80	0.338	0.020	1.32	0.446	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g (W/Kg)	Measured APD (W/m ²)	Power Drift (dB)	Scaling Factor	Report SAR1g (W/Kg)	Report APD (W/m ²)	Plot No.
Wi-Fi U-NII-5	ANT1	Back Side	22	802.11ax HE160	Sensor off	100.0%	79/6345	12.50	11.68	0.035	0.320	0.087	1.21	0.042	0.387	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	79/6345	12.50	11.68	0.629	5.170	-0.040	1.21	0.760	6.244	/
		Top Edge	6.5	802.11ax HE160	Sensor off	100.0%	79/6345	12.50	11.68	0.127	1.200	-0.052	1.21	0.153	1.449	/
	ANT2	Back Side	22	802.11ax HE160	Sensor off	100.0%	47/6185	12.50	11.00	0.055	0.506	-0.065	1.41	0.078	0.715	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	47/6185	12.50	11.00	0.269	2.240	-0.010	1.41	0.380	3.164	/
Wi-Fi U-NII-6	ANT1	Back Side	22	802.11ax HE160	Sensor off	100.0%	111/6505	13.00	11.35	0.043	0.379	0.190	1.46	0.063	0.554	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	111/6505	13.00	11.35	0.575	4.740	0.021	1.46	0.841	6.931	/
		Top Edge	6.5	802.11ax HE160	Sensor off	100.0%	111/6505	13.00	11.35	0.104	0.956	-0.027	1.46	0.152	1.398	/
	ANT2	Back Side	22	802.11ax HE160	Sensor off	100.0%	111/6505	13.00	11.31	0.083	0.727	0.027	1.48	0.122	1.073	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	111/6505	13.00	11.31	0.297	2.570	-0.050	1.48	0.438	3.793	/
Wi-Fi U-NII-7	ANT1	Back Side	22	802.11ax HE160	Sensor off	100.0%	143/6665	13.00	12.31	0.038	0.348	0.048	1.17	0.045	0.408	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	143/6665	13.00	12.31	0.638	5.190	-0.072	1.17	0.748	6.084	/
		Top Edge	6.5	802.11ax HE160	Sensor off	100.0%	143/6665	13.00	12.31	0.128	1.170	-0.070	1.17	0.150	1.371	/
	ANT2	Back Side	22	802.11ax HE160	Sensor off	100.0%	143/6665	13.50	13.06	0.100	0.883	-0.123	1.11	0.111	0.977	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	143/6665	13.50	13.06	0.763	5.820	0.020	1.11	0.844	6.441	17
Wi-Fi U-NII-8	ANT1	Back Side	22	802.11ax HE160	Sensor off	100.0%	207/6985	14.00	13.50	0.103	0.853	-0.149	1.12	0.116	0.957	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	207/6985	14.00	13.50	0.699	5.530	-0.029	1.12	0.784	6.205	/
		Top Edge	6.5	802.11ax HE160	Sensor off	100.0%	207/6985	14.00	13.50	0.116	1.020	0.169	1.12	0.130	1.144	/
	ANT2	Back Side	22	802.11ax HE160	Sensor off	100.0%	207/6985	14.50	13.97	0.049	0.396	0.072	1.13	0.055	0.447	/
		Right Edge	7	802.11ax HE160	Sensor off	100.0%	207/6985	14.50	13.97	0.568	4.420	0.170	1.13	0.642	4.994	/

10.3 PD Test Results

- The value with blue color is the maximum PD Value of each test band.
- FCC Guidance for portable devices, TCBC workshop October 2020 and CBC workshop October 2022: Interim procedures allow for SAR measurement using the 2020 version of IEC/IEEE 62209-1528:2020 supplemented with measured incident PD for highest SAR configuration.
- PD exposure is considered with two distances: 2mm (compliant distance) and $\lambda/5$.
- According to DASY8 MODULE mmWAVE SYSTEM HANDBOOK and IEC/IEEE 63195:2020.
DASY8 Module mmWave V3.0 features the Equivalent Source Reconstruction (ESR) method to compute the incident PD values averaged over an area of 1 cm² and 4 cm². With this method, the reconstruction uncertainty (REC) is below 0.6 dB for $d > \lambda/25$, corresponding to a test distance of 2 mm at 6 GHz. The REC value 0.6dB is valid if the following conditions on the grid resolution (ℓ_{grid}) and grid extent (v_{grid}) are met. The grid is based on λ per DASY8 MODULE mmWAVE SYSTEM HANDBOOK and IEC/IEEE 63195: 2020.
- Per FCC guidance and equipment manufacturer guidance, power density results were scaled by IEC 62479: 2020 for the measurement uncertainty > 30%. The uncertainty of the assessment method shall be determined by calculating the expanded uncertainty using a confidence interval of 95 % (see IEC 62479:2010). In this report, the total expanded uncertainty of 1.99 (1.58%) is used for scaling factor, which is larger than the maximum default uncertainty value of 30 %, so a penalty value shall be added to the assessment result before comparison with the limit.

Band	Antenna	Test Position	Dist. (mm)	Mode	Power Reduction	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Normal psPD (W/m ²)	Total psPD (W/m ²)	Power Drift [dB]	Measurement Uncertainty Scaling Factor	Tune up Scaling Factor	Scaled Normal psPD (W/m ²)	Scaled Total psPD (W/m ²)	Plot No.
U-NII-5	ANT1	Right Edge	2	802.be HE160	Sensor on	100.0%	47/6185	10.00	8.45	2.820	4.170	0.100	1.280	1.43	5.158	7.627	/
		Right Edge	9.5	802.be HE160	Sensor off	100.0%	79/6345	12.50	11.63	4.260	4.750	0.140	1.280	1.22	6.662	7.429	/
U-NII-6	ANT1	Right Edge	2	802.be HE80	Sensor on	100.0%	103/6465	10.00	9.28	3.600	5.840	0.052	1.280	1.18	5.439	8.823	/
		Right Edge	9.2	802.be HE160	Sensor off	100.0%	111/6505	13.00	11.35	3.900	4.470	-0.160	1.280	1.46	7.299	8.366	/
U-NII-7	ANT1	Right Edge	2	802.be HE160	Sensor on	100.0%	143/6665	9.50	9.06	2.150	4.360	0.030	1.280	1.11	3.045	6.176	/
		Right Edge	9	802.be HE160	Sensor off	100.0%	143/6665	13.00	12.31	3.140	4.440	0.033	1.280	1.17	4.711	6.662	/
U-NII-8	ANT2	Right Edge	2	802.be HE160	Sensor on	100.0%	207/6985	9.50	9.12	3.470	7.120	0.082	1.280	1.09	4.848	9.947	18
		Right Edge	8.6	802.be HE160	Sensor off	100.0%	207/6985	14.50	13.97	3.870	5.090	0.034	1.280	1.13	5.597	7.361	/

10.4 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Body
Wi-Fi 2.4G SISO ANT2 + Bluetooth ANT1	Yes
Wi-Fi 2.4G SISO ANT1 + Bluetooth ANT2	Yes
Wi-Fi 2.4G SISO ANT1 + NFC	Yes
Wi-Fi 2.4G SISO ANT2 + NFC	Yes
Wi-Fi 2.4G MIMO (ANT1 + ANT2) + NFC	Yes
Wi-Fi 5G SISO ANT1 + Bluetooth ANT1	Yes
Wi-Fi 5G SISO ANT2 + Bluetooth ANT1	Yes
Wi-Fi 5G SISO ANT1 + Bluetooth ANT2	Yes
Wi-Fi 5G SISO ANT2 + Bluetooth ANT2	Yes
Wi-Fi 5G MIMO (ANT1 + ANT2) + Bluetooth ANT1	Yes
Wi-Fi 5G MIMO (ANT1 + ANT2) + Bluetooth ANT2	Yes
Wi-Fi 5G SISO ANT1 + NFC	Yes
Wi-Fi 5G SISO ANT2 + NFC	Yes
Wi-Fi 5G MIMO (ANT1 + ANT2) + NFC	Yes
Wi-Fi 5G SISO ANT1 + Wi-Fi 2.4G SISO ANT1	Yes
Wi-Fi 5G SISO ANT2 + Wi-Fi 2.4G SISO ANT2	Yes
Wi-Fi 5G SISO ANT1 + Wi-Fi 2.4G SISO ANT2	Yes
Wi-Fi 5G SISO ANT2 + Wi-Fi 2.4G SISO ANT1	Yes
Wi-Fi 5G MIMO (ANT1 + ANT2) + Wi-Fi 2.4G MIMO (ANT1 + ANT2)	Yes
Wi-Fi 5G SISO ANT2 + Wi-Fi 2.4G SISO ANT2 + Bluetooth ANT1	Yes
Wi-Fi 5G SISO ANT1 + Wi-Fi 2.4G SISO ANT2 + Bluetooth ANT1	Yes
Wi-Fi 5G SISO ANT2 + Wi-Fi 2.4G SISO ANT1 + Bluetooth ANT2	Yes
Wi-Fi 5G SISO ANT1 + Wi-Fi 2.4G SISO ANT1 + Bluetooth ANT2	Yes
Wi-Fi 6E SISO ANT1 + Bluetooth ANT1	Yes
Wi-Fi 6E SISO ANT2 + Bluetooth ANT1	Yes
Wi-Fi 6E MIMO (ANT1 + ANT2) + Bluetooth ANT1	Yes
Wi-Fi 6E SISO ANT1 + Bluetooth ANT2	Yes
Wi-Fi 6E SISO ANT2 + Bluetooth ANT2	Yes
Wi-Fi 6E MIMO (ANT1 + ANT2) + Bluetooth ANT2	Yes
Wi-Fi 6E SISO ANT1 + Wi-Fi 2.4G SISO ANT1	Yes
Wi-Fi 6E SISO ANT2 + Wi-Fi 2.4G SISO ANT2	Yes
Wi-Fi 6E SISO ANT1 + Wi-Fi 2.4G SISO ANT2	Yes
Wi-Fi 6E SISO ANT2 + Wi-Fi 2.4G SISO ANT1	Yes
Wi-Fi 6E MIMO (ANT1 + ANT2) + Wi-Fi 2.4G MIMO (ANT1 + ANT2)	Yes
Wi-Fi 6E SISO ANT1 + Wi-Fi 2.4G SISO ANT2 + Bluetooth ANT1	Yes
Wi-Fi 6E SISO ANT2 + Wi-Fi 2.4G SISO ANT2 + Bluetooth ANT1	Yes
Wi-Fi 6E SISO ANT1 + Wi-Fi 2.4G SISO ANT1 + Bluetooth ANT2	Yes
Wi-Fi 6E SISO ANT2 + Wi-Fi 2.4G SISO ANT1 + Bluetooth ANT2	Yes
Wi-Fi 6E SISO ANT1 + NFC	Yes

Wi-Fi 6E SISO ANT2 + NFC	Yes
Wi-Fi 6E MIMO (ANT1 + ANT2) + NFC	Yes

General Note:

1. The Scaled SAR summation is calculated based on the same configuration and test position.
2. Per KDB 447498 D01, simultaneous transmission SAR is compliant if,
 - i) Scalar SAR summation < 1.6W/kg, simultaneously transmission SAR measurement is not necessary.
 - ii) $SPLSR = (SAR1 + SAR2)^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - iii) If $SPLSR \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

The Maximum SAR_{1g} Value (Wi-Fi 5G Antenna)

SAR _{1g} (W/kg) Test Position	ANT1				ANT2				MIMO			
	U-NII-2A	U-NII-2C	U-NII-3	MAX. SAR _{1g}	U-NII-2A	U-NII-2C	U-NII-3	MAX. SAR _{1g}	U-NII-2A	U-NII-2C	U-NII-3	MAX. SAR _{1g}
Back Side	0.272	0.397	0.312	0.397	0.354	0.298	0.226	0.354	N/A	N/A	N/A	N/A
Front Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	0.703	0.765	0.821	0.821	0.588	0.814	0.414	0.814	0.739	0.842	0.762	0.842
Top Edge	0.088	0.129	0.124	0.129	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SAR _{1g} (W/kg) Test Position	ANT1					ANT2					MIMO				
	U-NII-5	U-NII-6	U-NII-7	U-NII-8	MAX. SAR _{1g}	U-NII-5	U-NII-6	U-NII-7	U-NII-8	MAX. SAR _{1g}	U-NII-5	U-NII-6	U-NII-7	U-NII-8	MAX. SAR _{1g}
Back Side	0.382	0.350	0.543	0.559	0.559	0.202	0.428	0.484	0.573	0.573	N/A	N/A	0.435	0.354	0.435
Front Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	0.767	0.850	0.849	0.785	0.850	0.377	0.741	0.707	0.788	0.788	0.751	0.710	0.766	0.818	0.818
Top Edge	0.079	0.071	0.088	0.069	0.088	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

About Wi-Fi Antenna, Bluetooth Antenna and NFC Antenna

Test Position	Wi-Fi 2.4G			Wi-Fi 5G			Wi-Fi 6G			Bluetooth		NFC	MAX. Σ SAR _{1g}					
	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2	MIMO	ANT1	ANT2		Max. (1,4-9)	Max. (2,4-9)	Max. (1-9)	Max. (6,9) + 3	Max. (4,5,7,8) + 1 + 11	Max. (4,5,7,8) + 2 + 10
	1	2	3	4	5	6	7	8	9	10	11		+11	+10	+12	3	+ 1 + 11	+ 2 + 10
Back Side	0.481	0.499	0.446	0.397	0.354	0.751	0.559	0.573	0.435	0.160	0.149	0.100	0.900	0.911	0.851	1.197	1.203	1.232
Front Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	0.503	0.548	0.439	0.821	0.814	0.842	0.850	0.788	0.818	0.159	0.207	N/A	1.057	1.009	0.850	1.281	1.560	1.557
Top Edge	0.105	N/A	0.105	0.129	N/A	0.129	0.088	N/A	0.088	0.124	N/A	N/A	0.129	0.253	0.129	0.234	0.234	0.253
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note:

1. The value with blue color is the maximum Σ SAR_{1g} Value.

2. MAX. Σ SAR_{1g} =Unlicensed SARMAX +Licensed SARMAX

MAX. Σ SAR_{1g} = 1.560 W/kg, Thus SAR_{MAX,total} / SAR_{limit} < 1, so the Simultaneous transmission SAR with volume scan are not required for Wi-Fi Antenna, Bluetooth Antenna and NFC Antenna.

11 Measurement Uncertainty

For SAR

Source of Uncertainty	Uncertainty ± %	Probability Distribution	Div.	ci (1 g)	ci (10 g)	Standard uncer- tainty ± %, (1 g)	Standard uncer- tainty ± %, (10 g)	vi or veff
Measurement system								
Probe calibration	6.65	N	1	1	1	6.65	6.65	∞
Axial isotropy	4.7	R	1.732	0.71	0.71	1.9	1.9	∞
Hemispherical isotropy	9.6	R	1.732	0.71	0.71	3.9	3.9	∞
Boundary effect	1.9	R	1.732	1	1	1.1	1.1	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
Detection limits	1.0	R	1.732	1	1	0.6	0.6	∞
Modulation response	2.4	R	1.732	1	1	1.4	1.4	∞
Readout electronics	1.0	N	1	1	1	1.0	1.0	∞
Response time	0.8	R	1.732	1	1	0.5	0.5	∞
Integration time	2.2	R	1.732	1	1	1.3	1.3	∞
RF ambient conditions-noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF ambient conditions-reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe positioner mechanical tolerance	0.4	R	1.732	1	1	0.2	0.2	∞
Probe positioning with respect to phantom shell	2.9	R	1.732	1	1	1.7	1.7	∞
Post-processing	2.0	R	1.732	1	1	1.2	1.2	∞
Test sample related								
Test sample positioning	3.0	N	1	1	1	3.0	3.0	11
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	7
SAR drift measurement	5.0	R	1.732	1	1	2.9	2.9	∞
SAR scaling	0.0	R	1.732	1	1	0.0	0.0	∞
Phantom and set-up								
Phantom uncertainty	4.0	R	1.732	1	1	2.3	2.3	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.9	1.6	∞
Liquid conductivity (temperature uncertainty)	2.5	R	1.732	0.78	0.71	1.1	1.0	∞
Liquid conductivity (measured)	5.0	N	1	0.78	0.71	3.9	3.6	5
Liquid permittivity (temperature uncertainty)	2.5	R	1.732	0.23	0.26	0.3	0.4	∞
Liquid permittivity (measured)	5.0	N	1	0.23	0.26	1.2	1.3	5
Combined standard uncertainty		RSS				12.0	11.9	
Expanded uncertainty (95% confidence interval)		$k = 2$				24.1	23.8	

Source of Uncertainty	Tolerance/ Uncertainty value \pm %	Probability Distribution	Div.	ci (1 g)	ci (10 g)	Standard uncer- tainty \pm %, (1 g)	Standard uncer- tainty \pm %, (10 g)	vi or veff
Measurement system								
Probe calibration	6.65	N	1	1	1	6.65	6.65	∞
Axial isotropy	4.7	R	1.732	1	1	2.7	2.7	∞
Hemispherical isotropy	9.6	R	1.732	1	1	5.5	5.5	∞
Linearity	4.7	R	1.732	1	1	2.7	2.7	∞
Probe modulation response	2.4	R	1.732	1	1	1.4	1.4	∞
Detection limits	1.0	R	1.732	1	1	0.6	0.6	∞
Boundary effect	1.9	R	1.732	1	1	1.1	1.1	∞
Readout electronics	1.0	N	1	1	1	1.0	1.0	∞
Response time	0.8	R	1.732	1	1	0.5	0.5	∞
Integration time	2.2	R	1.732	1	1	1.3	1.3	∞
RF ambient conditions-noise	3.0	R	1.732	1	1	1.7	1.7	∞
RF ambient conditions-reflections	3.0	R	1.732	1	1	1.7	1.7	∞
Probe positioner mech.restrictions	0.4	R	1.732	1	1	0.2	0.2	∞
Probe positioning with respect to phantom shell	2.9	R	1.732	1	1	1.7	1.7	∞
Post-processing	2.0	R	1.732	1	1	1.2	1.2	∞
Test sample related								
Device holder uncertainty	3.6	N	1	1	1	3.6	3.6	M-1
Test sample positioning	3.0	N	1	1	1	3.0	3.0	M-1
Power scaling	0.0	R	1.732	1	1	0.0	0.0	∞
Drift of output power (measured SAR drift)	5.0	R	1.732	1	1	2.9	2.9	∞
Phantom and set-up								
Phantom uncertainty (shape and thickness tolerances)	4.0	R	1.732	1	1	2.3	2.3	∞
Algorithm for correcting SAR for deviations in permittivity and conductivity	1.9	N	1	1	0.84	1.9	1.6	∞
Liquid conductivity (meas.)	5.0	N	1	0.78	0.71	3.9	3.6	M-1
Liquid permittivity (meas.)	5.0	N	1	0.23	0.26	1.2	1.3	M
Liquid conductivity-temperature uncertainty	2.5	R	1.732	0.78	0.71	1.1	1.0	∞
Liquid permittivity-temperature uncertainty	2.5	R	1.732	0.23	0.26	0.3	0.4	∞
Combined standard uncertainty		RSS				12.8	12.7	
Expanded uncertainty (95% confidence interval)		$k = 2$				25.6	25.3	

For PD

DASY8 Uncertainty Budget for PD (avg $\geq 1 \text{ cm}^2$)							
Evaluation Distances to the Antennas $\leq \lambda/5$							
Error Description	Unc.value	Probab. Distri.	Div	(Ci)	Std.Unc. (\pm dB)	(vi)veff	
Uncertainty terms dependent on the measurement system							∞
CAL	Calibration	0.98	N	1	1	0.98	∞
COR	Probe correction	0	R	$\sqrt{3}$	1	0	∞
FRS	Frequency response (BW $\leq 1 \text{ GHz}$)	0.2	R	$\sqrt{3}$	1	0.12	∞
SCC	Sensor cross coupling	0	R	$\sqrt{3}$	1	0	∞
ISO	Isotropy	0.5	R	$\sqrt{3}$	1	0.29	∞
LIN	Linearity	0.2	R	$\sqrt{3}$	1	0.12	∞
PSC	Probe scattering	0	R	$\sqrt{3}$	1	0	∞
PPO	Probe positioning offset	0.3	R	$\sqrt{3}$	1	0.17	∞
PPR	Probe positioning repeatability	0.04	R	$\sqrt{3}$	1	0.02	∞
SMO	Sensor mechanical offset	0	R	$\sqrt{3}$	1	0	∞
PSR	Probe spatial resolution	0	R	$\sqrt{3}$	1	0	∞
FLD	Field impedance dependence	0	R	$\sqrt{3}$	1	0	∞
APD	Amplitude and phase drift	0	R	$\sqrt{3}$	1	0	∞
APN	Amplitude and phase noise	0.04	R	$\sqrt{3}$	1	0.02	∞
TR	Measurement area truncation	0	R	$\sqrt{3}$	1	0	∞
DAQ	Data acquisition	0.03	N	1	1	0.03	∞
SMP	Sampling	0	R	$\sqrt{3}$	1	0	∞
REC	Field reconstruction	0.6	R	$\sqrt{3}$	1	0.35	∞
TRA	FTE/MEO	0(0.7)	R	$\sqrt{3}$	1	0 (0.4)	∞
SCA	Power density scaling	-	R	$\sqrt{3}$	1	-	∞
SAV	Spatial averaging	0.1	R	$\sqrt{3}$	1	0.06	∞
SDL	System detection limit	0.04	R	$\sqrt{3}$	1	0.02	∞
Uncertainty terms dependent on the DUT and environmental factors							
PC	Probe coupling with DUT	0	R	$\sqrt{3}$	1	0	∞
MOD	Modulation response	0.4	R	$\sqrt{3}$	1	0.23	∞
IT	Integration time	0	R	$\sqrt{3}$	1	0	∞
RT	Response time	0	R	$\sqrt{3}$	1	0	∞
DH	Device holder influenc	0.1	R	$\sqrt{3}$	1	0.06	∞
DA	DUT alignment	0	R	$\sqrt{3}$	1	0	∞
AC	RF ambient conditions	0.04	R	$\sqrt{3}$	1	0.02	∞
AR	Ambient reflections	0.04	R	$\sqrt{3}$	1	0.02	∞
MSI	Immunity / secondary reception	0	R	$\sqrt{3}$	1	0	∞
DRI	Drift of the DUT	-	R	$\sqrt{3}$	1	-	∞
Combined Std Uncertainty						1.24	
Expanded Std Uncertainty (95%)						1.99	

ANNEX A: Test Layout



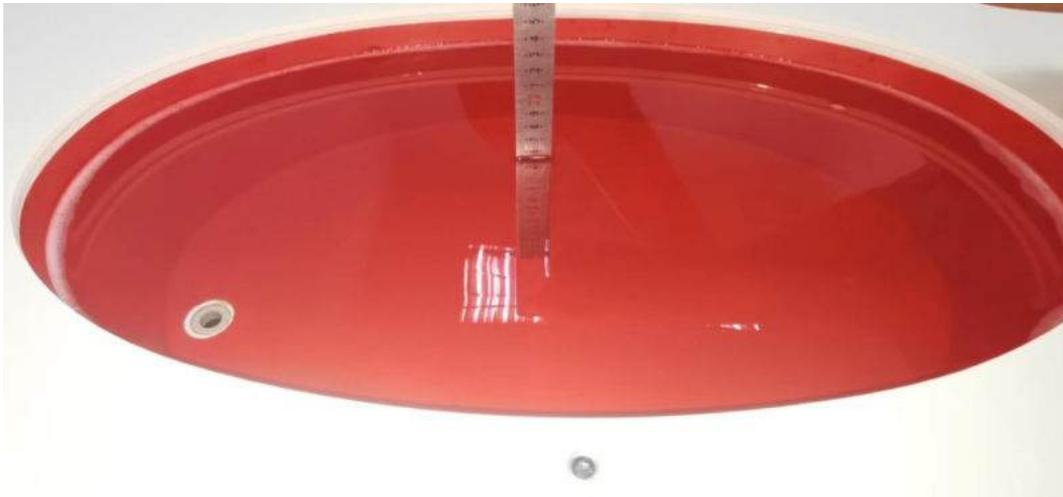
DASY 5 test system



DASY 8 test system

Tissue Simulating Liquids

For the measurement of the field distribution inside the flat phantom with DASy, the phantom must be filled with around 25 liters of homogeneous tissue simulating liquid. For SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is > 15 cm, which is shown as below.



Picture 3: Liquid depth in the flat Phantom

ANNEX B: System Check Results

Plot 1 System Performance Check at 2450 MHz TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2

Date: 2024/8/13

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.78$ S/m; $\epsilon_r = 40.76$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.62, 8.01, 8.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 14.01 W/kg

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.461V/m; Power Drift = 0.06 dB

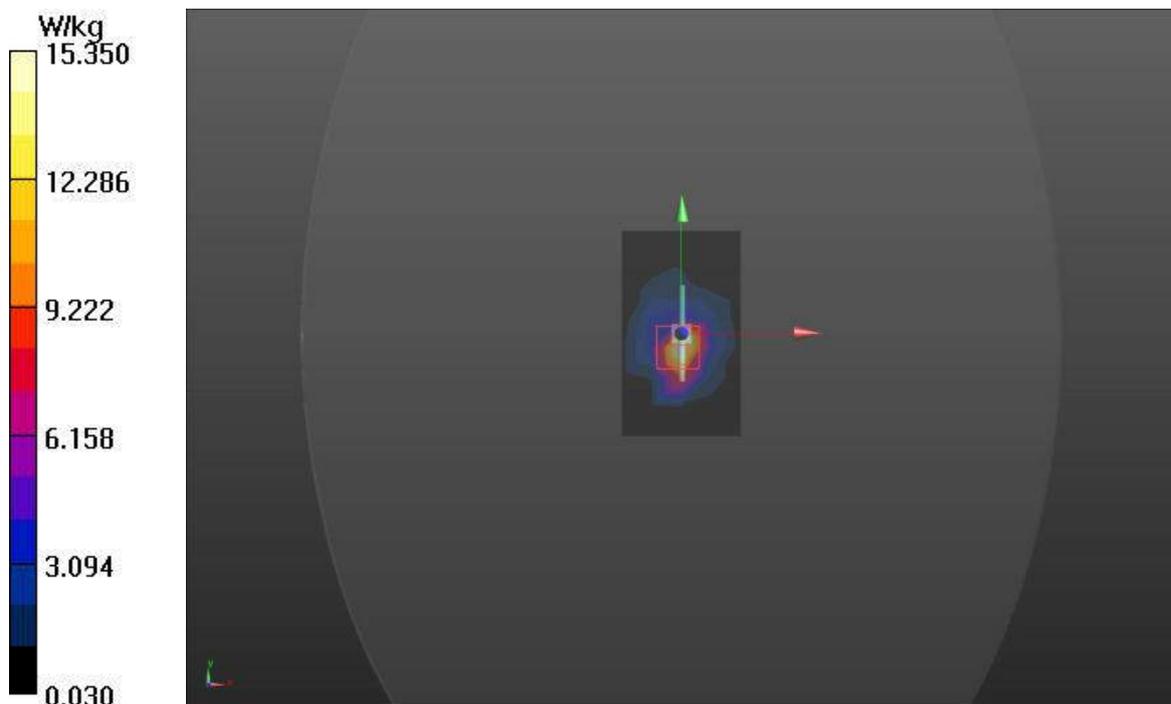
Peak SAR (extrapolated) = 28.46 W/kg

SAR(1 g) = 13.52 W/kg; SAR(10 g) = 6.17 W/kg

Smallest distance from peaks to all points 3 dB below = 9.2 mm

Ratio of SAR at M2 to SAR at M1 = 50.1%

Maximum value of SAR (measured) = 15.35 W/kg



Plot 2 System Performance Check at 5250 MHz TSL

DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 2024/8/8

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5200$ MHz; $\sigma = 4.49$ S/m; $\epsilon_r = 34.65$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.87, 6.17, 6.27); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 9.14 W/kg

d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 36.428 V/m; Power Drift = -0.15 dB

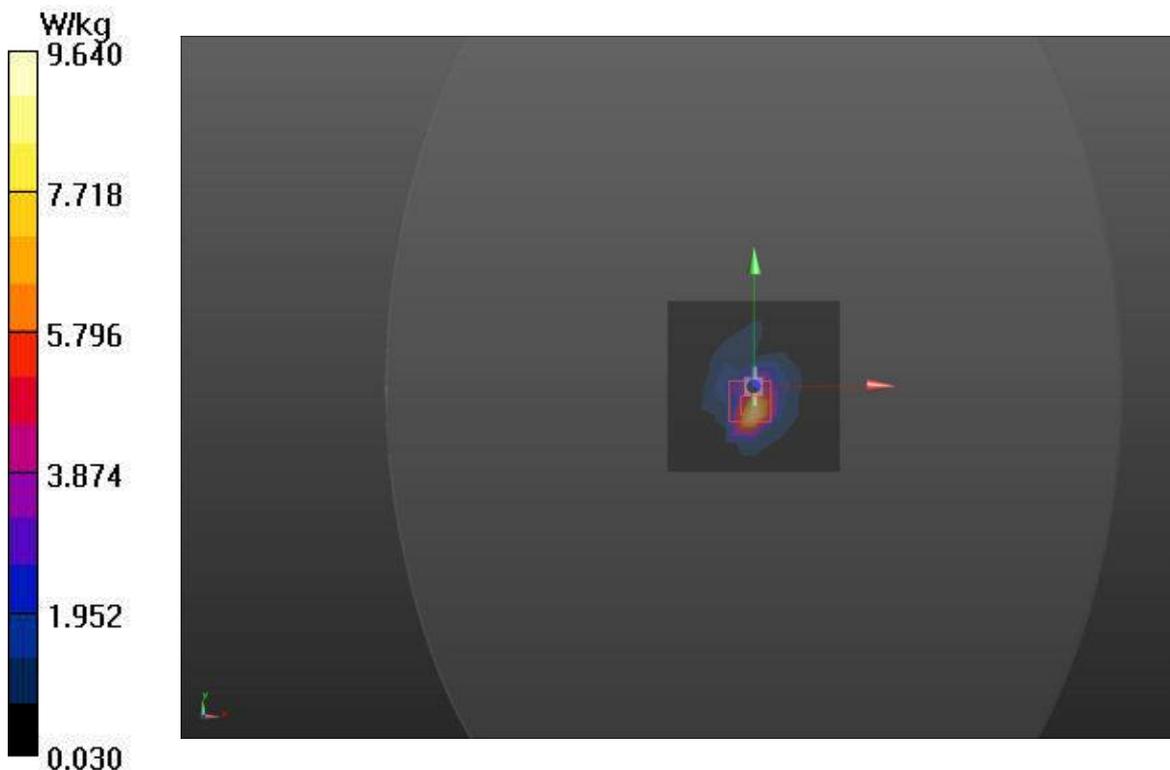
Peak SAR (extrapolated) = 50.15 W/kg

SAR(1 g) = 7.54 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 7 mm

Ratio of SAR at M2 to SAR at M1 = 65.3%

Maximum value of SAR (measured) = 9.64 W/kg



Plot 3 System Performance Check at 5600 MHz TSL

DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 2024/8/7

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5600$ MHz; $\sigma = 4.87$ S/m; $\epsilon_r = 34.02$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.33, 5.60, 5.70); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.25 W/kg

d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

dz=1.4mm

Reference Value = 23.142 V/m; Power Drift = -0.028 dB

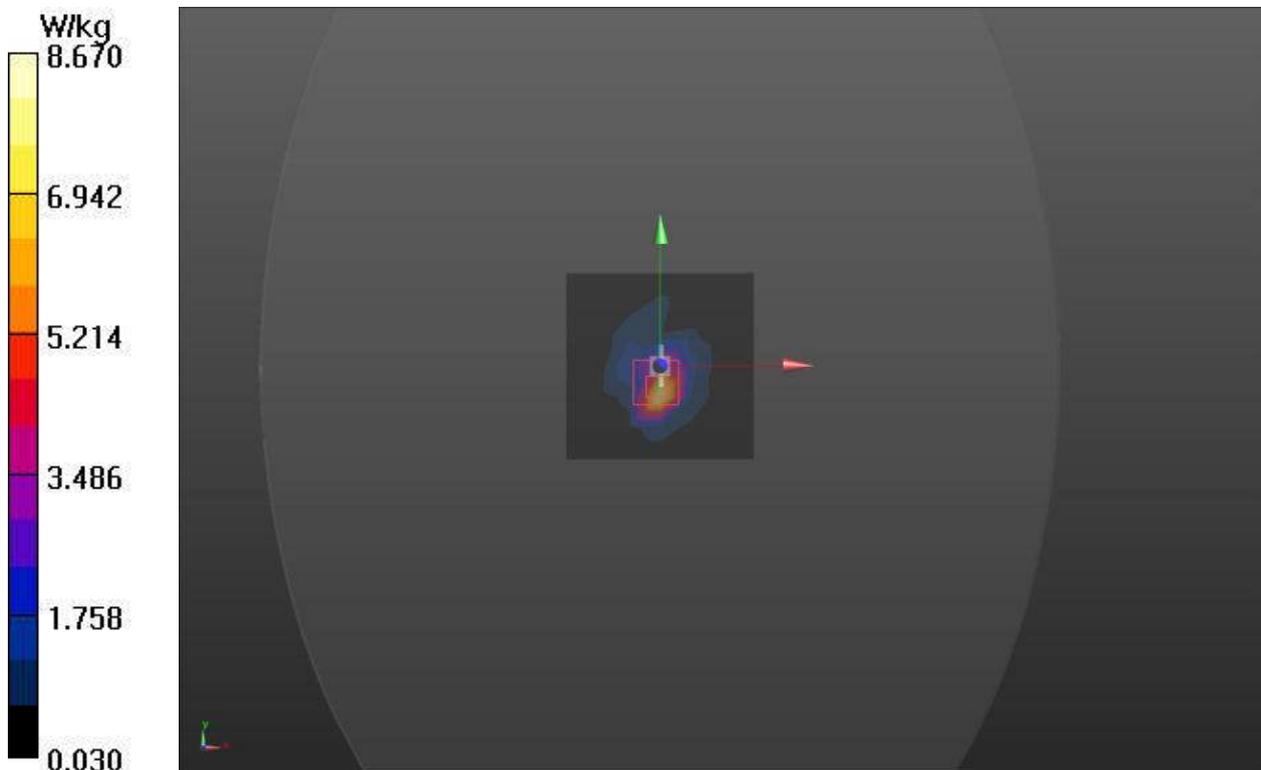
Peak SAR (extrapolated) = 22.9 W/kg

SAR(1 g) = 7.67 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 8 mm

Ratio of SAR at M2 to SAR at M1 = 61.9%

Maximum value of SAR (measured) = 8.67 W/kg



Plot 4 System Performance Check at 5750 MHz TSL

DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 2024/8/9

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.05$ S/m; $\epsilon_r = 33.77$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.31, 5.59, 5.68); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.31 W/kg

d=10mm, Pin=100mW/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm,

dz=1.4mm

Reference Value = 25.26 V/m; Power Drift = 0.044 dB

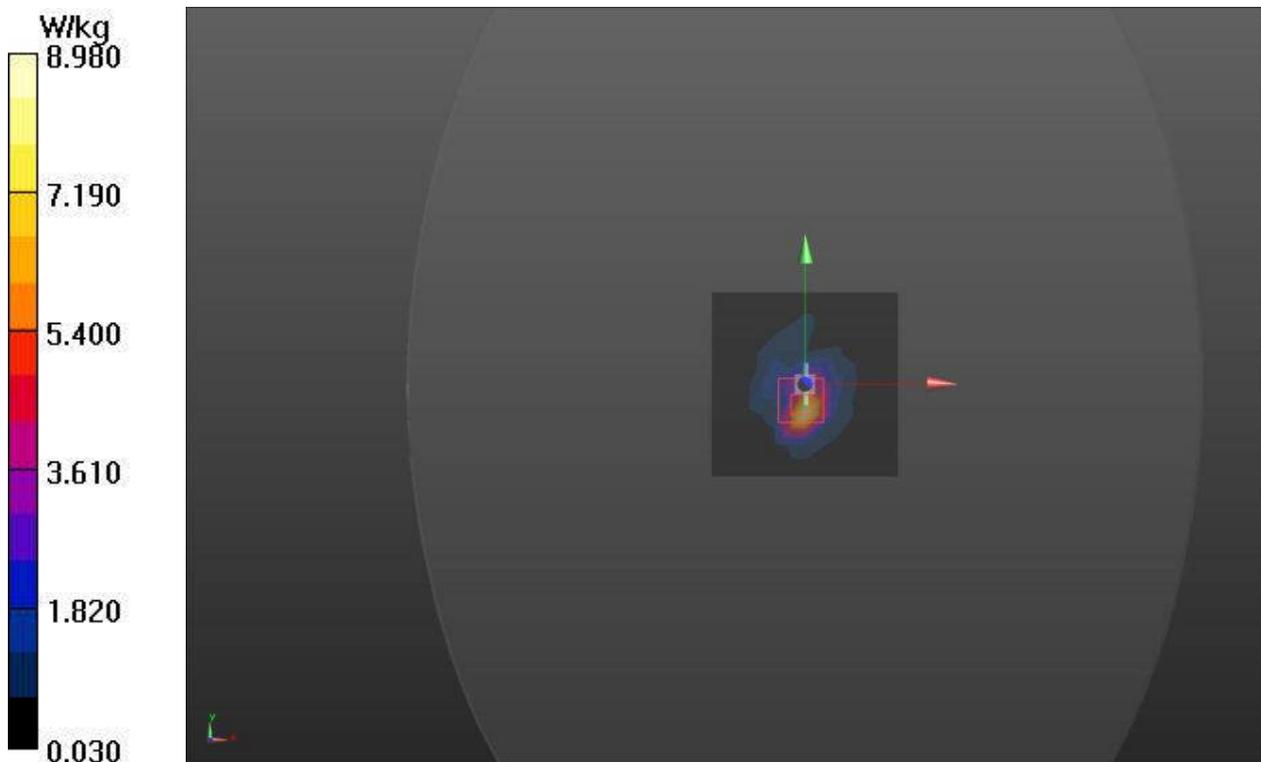
Peak SAR (extrapolated) = 23.4 W/kg

SAR(1 g) = 7.66 W/kg; SAR(10 g) = 2.27 W/kg

Smallest distance from peaks to all points 3 dB below = 7.8 mm

Ratio of SAR at M2 to SAR at M1 = 59.4%

Maximum value of SAR (measured) = 8.98 W/kg



Plot 5 System Performance Check at 6500 MHz TSL

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	16 x 6 x 300	1046	-

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	5.00		CW, 0--	6500.0, 0	6.03	5.91	32.49

Hardware Setup

Phantom	TSL, Measured	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2072	HBBL-600-10000	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1317, 2023-09-13

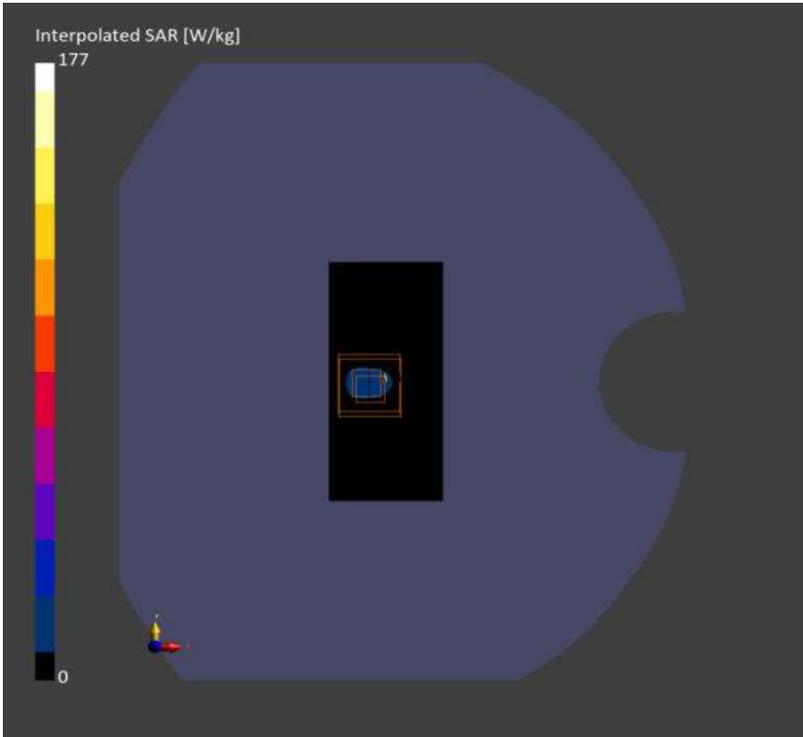
Scans Setup

	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
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-03	2024-08-03
psSAR1g [W/Kg]	23.6	30.4
psSAR10g [W/Kg]	5.14	5.79
Power Drift [dB]	-0.02	-0.09
Power Scaling	Disabled	Disabled

Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		55.2
Dist 3dB Peak [mm]		4.8



Plot 6 System Performance Check at 6500 MHz TSL

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	16 x 6 x 300	1046	-

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	,		CW, 0--	6500.0, 0	5.95	5.94	32.48

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2072	HBBL-600-10000	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1317, 2023-09-13

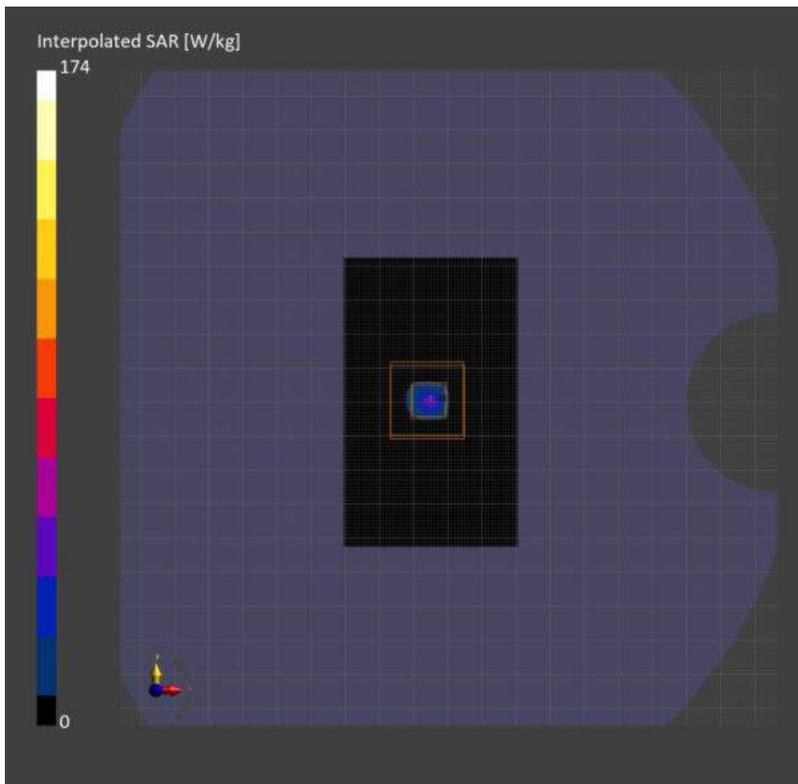
Scans Setup

	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
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-12	2024-08-12
psSAR1g [W/Kg]	24.65	30.34
psSAR10g [W/Kg]	4.77	5.22
Power Drift [dB]	0.04	0.02

Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.6
Dist 3dB Peak [mm]		4.8



Plot 7 System Performance Check at 6500 MHz TSL

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	16 x 6 x 300	1046	-

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	,		CW, 0--	6500.0, 0	5.95	5.96	32.48

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2072	HBBL-600-10000	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1317, 2023-09-13

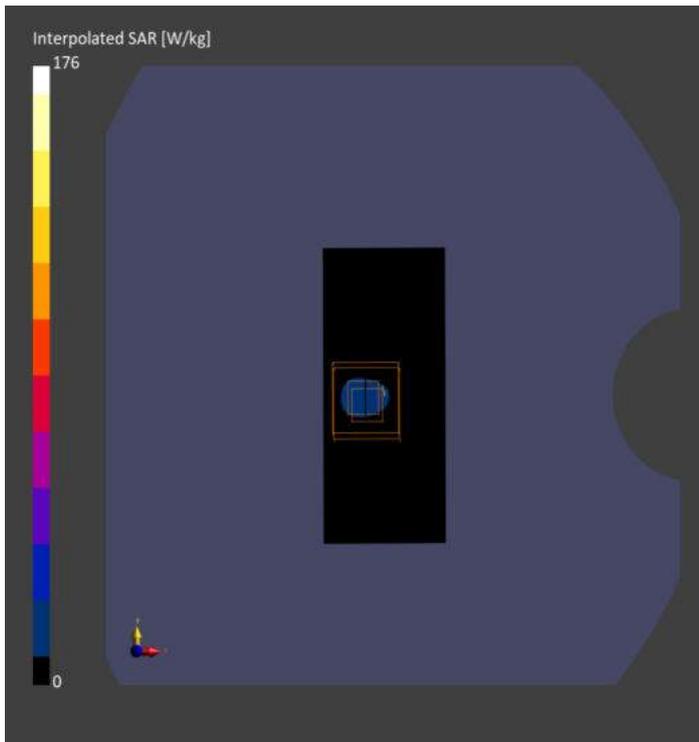
Scans Setup

	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
Sensor Surface [mm]	3.0	1.4
Graded Grid	n/a	Yes
Grading Ratio	n/a	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-13	2024-08-13
psSAR1g [W/Kg]	24.68	30.35
psSAR10g [W/Kg]	4.75	5.27
Power Drift [dB]	-0.03	-0.01

Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.8
Dist 3dB Peak [mm]		5.0



Plot 8 System Performance Check-13.5 MHz

Date: 2024/7/23

Communication System: UID 0, CW (0); Frequency: 13.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 13.5$ MHz; $\sigma = 0.73$ S/m; $\epsilon_r = 54.18$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(14.55, 15.41, 17.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

System Performance Check-13.5 MHz/d=10mm, Pin=1000mW, f=13.5 MHz/Area Scan (17x17x1):

Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.605 W/kg

System Performance Check-13.5 MHz/d=10mm, Pin=1000mW, f=13.5 MHz/Zoom Scan**(4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 7.347 V/m; Power Drift = 0.05 dB

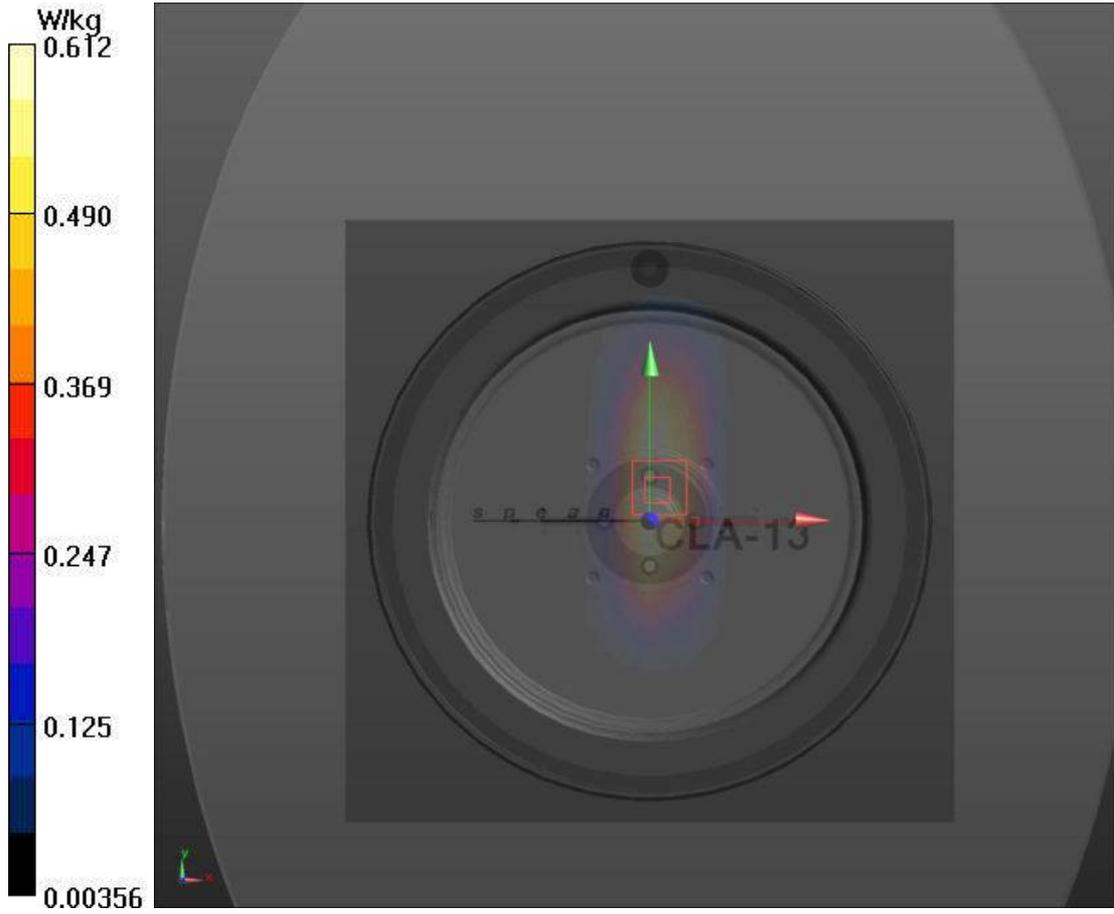
Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.532 W/kg; SAR(10 g) = 0.326 W/kg

Smallest distance from peaks to all points 3 dB below = 12.5 mm

Ratio of SAR at M2 to SAR at M1 = 47.4%

Maximum value of SAR (measured) = 0.612 W/kg



Plot 9 Measurement Report for Device, UID 0 -, Channel 0 (6500.000MHz)

Device under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	16 x 6 x 300	1046	-

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	5.00		CW, 0--	6500.000, 0	5.85	5.94	32.48

Hardware Setup

Phantom	TSL, Measured	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2072	HBBL-600-10000	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1317, 2023-09-13

Scan 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
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	N/A	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-12	2024-08-12
psSAR1g [W/kg]	24.7	28.1
psSAR10g [W/kg]	4.78	5.25
psAPD (1.0cm2, sq) [W/m2]		281
psAPD (4.0cm2, sq) [W/m2]		128
Power Drift [dB]	-0.02	0.01
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		52.6
Dist 3dB Peak [mm]		4.8

Warning(s) / Error(s)

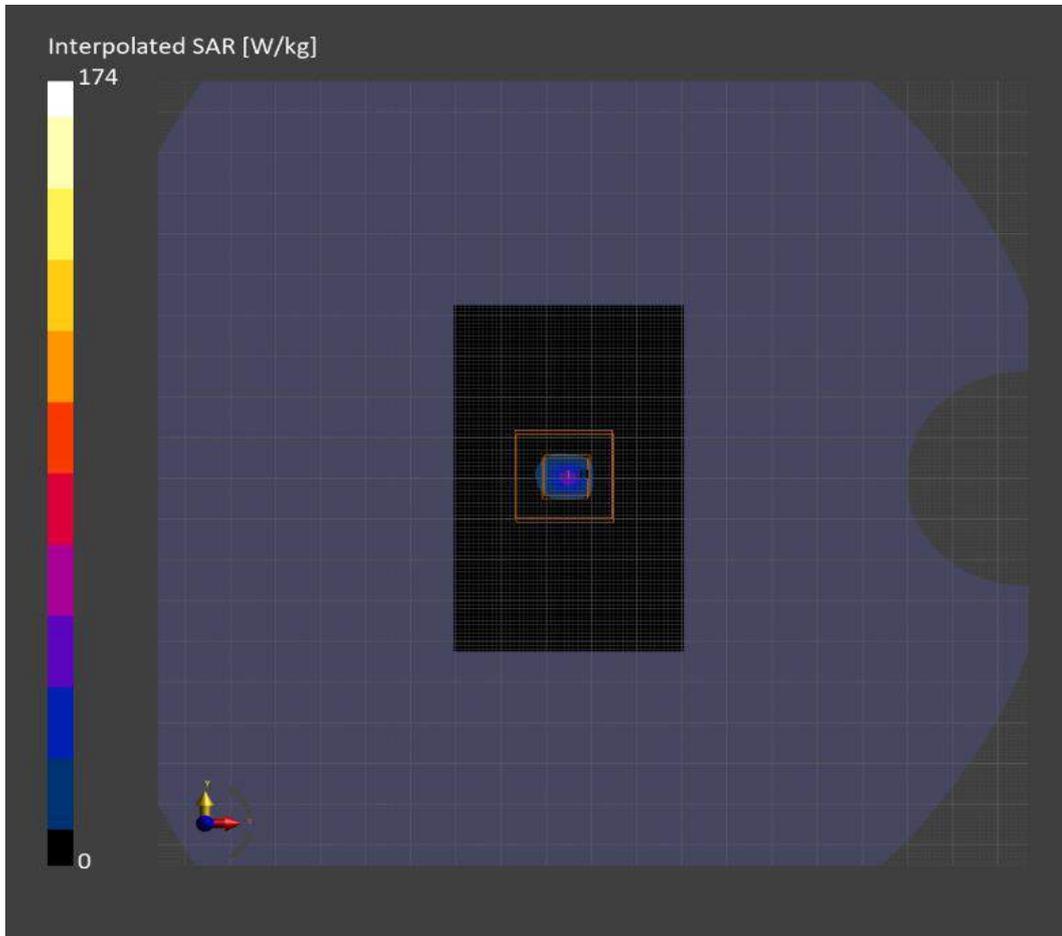
Details

Area Scan

Zoom Scan

Warning(s)

Error(s)



Plot 10 Measurement Report for Device, BACK, Validation band, CW, Channel 10000 (10000.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	100.0 x 100.0 x 172.0	1054	-

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	BACK, 10.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup

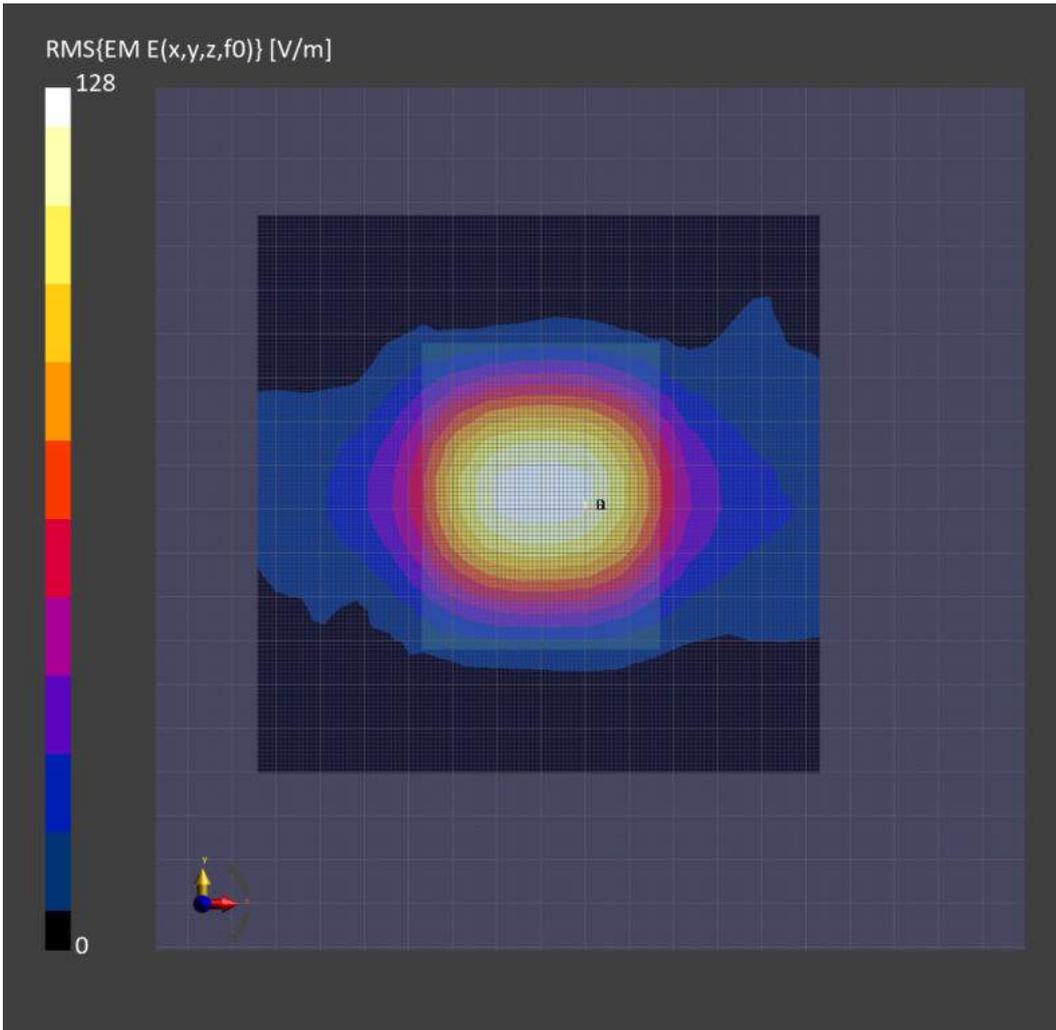
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9642_F1-55GHz, 2024-07-10	DAE4 Sn1317, 2023-09-13

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
MAIA	Y

Measurement Results

Scan Type	5G Scan
Date	2024-08-13
Avg. Area [cm ²]	1.00
psPDn+ [W/m ²]	51.2
psPDtot+ [W/m ²]	51.3
psPDmod+ [W/m ²]	51.6
E _{max} [V/m]	126
Power Drift [dB]	0.03



ANNEX C: Highest Graph Results

Plot 11 802.11b Right Edge 0mm Low

Date: 2024/8/13

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.74$ S/m; $\epsilon_r = 40.90$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.62, 8.01, 8.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Edge 0mm/Low/Area Scan (7x27x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.668 W/kg

Right Edge 0mm/Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.530 V/m; Power Drift = 0.190 dB

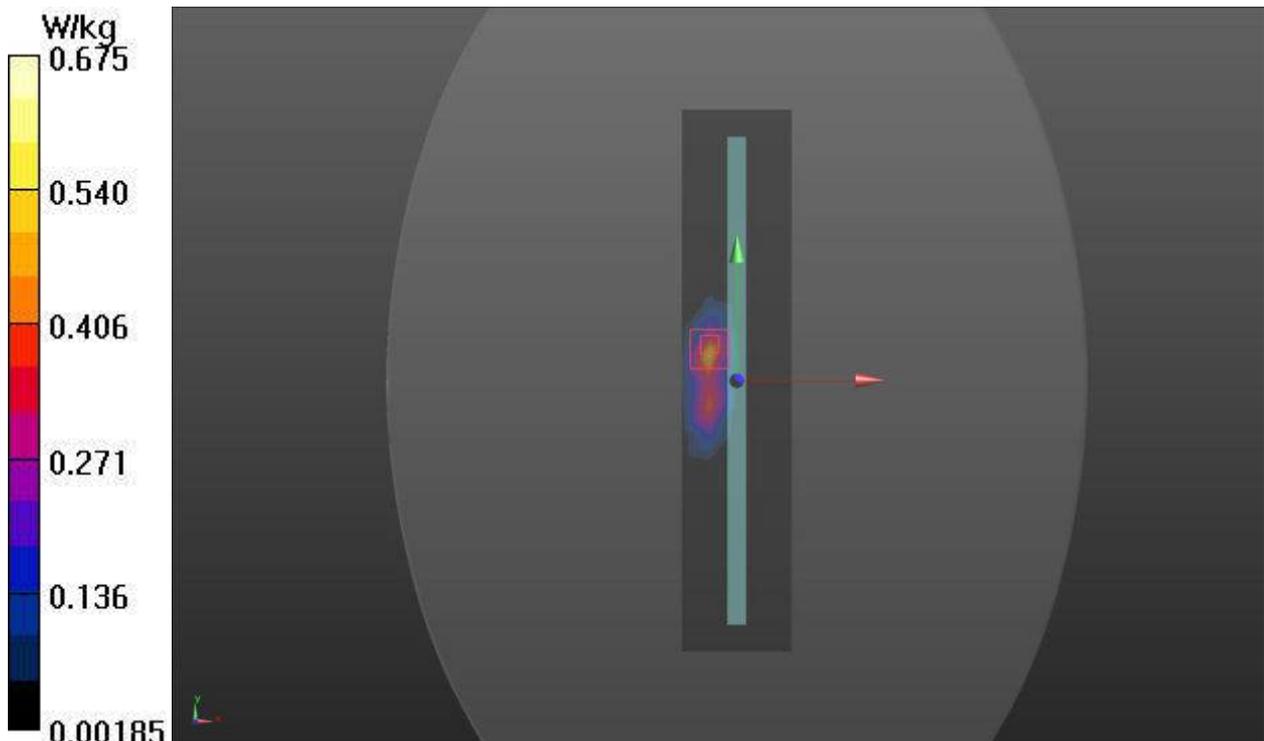
Peak SAR (extrapolated) = 1.60 W/kg

SAR(1 g) = 0.536 W/kg; SAR(10 g) = 0.208 W/kg

Smallest distance from peaks to all points 3 dB below = 15.8 mm

Ratio of SAR at M2 to SAR at M1 = 40.8%

Maximum value of SAR (measured) = 0.675 W/kg



Plot 12 802.11a Right Edge 0mm Low

Date: 2024/8/9

Communication System: UID 0, 802.11a (0); Frequency: 5745 MHz;Duty Cycle: 1:1

Medium parameters used: $f = 5745$ MHz; $\sigma = 5.04$ S/m; $\epsilon_r = 33.77$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.31, 5.59, 5.68); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Edge 0mm/Low/Area Scan (8x32x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.613 W/kg

Right Edge 0mm/Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.705 V/m; Power Drift = 0.034 dB

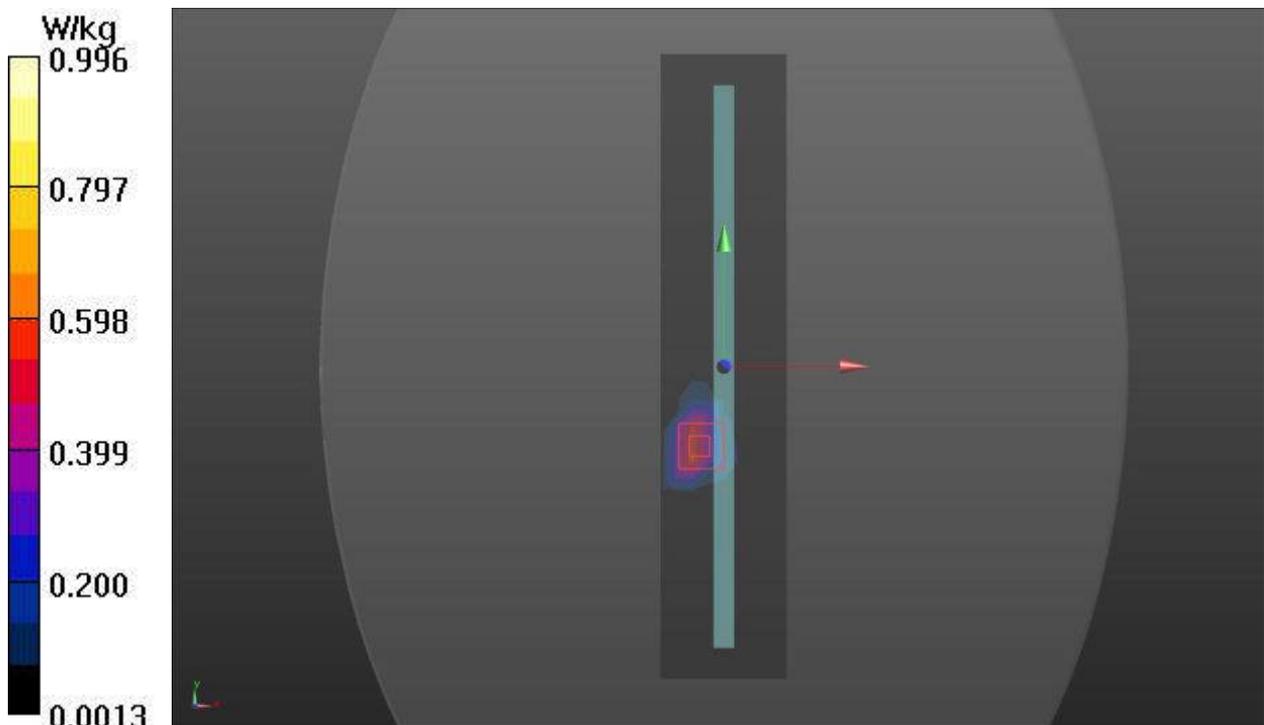
Peak SAR (extrapolated) = 2.30 W/kg

SAR(1 g) = 0.728 W/kg; SAR(10 g) = 0.223 W/kg

Smallest distance from peaks to all points 3 dB below = 9.8 mm

Ratio of SAR at M2 to SAR at M1 = 55.6%

Maximum value of SAR (measured) = 0.996 W/kg



Plot 13 Bluetooth DH5 Right Edge 0mm Low

Date: 2024/8/13

Communication System: UID 0, BT (0); Frequency: 2402 MHz; Duty Cycle: 1:1.30

Medium parameters used (interpolated): $f = 2402$ MHz; $\sigma = 1.73$ S/m; $\epsilon_r = 40.93$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.62, 8.01, 8.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Edge 0mm/Low/Area Scan (7x27x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.131 W/kg

Right Edge 0mm/Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.802 V/m; Power Drift = 0.016 dB

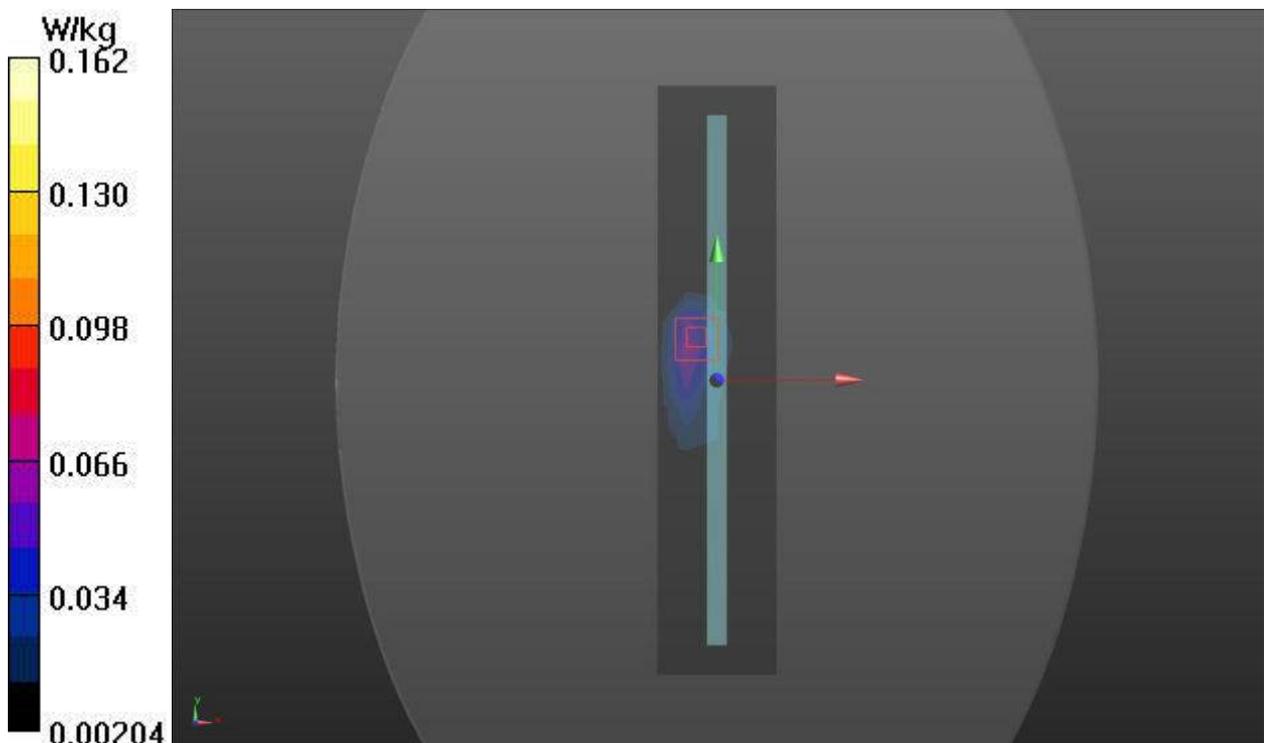
Peak SAR (extrapolated) = 2.23 W/kg

SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.059 W/kg

Smallest distance from peaks to all points 3 dB below = 14.8 mm

Ratio of SAR at M2 to SAR at M1 = 51.4%

Maximum value of SAR (measured) = 0.162 W/kg



Plot 14 Measurement Report for Device, EDGE RIGHT, U-NII-7, IEEE 802.11ax (20MHz, MCS0, 90pc duty cycle), Channel 175 (6825.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	268.0 x 180.0 x 15.0	XBBA2FC1700002	10" Tablet Computer

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	EDGE RIGHT, 0.00	U-NII-7	WLAN, 10671-AAC	6825.000, 175	6.03	6.29	31.91

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - xxxx	HBBL-600-10000	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1317, 2023-09-13

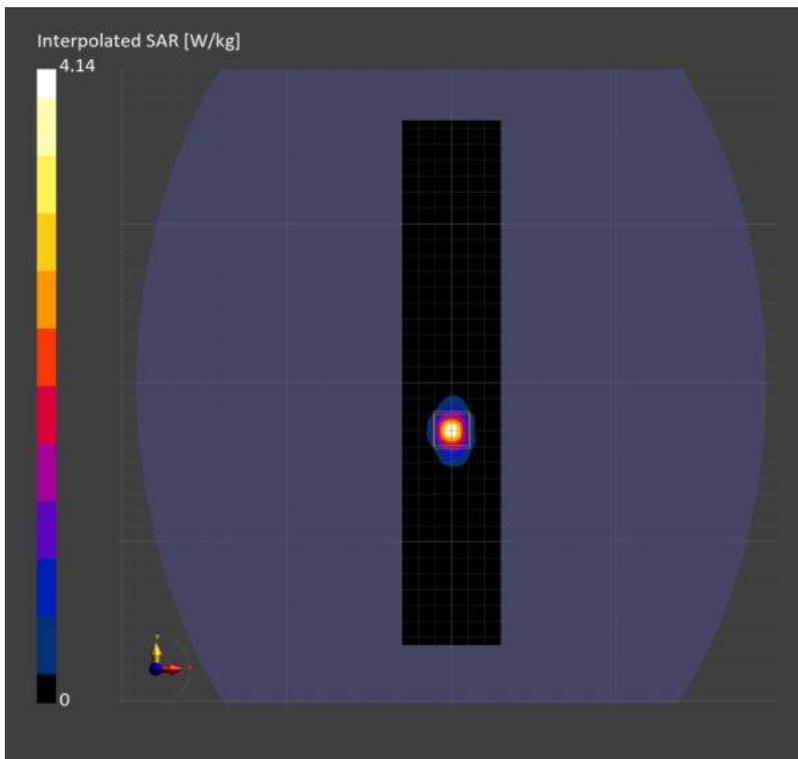
Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	210.0 x 45.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-03	2024-08-03
psSAR1g [W/Kg]	0.663	0.743

psSAR10g [W/Kg]	0.171	0.191
Power Drift [dB]	-0.01	-0.18
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		49.1
Dist 3dB Peak [mm]		6.1



Plot 15 802.11b Right Edge 7mm Mid

Date: 2024/8/13

Communication System: UID 0, 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.76$ S/m; $\epsilon_r = 40.81$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(7.62, 8.01, 8.14); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Edge 7mm/Mid/Area Scan (7x27x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.21 W/kg

Right Edge 7mm/Mid/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.540 V/m; Power Drift = 0.01 dB

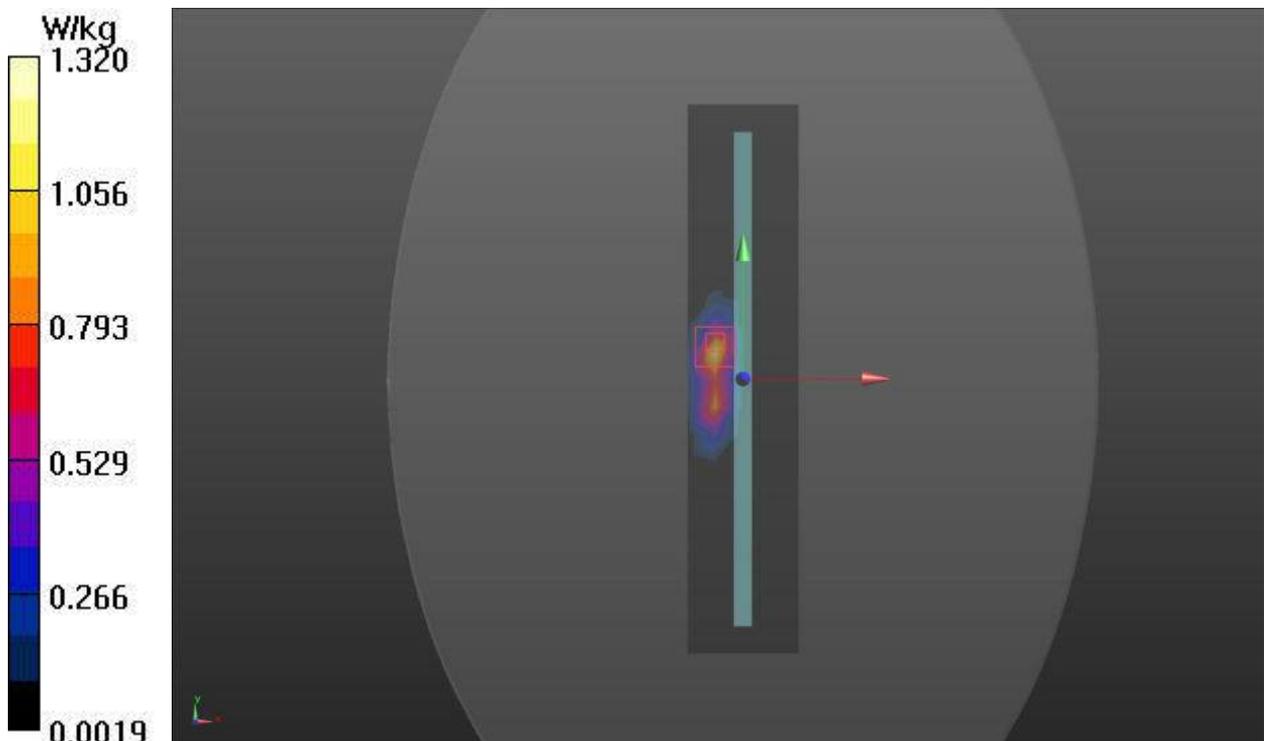
Peak SAR (extrapolated) = 1.76 W/kg

SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.612 W/kg

Smallest distance from peaks to all points 3 dB below = 16.8 mm

Ratio of SAR at M2 to SAR at M1 = 52.8%

Maximum value of SAR (measured) = 1.32 W/kg



Plot 16 802.11a Right Edge 7mm Low

Date: 2024/8/7

Communication System: UID 0, 802.11a (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.76$ S/m; $\epsilon_r = 34.20$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7689; ConvF(5.33, 5.60, 5.70); Calibrated: 2024/6/4

Electronics: DAE4 SN1317; Calibrated: 2023/9/13

Phantom: ELI v4.0; Type: QDOVA001BB;

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Edge 7mm/Low/Area Scan (8x32x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.956 W/kg

Right Edge 7mm/Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.512 V/m; Power Drift = 0.113 dB

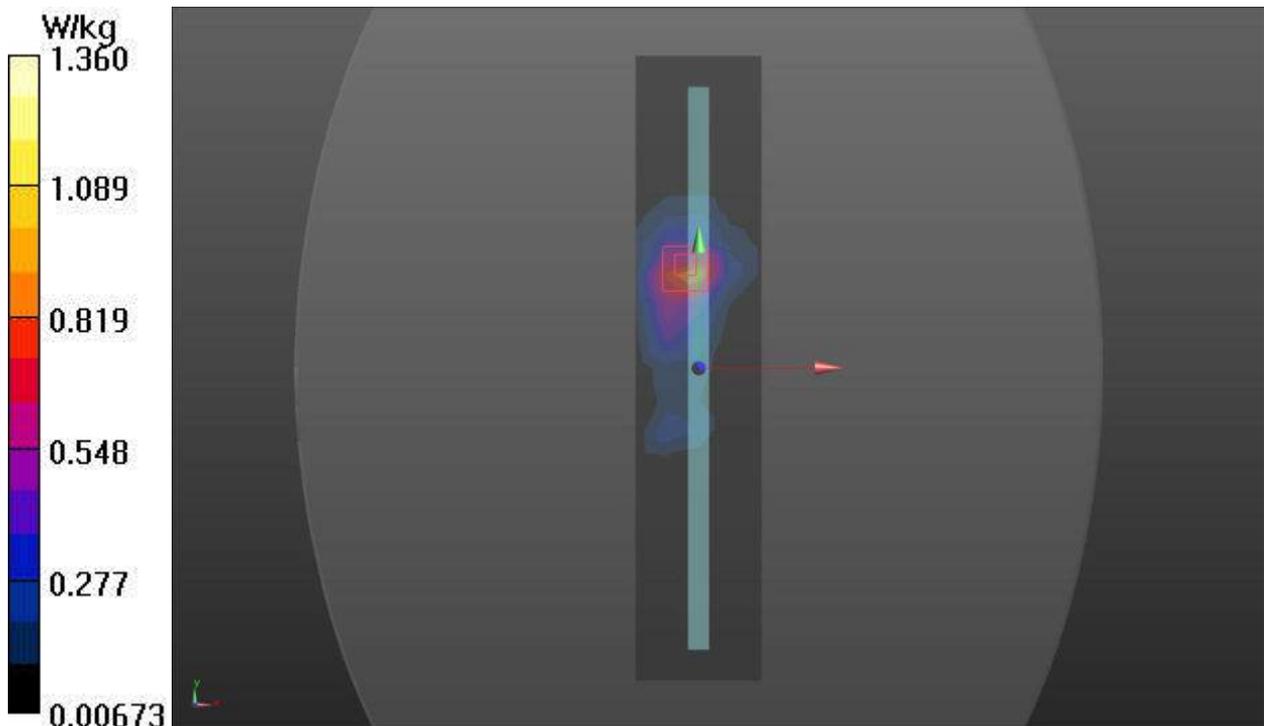
Peak SAR (extrapolated) = 3.44 W/kg

SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.432 W/kg

Smallest distance from peaks to all points 3 dB below = 10.8 mm

Ratio of SAR at M2 to SAR at M1 = 40.5%

Maximum value of SAR (measured) = 1.36 W/kg



Plot 17 Measurement Report for Device, EDGE RIGHT, U-NII-7, IEEE 802.11ax (20MHz, MCS0, 90pc duty cycle), Channel 143 (6665.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	268.0 x 180.0 x 15.0	XBBA2FC1700002	10" Tablet Computer

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	EDGE RIGHT, 7.00	U-NII-7	WLAN, 10671-AAC	6665.000, 143	6.03	6.11	32.17

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
ELI V8.0 (20deg probe tilt) - xxxx	HBBL-600-10000 Charge:xxxx, --	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1317, 2023-09-13

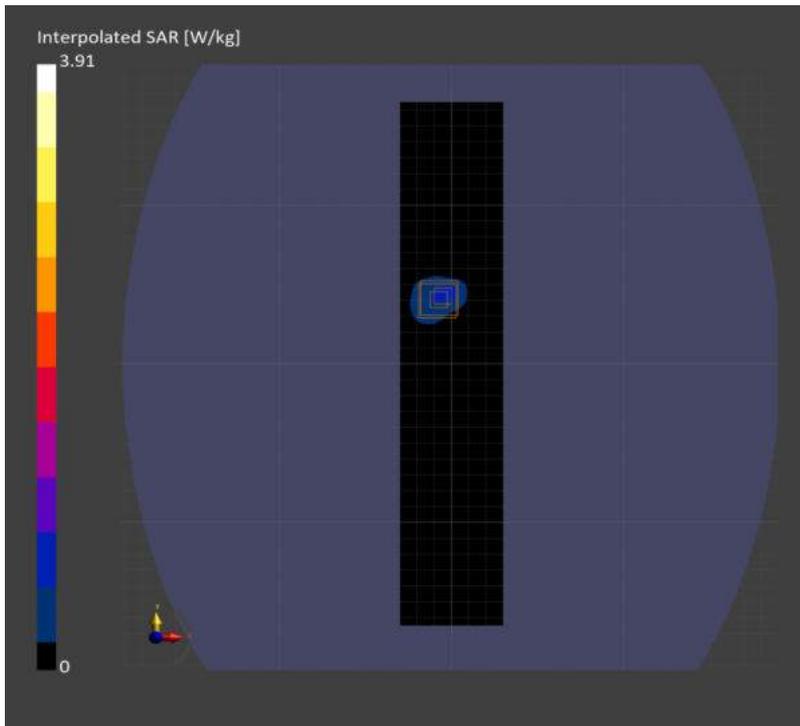
Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	210.0 x 45.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	N/A
Surface Detection	VMS + 6p	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-03	2024-08-03
psSAR1g [W/Kg]	0.607	0.763

psSAR10g [W/Kg]	0.232	0.258
Power Drift [dB]	0.05	0.02
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		48.9
Dist 3dB Peak [mm]		8.2



Plot 18 Measurement Report for Device, EDGE RIGHT, U-NII-8, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 207 (6985.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	268.0 x 180.0 x 15.0	XBBA2FC1700002	10" Tablet Computer

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	EDGE RIGHT, 2.00	U-NII-8	WLAN, 10743-AAC	6985.0, 207	1.0

Hardware Setup

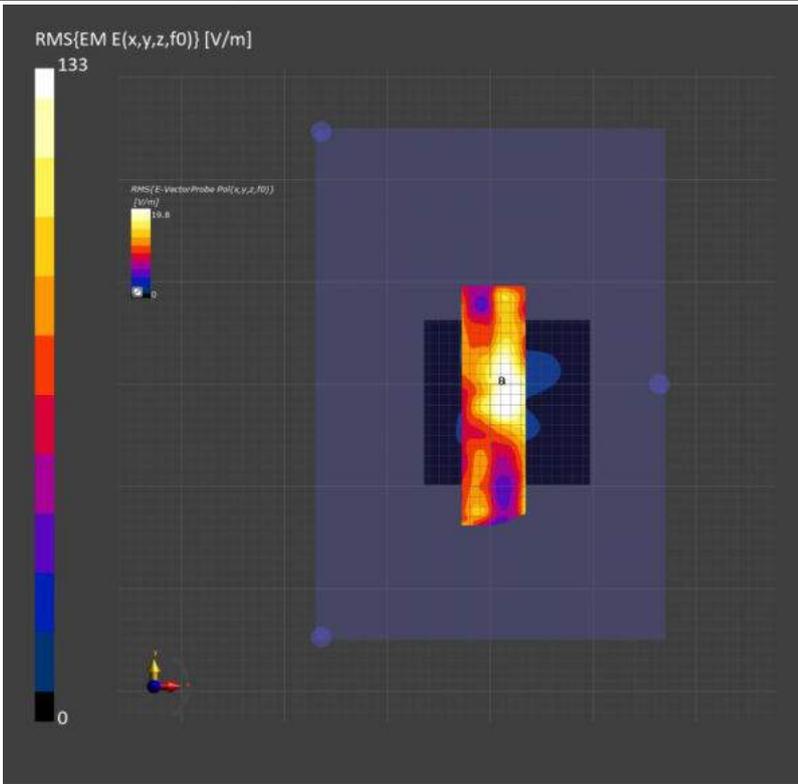
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9642_F1-55GHz, 2024-07-10	DAE4 Sn1317, 2023-09-13

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	90.0 x 90.0
Grid Steps [lambda]	0.005 x 0.005
Sensor Surface [mm]	4.0
MAIA	Y

Measurement Results

Scan Type	5G Scan
Date	2024-08-13
Avg. Area [cm ²]	4.00
psPDn+ [W/m ²]	3.47
psPDtot+ [W/m ²]	7.12
psPDmod+ [W/m ²]	14.6
E _{max} [V/m]	133
Power Drift [dB]	0.082



ANNEX D: Probe Calibration Certificate (SN: 7689)

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 **TA**
 Shanghai

Certificate No. **EX-7689_Jun24**

CALIBRATION CERTIFICATE

Object **EX3DV4 - SN:7689**

Calibration procedure(s) **QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6, QA CAL-25.v8**
 Calibration procedure for dosimetric E-field probes

Calibration date **June 04, 2024**

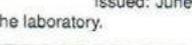
This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

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

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	26-Mar-24 (No. 217-04036/04037)	Mar-25
Power sensor NRP-Z91	SN: 103244	26-Mar-24 (No. 217-04036)	Mar-25
OCP DAK-3.5 (weighted)	SN: 1249	05-Oct-23 (OCP-DAK3.5-1249_Oct23)	Oct-24
OCP DAK-12	SN: 1016	05-Oct-23 (OCP-DAK12-1016_Oct23)	Oct-24
Reference 20 dB Attenuator	SN: CC2552 (20x)	26-Mar-24 (No. 217-04046)	Mar-25
DAE4	SN: 660	23-Feb-24 (No. DAE4-660_Feb24)	Feb-25
Reference Probe EX3DV4	SN: 7349	03-Nov-23 (No. EX3-7349_Nov23)	Nov-24

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

	Name	Function	Signature
Calibrated by	Joanna Lieshaj	Laboratory Technician	
Approved by	Sven Kühn	Technical Manager	

Issued: June 4, 2024

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

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



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

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

Accreditation No.: **SCS 0108**

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:7689

June 04, 2024

Parameters of Probe: EX3DV4 - SN:7689

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k = 2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	0.56	0.61	0.60	±10.1%
DCP (mV) ^B	102.7	103.5	104.8	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB $\sqrt{\mu\text{V}}$	C	D dB	VR mV	Max dev.	Max Unc ^E k = 2
0	CW	X	0.00	0.00	1.00	0.00	123.5	±1.1%	±4.7%
		Y	0.00	0.00	1.00		119.7		
		Z	0.00	0.00	1.00		140.9		
10352	Pulse Waveform (200Hz, 10%)	X	1.60	61.02	6.64	10.00	60.0	±2.5%	±9.6%
		Y	1.42	60.16	6.02		60.0		
		Z	1.73	61.65	6.95		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	0.79	60.00	4.97	6.99	80.0	±2.2%	±9.6%
		Y	0.82	60.00	4.79		80.0		
		Z	10.00	72.00	9.00		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	0.32	149.82	0.95	3.98	95.0	±2.8%	±9.6%
		Y	20.00	72.00	7.00		95.0		
		Z	0.20	139.27	0.20		95.0		
10355	Pulse Waveform (200Hz, 60%)	X	0.29	60.00	2.80	2.22	120.0	±1.7%	±9.6%
		Y	8.70	158.89	15.99		120.0		
		Z	9.34	158.65	18.11		120.0		
10387	QPSK Waveform, 1 MHz	X	0.72	66.25	13.93	1.00	150.0	±3.8%	±9.6%
		Y	0.59	64.27	12.38		150.0		
		Z	0.79	67.02	14.20		150.0		
10388	QPSK Waveform, 10 MHz	X	1.50	66.93	14.73	0.00	150.0	±1.3%	±9.6%
		Y	1.37	65.88	13.93		150.0		
		Z	1.55	67.15	14.85		150.0		
10396	64-QAM Waveform, 100 kHz	X	1.72	64.78	16.18	3.01	150.0	±0.9%	±9.6%
		Y	1.71	64.79	15.98		150.0		
		Z	1.75	65.00	16.24		150.0		
10399	64-QAM Waveform, 40 MHz	X	2.95	66.69	15.41	0.00	150.0	±1.6%	±9.6%
		Y	2.86	66.30	15.09		150.0		
		Z	2.87	66.14	15.14		150.0		
10414	WLAN CCDF, 64-QAM, 40 MHz	X	3.96	66.18	15.49	0.00	150.0	±3.0%	±9.6%
		Y	3.86	65.92	15.26		150.0		
		Z	4.05	66.38	15.59		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:7689

June 04, 2024

Parameters of Probe: EX3DV4 - SN:7689

Sensor Model Parameters

	C1 fF	C2 fF	α V ⁻¹	T1 msV ⁻²	T2 msV ⁻¹	T3 ms	T4 V ⁻²	T5 V ⁻¹	T6
x	10.8	78.12	33.65	2.19	0.00	4.90	0.42	0.00	1.00
y	10.5	76.45	33.69	3.63	0.00	4.91	0.50	0.00	1.00
z	11.2	81.08	33.46	3.12	0.00	4.90	0.41	0.00	1.00

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	-2.4°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

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

EX3DV4 - SN:7689

June 04, 2024

Parameters of Probe: EX3DV4 - SN:7689

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 ^H (k = 2)
13	55.0	0.75	14.55	15.41	17.14	0.00	1.25	±13.3%
750	41.9	0.89	9.58	10.07	10.24	0.34	1.27	±11.0%
835	41.5	0.90	9.44	9.92	10.09	0.34	1.27	±11.0%
1750	40.1	1.37	8.01	8.42	8.56	0.35	1.27	±11.0%
1900	40.0	1.40	7.88	8.28	8.42	0.35	1.27	±11.0%
2000	40.0	1.40	7.78	8.18	8.32	0.35	1.27	±11.0%
2300	39.5	1.67	7.65	8.04	8.17	0.35	1.27	±11.0%
2450	39.2	1.80	7.62	8.01	8.14	0.35	1.27	±11.0%
2600	39.0	1.96	7.39	7.77	7.89	0.35	1.27	±11.0%
3300	38.2	2.71	6.80	7.15	7.27	0.36	1.27	±13.1%
3500	37.9	2.91	6.76	7.11	7.22	0.36	1.27	±13.1%
3700	37.7	3.12	6.71	7.05	7.17	0.36	1.27	±13.1%
3900	37.5	3.32	6.51	6.84	6.95	0.37	1.27	±13.1%
4100	37.2	3.53	6.39	6.72	6.83	0.37	1.27	±13.1%
4400	36.9	3.84	6.31	6.63	6.74	0.37	1.27	±13.1%
4600	36.7	4.04	6.28	6.59	6.70	0.37	1.27	±13.1%
4800	36.4	4.25	6.21	6.53	6.64	0.37	1.27	±13.1%
4950	36.3	4.40	6.11	6.42	6.53	0.36	1.27	±13.1%
5250	35.9	4.71	5.87	6.17	6.27	0.33	1.27	±13.1%
5600	35.5	5.07	5.33	5.60	5.70	0.29	1.27	±13.1%
5750	35.4	5.22	5.31	5.59	5.68	0.28	1.27	±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 4–9 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

^F The probes are calibrated using tissue simulating liquids (TSL) that deviate for ϵ and σ by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10% if SAR correction is applied.

^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.

^H The stated uncertainty is the total calibration uncertainty (k = 2) of Norm-ConvF. Therefore, The uncertainty stated is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

EX3DV4 - SN:7689

June 04, 2024

Parameters of Probe: EX3DV4 - SN:7689

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 ^H (k = 2)
6500	34.5	6.07	6.03	6.33	6.44	0.20	1.27	±18.6%

^C Frequency validity at 6.5 GHz is -600/+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 The probes are calibrated using tissue simulating liquids (TSL) that deviate for ϵ and σ by less than ±10% from the target values (typically better than ±6%) and are valid for TSL with deviations of up to ±10%.

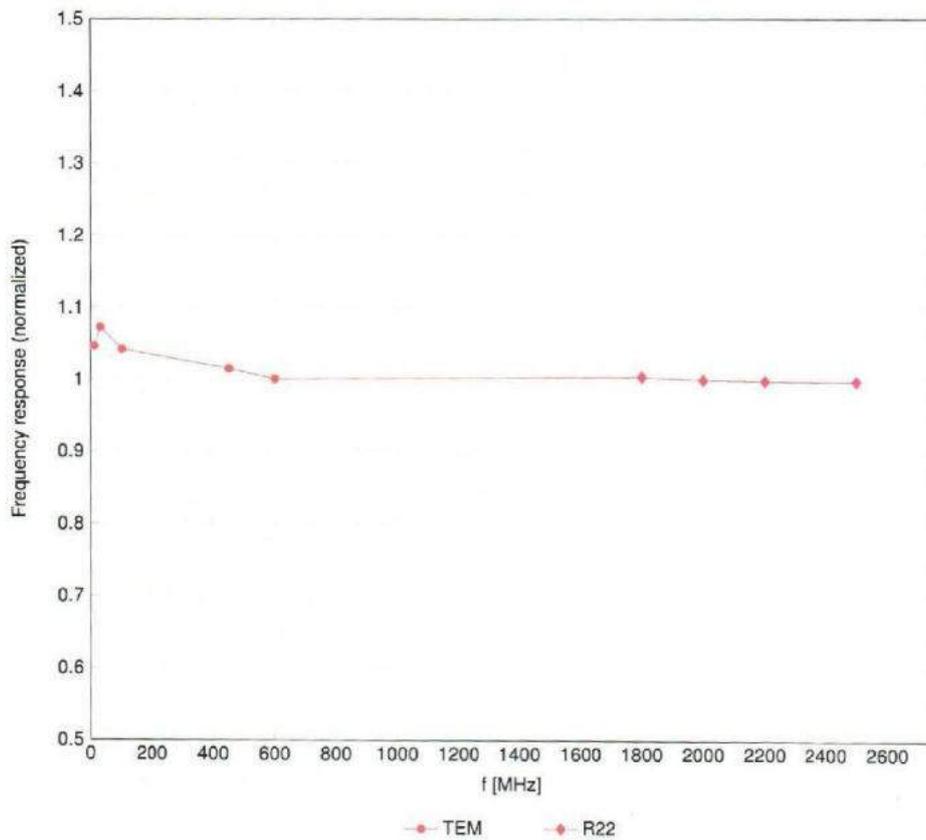
^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz; below ±2% for frequencies between 3–6 GHz; and below ±4% for frequencies between 6–10 GHz at any distance larger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

^H The stated uncertainty is the total calibration uncertainty (k = 2) of Norm-ConvF. Therefore, The uncertainty stated is equivalent to the uncertainty component with the symbol CF in Table 9 of IEC/IEEE 62209-1528:2020.

EX3DV4 - SN:7689

June 04, 2024

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

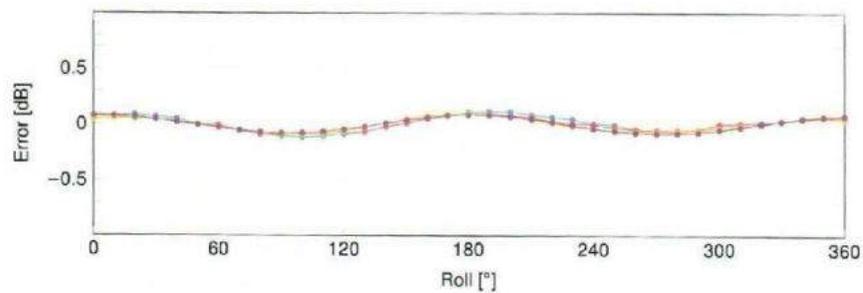
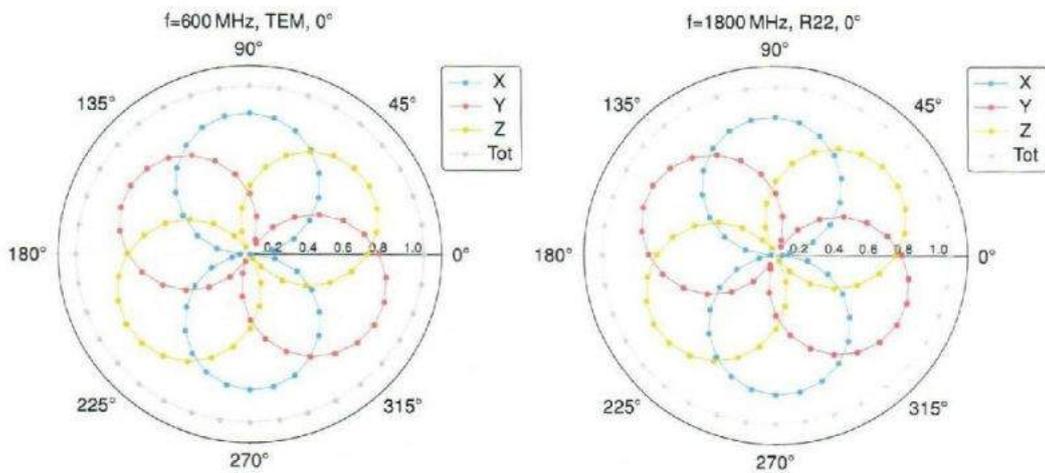


Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

EX3DV4 - SN:7689

June 04, 2024

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



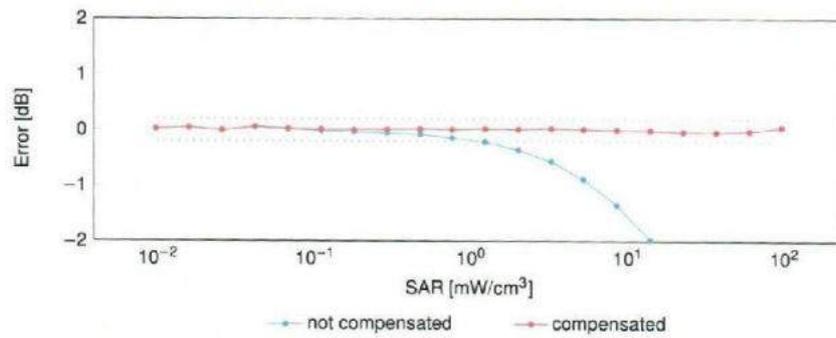
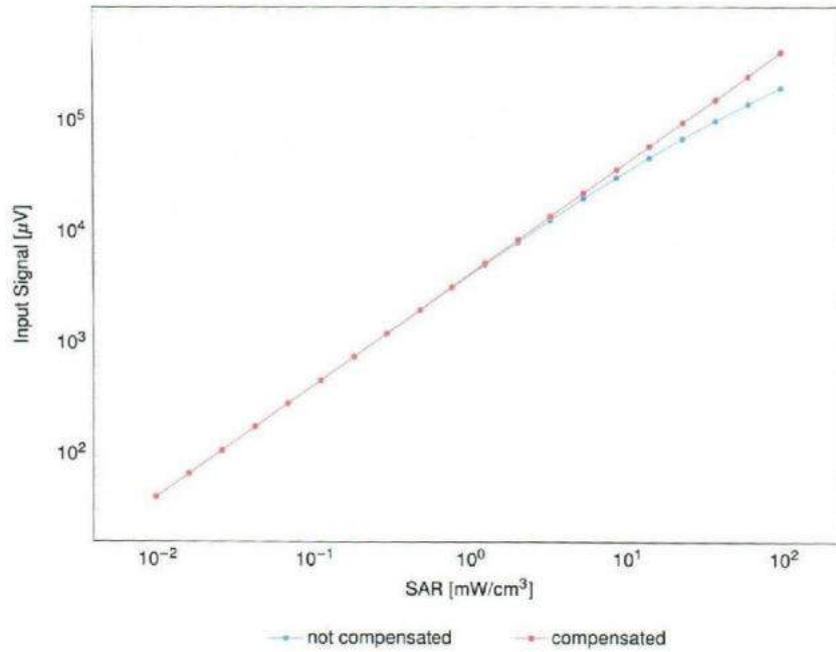
Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

EX3DV4 - SN:7689

June 04, 2024

Dynamic Range f(SAR_{head})

(TEM cell, $f_{eval} = 1900\text{MHz}$)

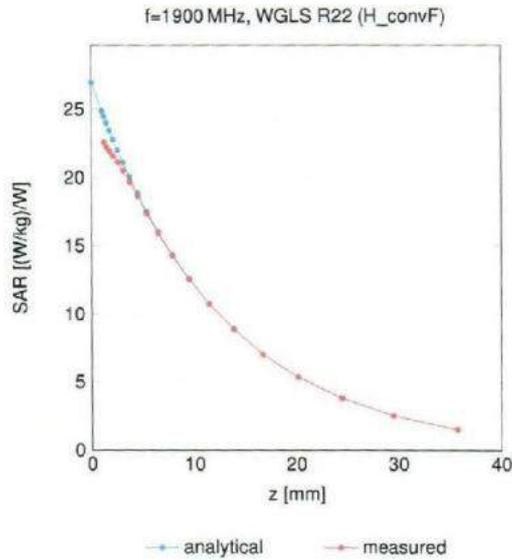


Uncertainty of Linearity Assessment: $\pm 0.6\%$ (k=2)

EX3DV4 - SN:7689

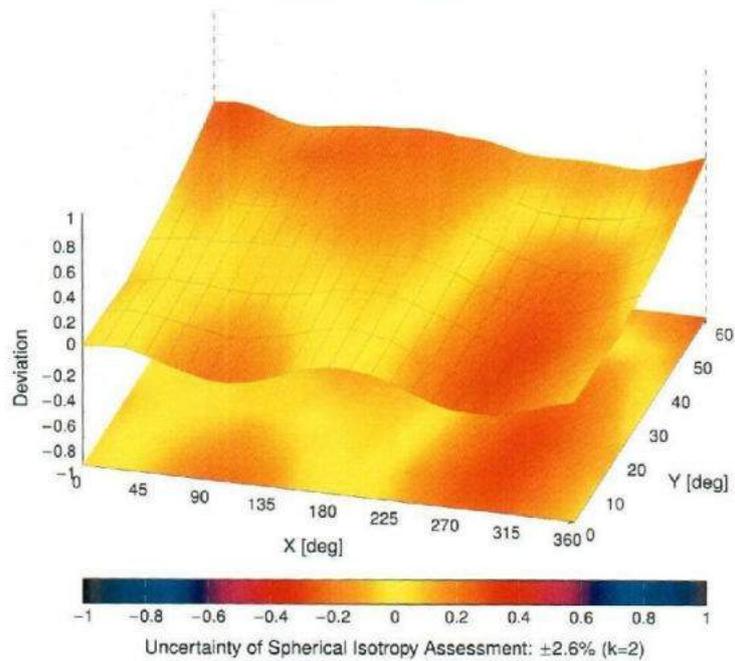
June 04, 2024

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ, θ), f = 900 MHz



EX3DV4 - SN:7689

June 04, 2024

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k = 2
0		CW	CW	0.00	±4.7
10010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.6
10011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	±9.6
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	±9.6
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	±9.6
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	±9.6
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	±9.6
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	±9.6
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	±9.6
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	±9.6
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	±9.6
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	±9.6
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	±9.6
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	±9.6
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	±9.6
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	±9.6
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	±9.6
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	±9.6
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	±9.6
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	±9.6
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	±9.6
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	±9.6
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	±9.6
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	±9.6
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	±9.6
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	±9.6
10062	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.6
10063	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
10064	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
10065	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
10066	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.6
10067	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.6
10068	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.6
10069	CAE	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	±9.6
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	±9.6
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	±9.6
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	±9.6
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	±9.6
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	±9.6
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	±9.6
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	±9.6
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	±9.6
10098	CAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
10100	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	±9.6
10101	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10102	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.80	±9.6
10103	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.6
10104	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
10105	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
10108	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
10109	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10110	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.6
10111	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6

EX3DV4 - SN:7689

June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k = 2
10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10MHz, 64-QAM)	LTE-FDD	6.59	±9.6
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10114	CAE	IEEE 802.11n (HT Greenfield, 13.5Mbps, BPSK)	WLAN	8.10	±9.6
10115	CAE	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	±9.6
10116	CAE	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6
10117	CAE	IEEE 802.11n (HT Mixed, 13.5Mbps, BPSK)	WLAN	8.07	±9.6
10118	CAE	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6
10119	CAE	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6
10140	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6
10142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9.6
10144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
10149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6
10152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±9.6
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6
10160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6
10161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10162	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.6
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±9.6
10169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6
10170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.6
10176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5MHz, QPSK)	LTE-FDD	5.73	±9.6
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±9.6
10182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3MHz, QPSK)	LTE-FDD	5.73	±9.6
10185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3MHz, 16-QAM)	LTE-FDD	6.51	±9.6
10186	AAF	LTE-FDD (SC-FDMA, 1 RB, 3MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10189	AAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10193	CAE	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
10194	CAE	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
10195	CAE	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
10196	CAE	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±9.6
10197	CAE	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6
10198	CAE	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6
10219	CAE	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
10220	CAE	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
10221	CAE	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6
10222	CAE	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6
10223	CAE	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6
10224	CAE	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6

EX3DV4 - SN:7689

June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k = 2
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	±9.6
10229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±9.6
10232	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	±9.6
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±9.6
10238	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±9.6
10241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±9.6
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	±9.6
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±9.6
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	±9.6
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	±9.6
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±9.6
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
10254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6
10255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±9.6
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±9.6
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±9.6
10270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	±9.6
10274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
10275	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6
10278	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	11.81	±9.6
10279	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	PHS	12.18	±9.6
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	±9.6
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	±9.6
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	±9.6
10297	AAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6
10298	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6
10299	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6
10300	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10301	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	WIMAX	12.03	±9.6
10302	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WIMAX	12.57	±9.6
10303	AAA	IEEE 802.16e WIMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)	WIMAX	12.52	±9.6
10304	AAA	IEEE 802.16e WIMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WIMAX	11.86	±9.6
10305	AAA	IEEE 802.16e WIMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WIMAX	15.24	±9.6
10306	AAA	IEEE 802.16e WIMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)	WIMAX	14.67	±9.6

EX3DV4 - SN:7689

June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k = 2
10307	AAA	IEEE 802.16e WiMAX (29.18, 10 ms, 10MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	±9.6
10308	AAA	IEEE 802.16e WiMAX (29.18, 10 ms, 10MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6
10309	AAA	IEEE 802.16e WiMAX (29.18, 10 ms, 10MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	±9.6
10310	AAA	IEEE 802.16e WiMAX (29.18, 10 ms, 10MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	±9.6
10311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15MHz, QPSK)	LTE-FDD	8.08	±9.6
10313	AAA	IDEN 1:3	IDEN	10.51	±9.6
10314	AAA	IDEN 1:6	IDEN	13.48	±9.6
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10317	AAE	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	±9.6
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	±9.6
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	±9.6
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	±9.6
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	±9.6
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.6
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	±9.6
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	±9.6
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	±9.6
10400	AAF	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	±9.6
10401	AAF	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	±9.6
10402	AAF	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	±9.6
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.6
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	±9.6
10406	AAB	CDMA2000, RC3, SC32, SCH0, Full Rate	CDMA2000	5.22	±9.6
10410	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	±9.6
10414	AAA	WLAN CDDF, 64-QAM, 40 MHz	Generic	8.54	±9.6
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10417	AAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preamble)	WLAN	8.14	±9.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preamble)	WLAN	8.19	±9.6
10422	AAD	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	±9.6
10423	AAD	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	±9.6
10424	AAD	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	±9.6
10425	AAD	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	±9.6
10426	AAD	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.6
10427	AAD	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.6
10430	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	±9.6
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	±9.6
10432	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10433	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	±9.6
10435	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10447	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10448	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.53	±9.6
10449	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.51	±9.6
10450	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.6
10451	AAB	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
10456	AAD	IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	±9.6
10457	AAB	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.6
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
10460	AAB	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.6
10461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	±9.6
10463	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10465	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10466	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10467	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10468	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10469	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10470	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10471	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6

EX3DV4 - SN:7689

June 04, 2024

UID	Rev	Communication System Name	Group	PAR (dB)	Unc ^E k = 2
10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10477	AAG	LTE-TDD (SC-FDMA, 1 RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10478	AAG	LTE-TDD (SC-FDMA, 1 RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10480	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	±9.6
10481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	±9.6
10483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	±9.6
10484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±9.6
10485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±9.6
10486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	±9.6
10487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	±9.6
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 10MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	±9.6
10489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	±9.6
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 20MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	±9.6
10496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	±9.6
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	±9.6
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	±9.6
10504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10506	AAG	LTE-TDD (SC-FDMA, 100% RB, 10MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±9.6
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	±9.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	±9.6
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	±9.6
10514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10515	AAA	IEEE 802.11b WiFi 2.4GHz (DSSS, 2Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10516	AAA	IEEE 802.11b WiFi 2.4GHz (DSSS, 5.5Mbps, 99pc duty cycle)	WLAN	1.57	±9.6
10517	AAA	IEEE 802.11b WiFi 2.4GHz (DSSS, 11Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10518	AAD	IEEE 802.11a/h WiFi 5GHz (OFDM, 9Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10519	AAD	IEEE 802.11a/h WiFi 5GHz (OFDM, 12Mbps, 99pc duty cycle)	WLAN	8.39	±9.6
10520	AAD	IEEE 802.11a/h WiFi 5GHz (OFDM, 18Mbps, 99pc duty cycle)	WLAN	8.12	±9.6
10521	AAD	IEEE 802.11a/h WiFi 5GHz (OFDM, 24Mbps, 99pc duty cycle)	WLAN	7.97	±9.6
10522	AAD	IEEE 802.11a/h WiFi 5GHz (OFDM, 36Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10523	AAD	IEEE 802.11a/h WiFi 5GHz (OFDM, 48Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10524	AAD	IEEE 802.11a/h WiFi 5GHz (OFDM, 54Mbps, 99pc duty cycle)	WLAN	8.27	±9.6
10525	AAD	IEEE 802.11ac WiFi (20MHz, MCS0, 99pc duty cycle)	WLAN	8.36	±9.6
10526	AAD	IEEE 802.11ac WiFi (20MHz, MCS1, 99pc duty cycle)	WLAN	8.42	±9.6
10527	AAD	IEEE 802.11ac WiFi (20MHz, MCS2, 99pc duty cycle)	WLAN	8.21	±9.6
10528	AAD	IEEE 802.11ac WiFi (20MHz, MCS3, 99pc duty cycle)	WLAN	8.36	±9.6
10529	AAD	IEEE 802.11ac WiFi (20MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±9.6
10531	AAD	IEEE 802.11ac WiFi (20MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±9.6
10532	AAD	IEEE 802.11ac WiFi (20MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10533	AAD	IEEE 802.11ac WiFi (20MHz, MCS8, 99pc duty cycle)	WLAN	8.38	±9.6
10534	AAD	IEEE 802.11ac WiFi (40MHz, MCS0, 99pc duty cycle)	WLAN	8.45	±9.6
10535	AAD	IEEE 802.11ac WiFi (40MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.6
10536	AAD	IEEE 802.11ac WiFi (40MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9.6
10537	AAD	IEEE 802.11ac WiFi (40MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
10538	AAD	IEEE 802.11ac WiFi (40MHz, MCS4, 99pc duty cycle)	WLAN	8.54	±9.6
10540	AAD	IEEE 802.11ac WiFi (40MHz, MCS6, 99pc duty cycle)	WLAN	8.39	±9.6