TEST REPORT

Applicant	Play For Dream (Shanghai) Technologies Co., Ltd.
FCC ID	2BMM9-MRD3A0
Product	PLAY FOR DREAM MR
Brand	PLAY FOR DREAM
Model	PFDM D3
Report No.	R2411A1737-S1V4
Issue Date	April 3, 2025

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.

Prepared by: Wei Fangying *Approved by: Xu Kai*

Eurofins TA Technology (Shanghai) Co., Ltd.

Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
TEL: +86-021-50791141/2/3
FAX: +86-021-50791141/2/3-8000

Table of Contents

Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	January 15, 2025
Rev.1	Update description.	January 17, 2025
Rev.2	Update description.	January 17, 2025
Rev.3	Update description.	February 14, 2025
Rev.4	Update description.	April 3, 2025
Note: This revised report (Report No.: R2411A1737-S1V4) supersedes and replaces the previously issued report (Report No.: R2411A1737-S1V3). Please discard or destroy the previously issued report and dispose of it accordingly.		

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.
Address:	Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Xu Kai
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	https://www.eurofins.com/electrical-and-electronics
E-mail:	Kain.Xu@cpt.eurofinscn.com

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)	
	Head SAR 1g(0mm)	Extremity SAR 10g(0mm)
Wi-Fi 2.4GHz	0.236	0.973
Wi-Fi 5GHz	0.504	1.243
Wi-Fi 6GHz	0.107	0.292
Bluetooth	NA	NA
nRF 2.4GHz	NA	NA
Mode	**Highest PD (W/m^2@$4cm^2$)**	
	Test Distance: 2 mm	**Test Distance: λ/5 mm**
Wi-Fi 6GHz	6.433	3.405

Date of Testing: November 25, 2024 ~ December 28, 2024
Date of Sample Received: November 19, 2024

Note:

1. The device is in compliance with Uncontrolled Environment /General Population exposure limits (1.6 W/kg for Head SAR 1g, 4.0 W/kg for Extremity SAR 10g, 10 W/m^2@4 cm^2 for PD) specified in ANSI C95.1: 1992/IEEE C95.1: 1991, FCC 47 CFR Part 1 1.1310, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and IEC/IEEE 62209-1528:2020.
2. Stand-alone SAR evaluation is not required for Bluetooth and nRF 2.4GHz, more details information see section 10.2.
3. 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	Head SAR 1g(0mm)	Extremity SAR 10g(0mm)
Highest Simultaneous Transmission SAR (W/kg)	1.444	2.322
Note: The detail for simultaneous transmission consideration is described in chapter 10.5.		

3 Description of Equipment Under Test

Client Information

Applicant	Play For Dream (Shanghai) Technologies Co., Ltd.
Applicant address	Room 501, Building No 3, Caosong Road No.1, Xingiao Town, Songjiang District, Shanghai, China
Manufacturer	Play For Dream (Shanghai) Technologies Co., Ltd.
Manufacturer address	Room 501, Building No 3, Caosong Road No.1, Xingiao Town, Songjiang District, Shanghai, China

General Technologies

EUT Stage	Identical Prototype
Model	PFDM D3
Lab internal SN	R2411A1737/S01
Hardware Version	4.0
Software Version	D3_DEV_3.0.1.290
Antenna Type	Internal Antenna
EUT Accessory	
Adapter	Manufacturer: Shenzhen Kosun Industrial Co., Ltd. Model: 623005
Data Cable	Manufacturer: Shenzhen Zhishang Technology Co., LTD 1200±20mm, Shielded
Note: 1. 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	2.4GHz	DSSS, OFDM	802.11b/g/n HT20/ax HE20/be EHT20	2412 ~ 2462	2412 ~ 2462
		OFDM	802.11n HT40/ax HE40/be EHT40	2422 ~ 2452	2422 ~ 2452
	5GHz	OFDM; OFDMA	802.11a 802.11n HT20/ HT40 802.11ac VHT20/ VHT40/ VHT80/ VHT160 802.11ax HE20/ HE40/ HE80/ HE160 802.11be EHT20/ EHT40/ EHT80/ EHT160	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850
	6GHz	OFDMA	802.11ax HE20/ HE40/ HE80/ HE160 802.11be-EHT20/ EHT40/ EHT80/ EHT160/ EHT320	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125	5925 ~ 6425 6425 ~ 6525 6525 ~ 6875 6875 ~ 7125
	Does this device support MIMO ☒Yes (2TX, 2RX) ☐No				
nRF	2.4GHz	GFSK	--	2402 ~2480	2402 ~2480
Bluetooth	2.4GHz	Version 5.3 BR/EDR + LE		2402 ~2480	2402 ~2480

4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with

FCC 47 CFR § 2.1093
FCC 47 CFR Part 1 1.1310
ANSI C95.1: 1992
IEEE C95.1: 1991,
IEEE 1528- 2013
IEC 62479:2010
IEC/IEEE 62209-1528:2020
IEC/IEEE 63195-1:2022 (Not within Eurofins TA's scope of A2LA accreditation)
DASY8 MODULE SAR SYSTEM HANDBOOK
DASY8 MODULE mmWAVE SYSTEM HANDBOOK

the following FCC Published RF exposure KDB procedures:
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 388624 D01 Pre-Approval Guidance v13
KDB 388624 D02 Pre-Approval Guidance List v18r06

5 Operational Conditions during Test

5.1 SAR test evaluation

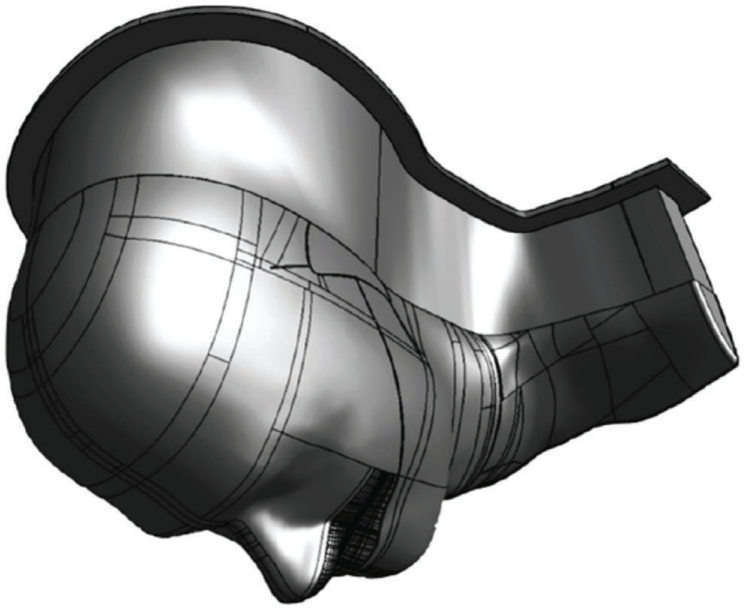
According to KDB 447498 D01 V06 Appendix A, the maximum output power of ANT2 (2.4GHz:2402MHz~2480MHz) is 8 dBm (the exemption threshold for head SAR is 10 dBm ; the exemption threshold for extremity SAR is 14 dBm ;). Therefore, ANT2 can be exempted from testing.

According to Appendix A of KDB 447498 D01 V06, the transmit power of ANT0 and ANT1 is greater than the exemption threshold. Therefore, ANT0 and ANT1 shall be tested as section 5.2 and section 5.3.

5.2 SAR test evaluation for head exposure

This device belongs to the face-worn exposure equipment, Head mounted devices are designed to be used on the face, particularly the eve regions. Since the device worn in front of the face, SAR testing was performed in a face-down phantom to evaluate all head use case conditions. SAR was evaluated with a separation distance of 0 mm between the device and face down phantom.

The SAM face-down phantom shown below is recommended for devices where the exposure is at the front side of the head. It is the same as the SAM phantom specified, but oriented with the front of the face facing downward. This phantom is truncated along a plane behind the ear reference point. Above this plane, an upper extension is added to ensure that the tissue-equivalent medium liquid is deep enough to measure in the relevant regions of the SAM phantom. The upper extension is flanged, to allow measurement probe access. The shell thickness shall be 2 mm ± 0,2 mm (not including the upper extension). The phantom is filled with head tissue-equivalent medium.
The same phantom could be used for some transmitters mounted on eyeglasses or eyewear. If the psSAR location is in the eye region, the user shall either show that the tissueequivalent medium provides conservative exposure or propose an alternative medium.



5.3 SAR test evaluation for extremity exposure

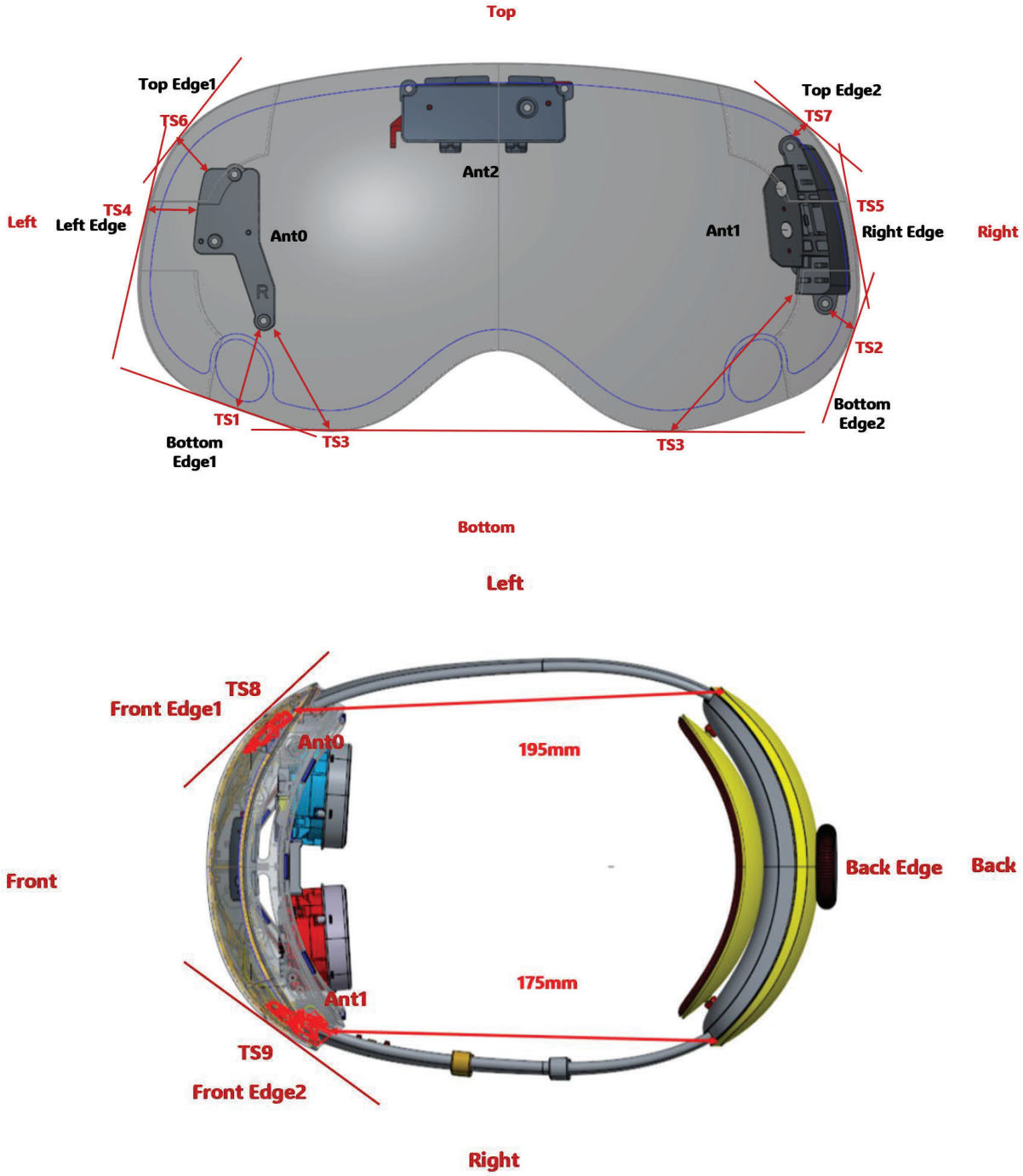
This device may also be exposed to extremity, such as hands. Therefore, it is necessary to assess the compliance of the product under extremity exposure conditions. However, since this device is an irregular one, based on the positions of the antennas, we have evaluated the points (TS1 – TS9) under the worst exposure conditions and conducted tests on these points or surfaces. The tests were carried out at the relatively most conservative distance (0 mm). Even though the device will not be continuously held in hands during use.

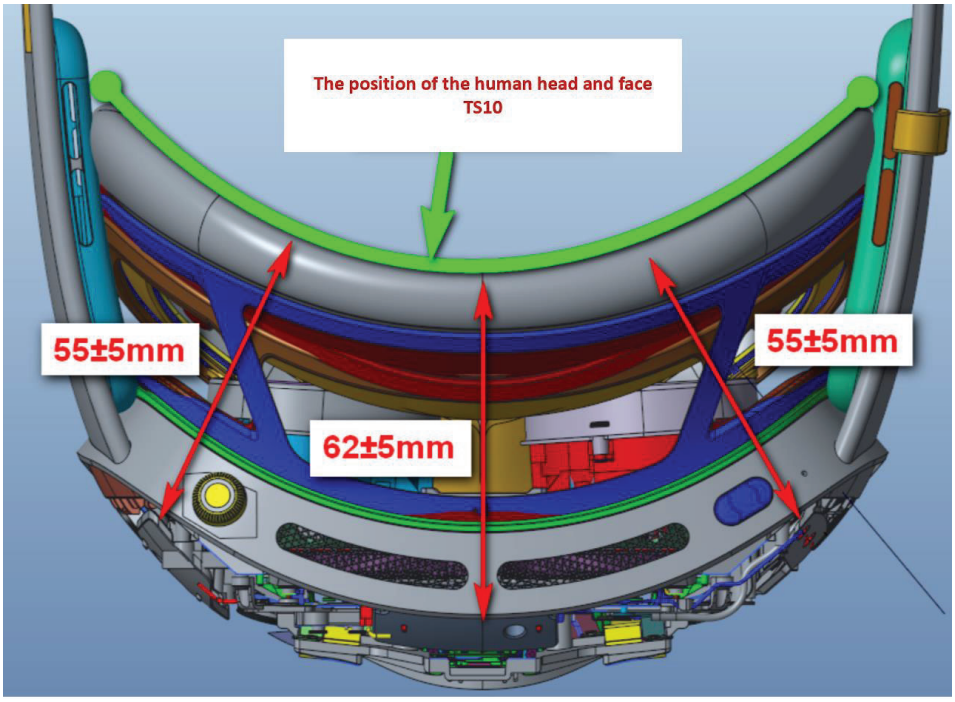
5.4 Test position summary

Based on the distance between the antenna position and the device's surface，the descriptions of the test surfaces or points are as follows.：

TS1	TS2	TS3	TS4	TS5	TS6	TS7	TS8	TS9	TS10
For Ant0	For Ant0	For Ant0 and Ant1	For Ant0	For Ant1	For Ant0	For Ant1	For Ant0	For Ant1	For Ant0 and Ant1
Bottom Edge1	Bottom Edge2	Bottom Edge3	Left Edge	Right Edge	Top Edge1	Top Edge2	Front Edge1	Front Edge2	All points towards to face
0mm	0mm	0mm	0mm	0mm	0mm	0mm	0mm	0mm	0mm

TS1: This surface is the one on the local surface (the left side of the Bottom surface) that is closest to the antenna 0.
TS2: This surface is the one on the local surface (the right side of the Bottom surface) that is closest to the antenna 1.
TS3: This surface is the one on the local surface (the front side of the Bottom surface) that is closest to the antenna 0 and antenna 1.
TS4: This surface is the one on the local surface (left side) that is closest to the antenna 0.
TS5: This surface is the one on the local surface (right side) that is closest to the antenna 1.
TS6: This point is the one on the local surface (the left side of the Top surface) that is closest to the antenna 0.
TS7: This point is the one on the local surface (the right side of the Top surface) that is closest to the antenna 1.
TS8: This surface is the one on the spectacle lens surface (the left side of the Front side) that is closest to antenna 0.
TS9: This surface is the one on the spectacle lens surface (the right side of the Front surface) that is closest to antenna 1.
TS10: The facial exposure conditions, covering all points on the curved surface. The face down model is used to test all the points of facial exposure.
Back edge: Since there is no radio frequency module on the back surface of the device and it is far from the antenna position, it is exempted from testing.





5.5 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 preformed 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.

5.6 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.

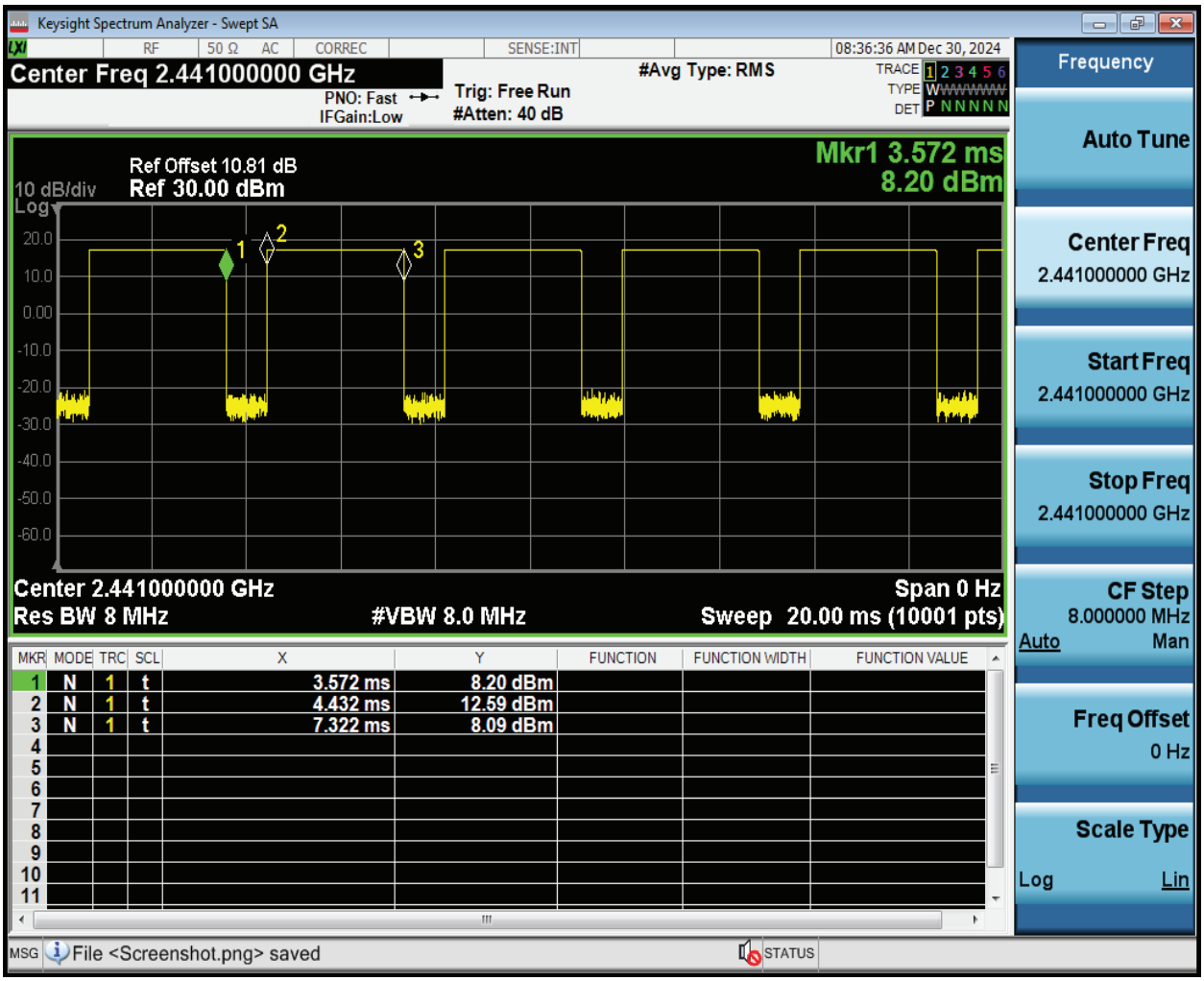
According to 201904 TCBC workshop KDB 248227 D01 can be used for SAR initial test configurations and test reduction for 802.11ax.

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 hoping 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:

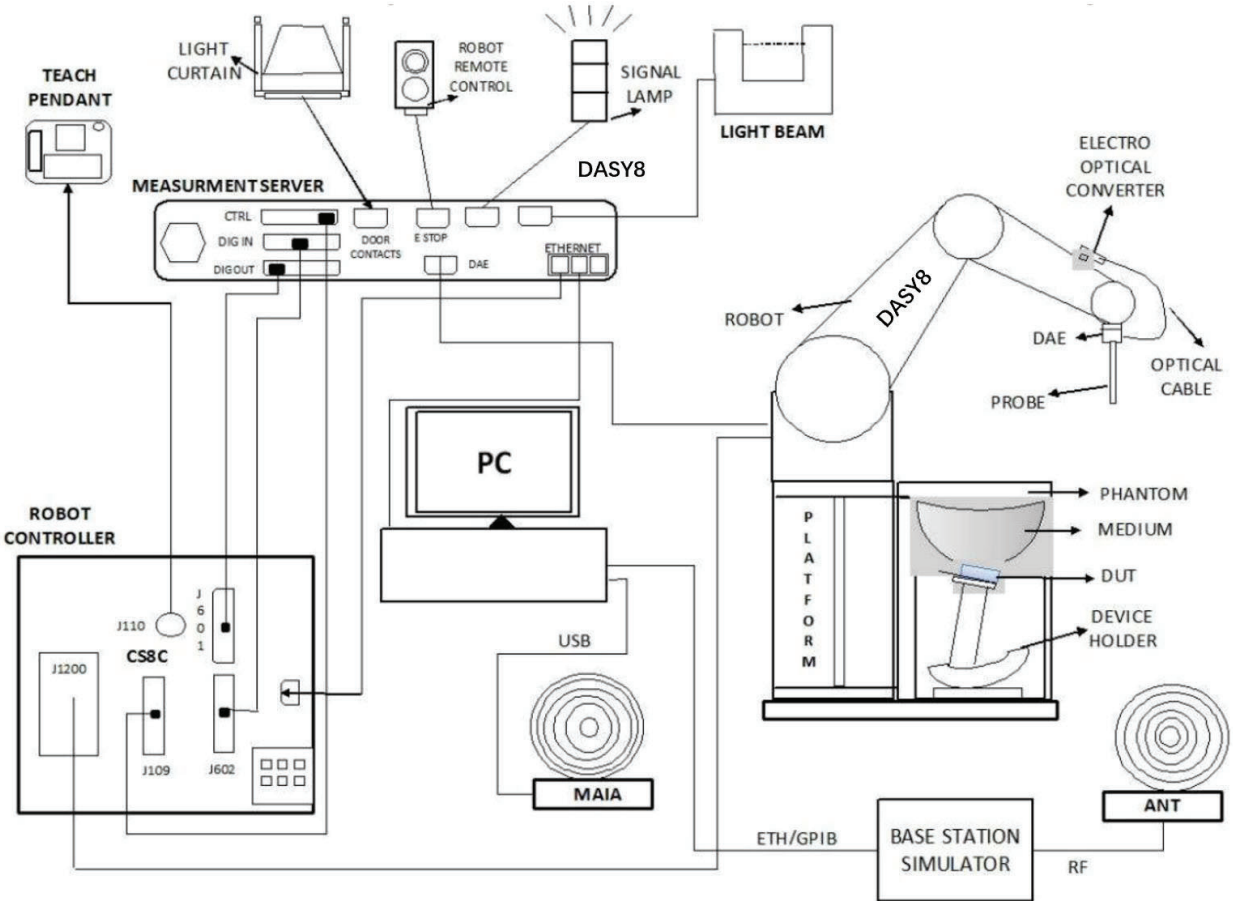


Note: Duty factor= Ton (ms)/ T(on+off) (ms)=77%

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

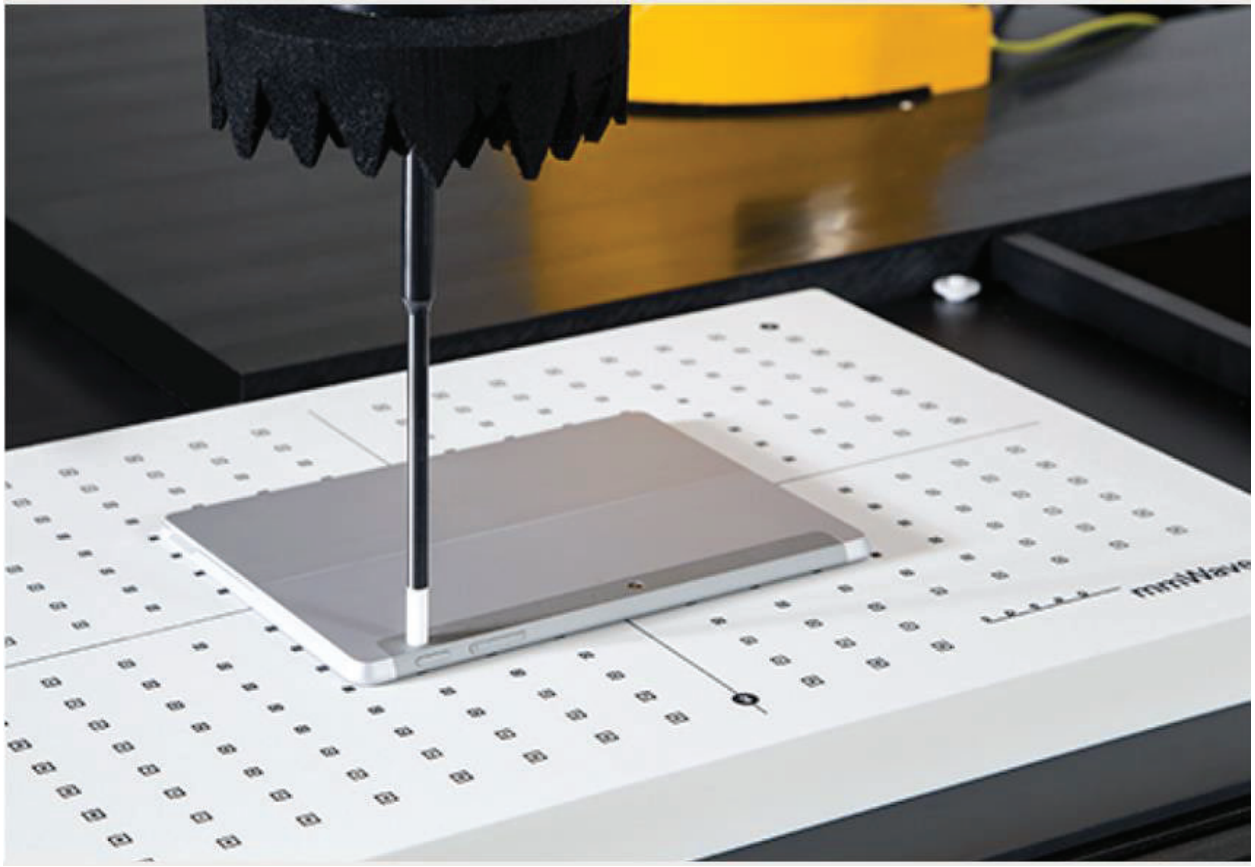
The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

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 µW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 µW/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 SAR Measurement Procedure

6.3.1 SAR test using flat/head phantom

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)

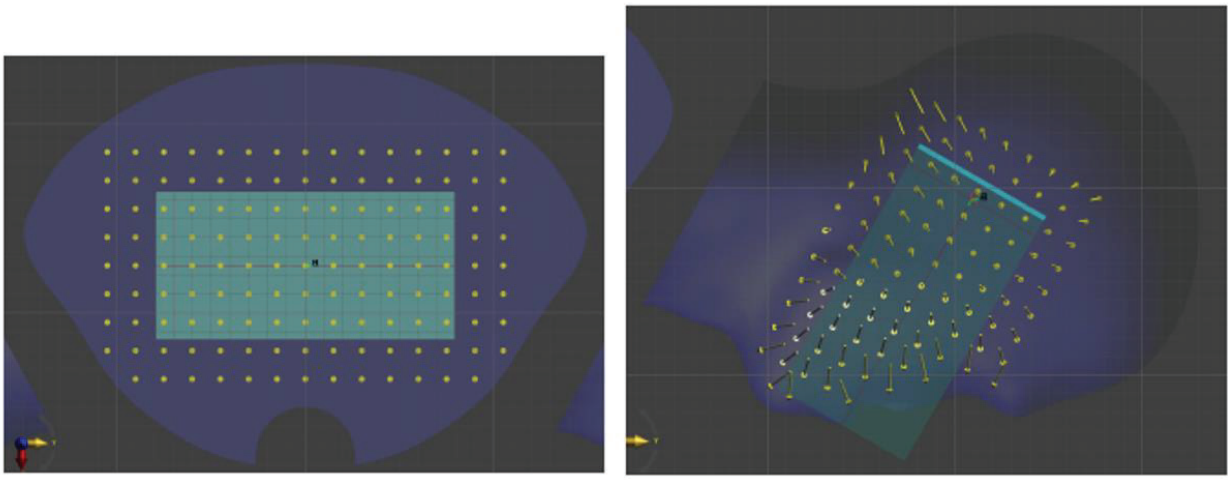
Area Scan

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.



(a) Flat Phantom Section (b) Left Head Phantom Section

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.

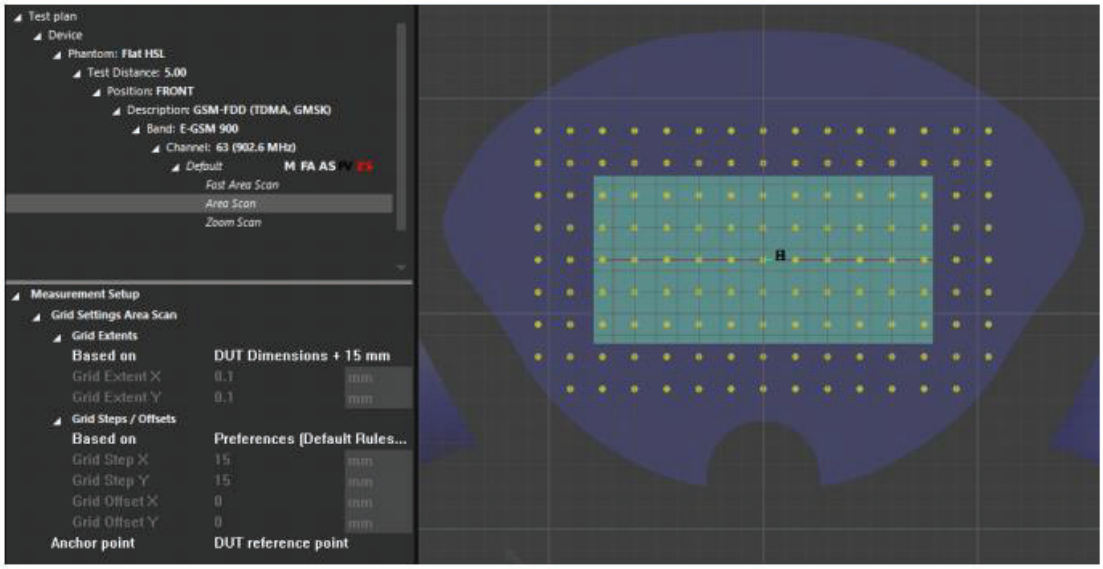
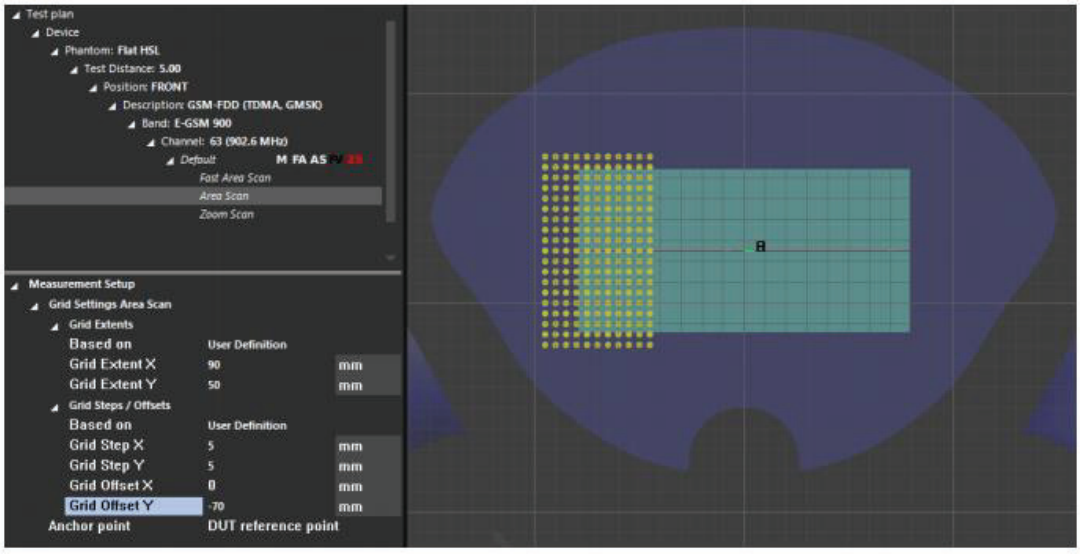


Figure (d): Grid settings as specified by the user



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 DASY's 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 DASY's 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 trou-Ble shooting purposes. A warning will be issued if the specified settings do not fulfill the DASY's 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:

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

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.

6.3.2 SAR test using face down phantom

In cDASY6 V6.8+, following measurement scan types are supported for specific phantoms:

• Fast Area Scan (FA)
• Area Scan (AS)
• Fast Volume Scan (VS)
• Zoom Scan (ZS)

The fast area (FA) scan and area scan (AS) are only supported in SAM Twin Chin-20 Phantom, and do not differ in any way from their normal implementation in the SAM phantom.

The volume scan (VS) is supported by all phantoms (regular as well as specific) and is the only scan mode supported for Wrist and Ankle phantoms.

The zoom scan (ZS) is supported in all phantoms except the Wrist and Ankle phantom.

Fast Volume Scan

Fast Volume Scans are used to assess the 1g and 10g peak spatial-average SAR (psSAR) in the simulated tissue-equivalent medium. The extent of measurement grids is set by the user according to test device dimensions or the entire measurable region of the phantom. To support measurements in any phantom shape, such as specific phantoms, the measurement grids are conformal to the phantom surface, at a fixed offset from the surface. The measurement grids at larger distances from the surface are also conformal to the grid layer closest to the phantom surface, with a fixed offset distance between layers. The number of measured layers and grid resolution used for Fast Volume Scan, shown in below Table, are optimized according to phantom type and measurement frequency.

Frequency	Phantom Type	No. of Layers	d sensor-surface (mm)	Step X, Y (mm)
Up-to 4 GHz	• SAM Chin 20 • Head-stand / Facedown • WBDuke	3	3,7,15	10
4-6 GHz	• SAM Chin 20 • Head-stand / Facedown • WBDuke	3	3,7,15	5
Up-to 4 GHz	• Wrist • Ankle	3	3,6,10	5
4-6 GHz	• Wrist • Ankle	3	3,5,7	5

Zoom Scan

Zoom Scans are used to assess the 1g and 10g peak spatial-average SAR within a cubic volume in the simulated tissue-equivalent medium. The post-processing algorithm used for regular (i.e., Twin SAM and ELI) and specific phantoms are identical.

For the set of specific phantoms (Head Stand, Face down and WBDuke), the minimum conformal distance ($d_{sensor\ surface}$) is limited to 3mm, so as to avoid the boundary effect, as the probe may approach the phantom surface at larger probe angles for these phantoms.

6.4 PD Measurement Procedure

The measurements to be performed are selected in the Project Overview window. DASY8 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 Eand 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	/	2024-12-02	2025-12-01
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	1291	/	2024-04-12	2025-04-11
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	/	2024-10-07	2027-10-06
Test Software for Tissue	SPEAG	/	/	DAK 3.0.4.1	/	/
Temperature Probe	Auden	DTM3000	3905	/	2024-12-03	2025-12-02
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
5600	35.5	5.07
5750	35.4	5.22
6500	34.5	6.07

Measurements results

Frequency (MHz)	Test Date	Temp ℃	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	2024/12/26	21.5	40.76	1.78	39.2	1.80	3.98	-1.11
5250	2024/12/26	21.5	34.65	4.49	35.9	4.71	-3.48	-4.67
5600	2024/12/28	21.5	34.02	4.87	35.9	4.71	-5.24	3.40
5750	2024/12/3	21.5	33.77	5.05	35.4	5.22	-4.60	-3.26
6500	2024/12/7	21.5	32.49	5.91	34.5	6.07	-5.83	-2.64
6500	2024/12/9	21.5	32.48	5.94	34.5	6.07	-5.86	-2.14
6500	2024/12/27	21.5	32.48	5.96	34.5	6.07	-5.86	-1.81
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm.								

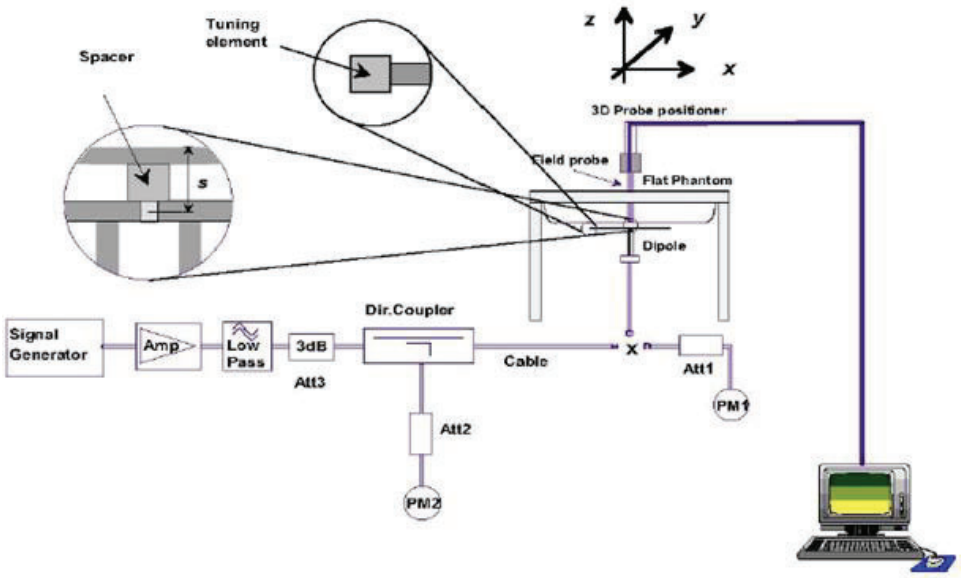
8.2 System Check

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.

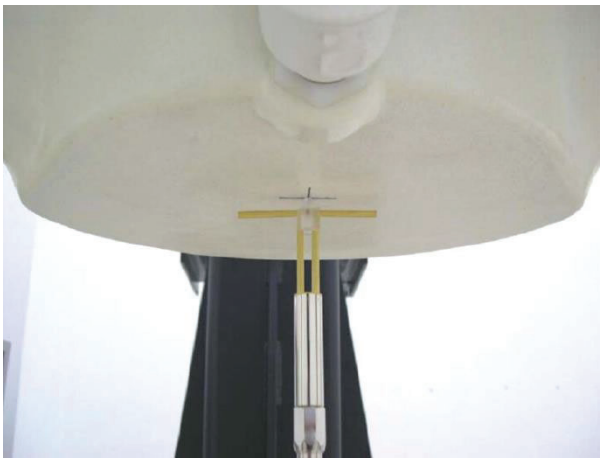
8.2.1 System Cheek Configuration

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

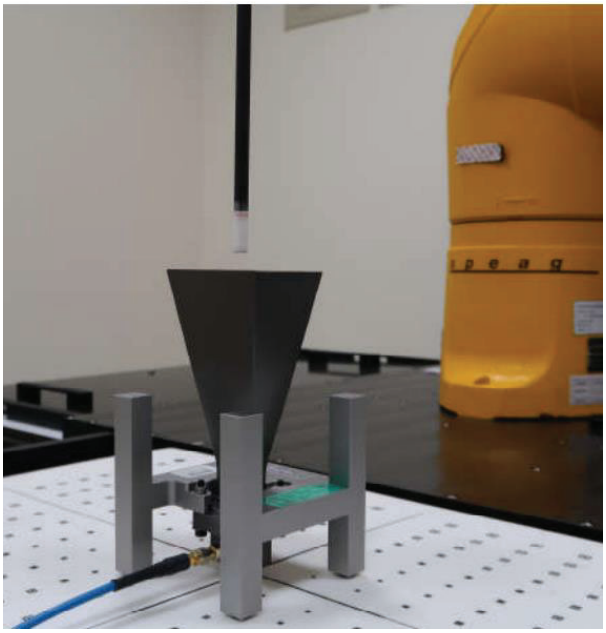
Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (＞20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

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

8.2.2 SAR&APD System Check Results

Frequency (MHz)	Test Date	Temp ℃	250mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
2450	2024/12/26	21.5	13.52	54.80	52.60	4.18	1
Frequency (MHz)	**Test Date**	**Temp ℃**	**100mW Measured SAR_{1g} (W/kg)**	**1W Normalized SAR_{1g} (W/kg)**	**1W Target SAR_{1g} (W/kg)**	**Δ % (Limit ±10%)**	**Plot No.**
5250	2024/12/26	21.5	7.54	75.40	77.70	-2.96	2
5600	2024/12/28	21.5	7.67	76.70	80.30	-4.48	3
5750	2024/12/3	21.5	7.66	76.60	76.80	-0.26	4
6500	2024/12/7	21.5	30.40	304.00	291.00	4.47	5
6500	2024/12/9	21.5	30.34	303.40	291.00	4.26	6
6500	2024/12/27	21.5	30.35	303.50	291.00	4.30	7
Frequency (MHz)	**Test Date**	**Temp ℃**	**100mW Measured 4cm² APD (W/m²)**	**1W Normalized 4cm² APD (W/m²)**	**1W Target 4cm² APD (W/m²)**	**Limit For APD (±10%)**	**Plot No.**
6500	2024/12/7	22.0	128	1280	1330	-4	8
Note: Target Values used derive from the calibration certificate data storage and evaluation.							

8.2.3 PD System Cheek Result



Frequency (GHz)	5G Verification Source	Test Date	Distance (mm)	Measured 4cm² (W/m²)	Targeted 4cm² (W/m²)	Deviation (dB)	Plot No.
10	10GHz-	2024/12/7	10	51.6	50	0.03	9

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 2.4GHz Mode

Wi-Fi 2.4GHz Ant0 / Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	17.00	**16.42**
	6/2437	17.00	16.11
	11/2462	17.00	16.26
802.11g (6M)	1/2412	10.50	9.09
	6/2437	17.00	15.61
	11/2462	13.50	12.38
802.11n-HT20 (MCS0)	1/2412	9.50	7.84
	6/2437	17.00	15.65
	11/2462	11.50	10.43
802.11n-HT40 (MCS0)	3/2422	8.50	6.72
	6/2437	17.00	15.76
	9/2452	6.50	5.49
802.11ax-HE20 (MCS0)	1/2412	14.50	13.32
	6/2437	17.00	16.28
	11/2462	16.50	15.77
802.11ax-HE40 (MCS0)	3/2422	13.50	12.04
	6/2437	17.00	16.24
	9/2452	11.50	10.96
802.11be EHT20 (MCS0)	1/2412	17.00	16.65
	6/2437	17.00	16.36
	11/2462	16.50	15.83
802.11be EHT40 (MCS0)	3/2422	12.50	10.95
	6/2437	17.00	16.04
	9/2452	11.50	10.71
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 2.4GHz Ant1 Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	18.00	16.92
	6/2437	18.00	17.11
	11/2462	18.00	**17.43**
802.11g (6M)	1/2412	11.00	10.37
	6/2437	18.00	16.38
	11/2462	14.00	13.24
802.11n-HT20 (MCS0)	1/2412	10.00	9.35
	6/2437	18.00	16.48
	11/2462	12.00	11.20
802.11n-HT40 (MCS0)	3/2422	9.00	7.84
	6/2437	18.00	16.80
	9/2452	7.00	6.04
802.11ax-HE20 (MCS0)	1/2412	15.50	14.52
	6/2437	18.00	17.22
	11/2462	17.50	16.84
802.11ax-HE40 (MCS0)	3/2422	14.00	13.53
	6/2437	18.00	17.42
	9/2452	12.00	11.47
802.11be EHT20 (MCS0)	1/2412	18.00	17.12
	6/2437	18.00	17.10
	11/2462	17.50	16.92
802.11be EHT40 (MCS0)	3/2422	13.00	12.37
	6/2437	18.00	17.30
	9/2452	12.00	11.35
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 2.4GHz MIMO Mode	Channel /Frequency (MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 0	Ant 1
802.11b (1M)	1/2412	21.50	21.20	17.87	18.48
	6/2437	21.50	20.15	16.82	17.44
	11/2462	21.50	**21.22**	17.72	18.65
802.11g (6M)	1/2412	14.00	12.64	8.95	10.22
	6/2437	20.00	18.82	15.40	16.18
	11/2462	17.00	15.75	12.25	13.18
802.11n-HT20 (MCS0)	1/2412	13.00	11.59	7.78	9.26
	6/2437	20.00	18.94	15.49	16.32
	11/2462	15.00	13.76	10.33	11.14
802.11n-HT40 (MCS0)	3/2422	11.50	10.24	6.59	7.79
	6/2437	20.00	19.24	15.64	16.74
	9/2452	10.00	8.73	5.47	5.96
802.11ax VHT20 (MCS0)	1/2412	18.00	16.97	13.35	14.50
	6/2437	21.00	19.99	16.20	17.64
	11/2462	20.00	19.35	15.72	16.88
802.11ax VHT40 (MCS0)	3/2422	17.00	15.83	11.94	13.55
	6/2437	21.00	20.01	16.10	17.74
	9/2452	15.00	14.21	10.85	11.52
802.11be EHT20 (MCS0)	1/2412	21.00	20.14	16.52	17.67
	6/2437	21.00	20.01	16.17	17.69
	11/2462	20.00	19.37	15.68	16.94
802.11be EHT40 (MCS0)	3/2422	16.00	14.68	10.80	12.40
	6/2437	21.00	19.85	15.90	17.61
	9/2452	15.00	14.01	10.65	11.33
Note: Initial test configuration is 802.11b mode.					

9.1.2 nRF 2.4GHz Mode

	Frequency (MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
nRF 2.4GHz Ant2	2402	8.00	7.20
	2440	8.00	7.13
	2480	8.00	7.03

9.1.3 Wi-Fi 5GHz Mode

5GHz Wi-Fi (U-NII-1) Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	36/5180	18.00	17.23
	40/5200	18.00	17.37
	48/5240	18.00	16.85
802.11nHT20(MCS0)	36/5180	18.00	17.23
	40/5200	18.00	17.37
	48/5240	18.00	16.85
802.11nHT40(MCS0)	38/5190	18.00	**16.80**
	46/5230	18.00	16.43
802.11ac-VHT20(MCS0)	36/5180	17.00	16.18
	40/5200	17.00	16.30
	48/5240	17.00	15.80
802.11ac-VHT40(MCS0)	38/5190	17.00	16.97
	46/5230	17.00	16.51
802.11ac-VHT80(MCS0)	42/5210	16.00	15.01
802.11ac-VHT160 (MCS0)	50/5250	13.00	11.46
802.11ax-HE20(MCS0)	36/5180	18.00	17.31
	40/5200	18.00	17.53
	48/5240	18.00	16.98
802.11ax-HE40(MCS0)	38/5190	18.00	16.90
	46/5230	18.00	16.46
802.11ax-HE80(MCS0)	42/5210	17.00	16.29
802.11ax-HE160(MCS0)	50/5250	13.00	11.75
802.11be-EHT20(MCS0)	36/5180	18.00	17.38
	40/5200	18.00	17.49
	48/5240	18.00	17.04
802.11be-EHT40(MCS0)	38/5190	18.00	17.85
	46/5230	18.00	17.43
802.11be-EHT80(MCS0)	42/5210	17.00	16.37
802.11be-EHT160(MCS0)	50/5250	13.00	11.31
Note. Initial test configuration is 802.11n HT40 mode.			

5GHz Wi-Fi (U-NII-2A) Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	52/5260	18.00	16.63
	56/5280	18.00	16.54
	64/5320	18.00	16.36
802.11nHT20(MCS0)	52/5260	18.00	16.89
	56/5280	18.00	16.75
	64/5320	18.00	16.62
802.11nHT40(MCS0)	54/5270	17.00	15.19
	62/5310	17.00	15.33
802.11ac-VHT20(MCS0)	52/5260	17.00	15.87
	56/5280	17.00	15.82
	64/5320	17.00	15.83
802.11ac-VHT40(MCS0)	54/5270	17.00	15.37
	62/5310	17.00	15.49
802.11ac-VHT80(MCS0)	58/5290	16.00	14.27
802.11ax-HE20(MCS0)	52/5260	18.00	17.04
	56/5280	18.00	16.94
	64/5320	18.00	16.77
802.11ax-HE40(MCS0)	54/5270	18.00	**16.70**
	62/5310	18.00	16.61
802.11ax-HE80(MCS0)	58/5290	17.00	15.66
802.11be-EHT20(MCS0)	52/5260	18.00	16.92
	56/5280	18.00	16.92
	64/5320	18.00	16.74
802.11be-EHT40(MCS0)	54/5270	18.00	17.40
	62/5310	18.00	17.48
802.11be-EHT80(MCS0)	58/5290	17.00	15.69
Note. Initial test configuration is 802.11ax HE40 mode.			

5GHz Wi-Fi (U-NII-2C) Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	17.50	**16.85**
	116/5580	17.50	16.64
	140/5700	17.50	16.82
	144/5720	17.50	15.91
802.11nHT20 (MCS0)	100/5500	16.50	15.96
	116/5580	16.50	15.76
	140/5700	16.50	15.93
	144/5720	16.50	14.98
802.11nHT40 (MCS0)	102/5510	15.00	14.41
	110/5550	15.00	14.55
	134/5670	15.00	14.13
	142/5710	15.00	14.05
802.11ac-VHT20 (MCS0)	100/5500	17.00	15.98
	116/5580	17.00	15.91
	140/5700	17.00	16.03
	144/5720	16.50	15.14
802.11ac-VHT40 (MCS0)	102/5510	15.00	14.45
	110/5550	15.00	14.64
	134/5670	15.00	14.22
	142/5710	15.00	14.12
802.11ac-VHT80 (MCS0)	106/5530	16.00	14.98
	122/5610	16.00	14.53
	138/5690	16.00	14.70
802.11ac-VHT160 (MCS0)	114/5570	15.00	14.68
802.11ax-HE20(MCS0)	100/5500	16.50	15.12
	116/5580	16.50	14.84
	140/5700	16.50	15.05
	144/5720	16.00	14.08
802.11ax-HE40(MCS0)	102/5510	15.00	14.52
	110/5550	15.00	14.68
	134/5670	15.00	14.24
	142/5710	15.00	14.09
802.11ax-HE80(MCS0)	106/5530	16.00	15.17
	122/5610	16.00	14.76
	138/5690	16.00	14.87
802.11ax-HE160(MCS0)	114/5570	15.00	14.68
802.11be-EHT20(MCS0)	100/5500	17.50	17.05
	116/5580	17.50	16.86
	140/5700	17.50	16.97

	144/5720	17.50	15.83
802.11be-EHT40(MCS0)	102/5510	16.00	15.42
	110/5550	16.00	15.48
	134/5670	16.00	15.02
	142/5710	16.00	14.96
802.11be-EHT80(MCS0)	106/5530	17.00	16.23
	122/5610	17.00	15.94
	138/5690	17.00	15.91
802.11be-EHT160(MCS0)	114/5570	15.00	13.99
Note. Initial test configuration is 802.11a mode.			

5GHz Wi-Fi (U-NII-3) Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	144/5720	11.00	9.97
	149/5745	17.00	15.85
	157/5785	17.00	15.94
	165/5825	17.00	16.30
802.11nHT20(MCS0)	144/5720	11.00	9.63
	149/5745	17.00	16.00
	157/5785	17.00	16.17
	165/5825	17.00	16.34
802.11nHT40(MCS0)	144/5720	5.00	4.24
	151/5755	17.00	16.66
	159/5795	17.00	**16.83**
802.11ac-VHT20(MCS0)	144/5720	11.00	9.79
	149/5745	17.00	16.06
	157/5785	17.00	16.23
	165/5825	17.00	16.34
802.11ac-VHT40(MCS0)	142/5710	5.00	4.38
	151/5755	17.00	16.64
	159/5795	17.00	16.90
802.11ac-VHT80(MCS0)	138/5690	3.00	1.91
	155/5775	16.00	15.33
802.11ax-HE20(MCS0)	144/5720	11.00	9.15
	149/5745	17.00	16.03
	157/5785	17.00	16.23
	165/5825	17.00	16.32
802.11ax-HE40(MCS0)	142/5710	6.00	5.03
	151/5755	17.00	16.50
	159/5795	17.00	16.82
802.11ac-VHT80(MCS0)	138/5690	3.00	2.80
	155/5775	17.00	16.53
802.11be-EHT20(MCS0)	144/5720	11.00	10.89

	149/5745	17.00	15.86
	157/5785	17.00	16.41
	165/5825	17.00	16.21
802.11be-EHT40(MCS0)	142/5710	6.50	5.91
	151/5755	17.00	16.69
	159/5795	17.00	16.57
802.11be-EHT80(MCS0)	138/5690	4.00	3.73
	155/5775	16.00	15.13
Note. Initial test configuration is 802.11n HT40 mode.			

5GHz Wi-Fi (U-NII-1) Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	36/5180	18.00	16.99
	40/5200	18.00	16.91
	48/5240	18.00	16.96
802.11nHT20(MCS0)	36/5180	18.00	17.35
	40/5200	18.00	17.30
	48/5240	18.00	17.32
802.11nHT40(MCS0)	38/5190	18.00	**16.83**
	46/5230	18.00	16.68
802.11ac-VHT20(MCS0)	36/5180	17.00	16.16
	40/5200	17.00	16.08
	48/5240	17.00	16.28
802.11ac-VHT40(MCS0)	38/5190	17.00	16.77
	46/5230	17.00	16.70
802.11ac-VHT80(MCS0)	42/5210	16.00	14.88
802.11ac-VHT160 (MCS0)	50/5250	13.00	11.96
802.11ax-HE20(MCS0)	36/5180	18.00	17.32
	40/5200	18.00	17.30
	48/5240	18.00	17.32
802.11ax-HE40(MCS0)	38/5190	18.00	16.75
	46/5230	18.00	16.72
802.11ax-HE80(MCS0)	42/5210	17.00	16.22
802.11ax-HE160(MCS0)	50/5250	13.00	12.27
802.11be-EHT20(MCS0)	36/5180	18.00	17.18
	40/5200	18.00	17.20
	48/5240	18.00	17.23
802.11be-EHT40(MCS0)	38/5190	18.00	17.77
	46/5230	18.00	17.62
802.11be-EHT80(MCS0)	42/5210	17.00	16.20
802.11be-EHT160(MCS0)	50/5250	13.00	11.53
Note. Initial test configuration is 802.11n HT40 mode.			

5GHz Wi-Fi (U-NII-2A) Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	52/5260	18.00	16.58
	56/5280	18.00	16.39
	64/5320	17.50	15.74
802.11nHT20(MCS0)	52/5260	18.00	16.94
	56/5280	18.00	16.82
	64/5320	18.00	15.98
802.11nHT40(MCS0)	54/5270	17.00	15.24
	62/5310	17.00	14.99
802.11ac-VHT20(MCS0)	52/5260	17.00	15.87
	56/5280	17.00	15.71
	64/5320	17.00	15.11
802.11ac-VHT40(MCS0)	54/5270	17.00	15.18
	62/5310	17.00	14.91
802.11ac-VHT80(MCS0)	58/5290	16.00	14.38
802.11ax-HE20(MCS0)	52/5260	18.00	17.09
	56/5280	18.00	16.96
	64/5320	18.00	16.63
802.11ax-HE40(MCS0)	54/5270	18.00	17.33
	62/5310	18.00	**17.47**
802.11ax-HE80(MCS0)	58/5290	17.00	16.20
802.11be-EHT20(MCS0)	52/5260	18.00	16.85
	56/5280	18.00	16.71
	64/5320	17.50	15.90
802.11be-EHT40(MCS0)	54/5270	18.00	17.23
	62/5310	18.00	16.79
802.11be-EHT80(MCS0)	58/5290	17.00	15.53
Note. Initial test configuration is 802.11ax HE80 mode.			

5GHz Wi-Fi (U-NII-2C) Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	17.50	16.95
	116/5580	17.50	**17.24**
	140/5700	17.50	16.81
	144/5720	17.50	15.85
802.11nHT20 (MCS0)	100/5500	16.50	15.98
	116/5580	16.50	16.16
	140/5700	16.50	15.75
	144/5720	16.50	14.77
802.11nHT40 (MCS0)	102/5510	15.00	14.86
	110/5550	15.00	14.51
	134/5670	15.00	14.05
	142/5710	15.00	14.03
802.11ac-VHT20 (MCS0)	100/5500	17.00	15.92
	116/5580	17.00	16.11
	140/5700	17.00	15.77
	144/5720	16.50	14.77
802.11ac-VHT40 (MCS0)	102/5510	15.00	14.80
	110/5550	15.00	14.45
	134/5670	15.00	14.05
	142/5710	15.00	14.09
802.11ac-VHT80 (MCS0)	106/5530	16.00	15.08
	122/5610	16.00	14.80
	138/5690	16.00	14.63
802.11ac-VHT160 (MCS0)	114/5570	15.00	13.99
802.11ax-HE20(MCS0)	100/5500	16.50	15.03
	116/5580	16.50	15.21
	140/5700	16.50	14.92
	144/5720	16.00	13.80
802.11ax-HE40(MCS0)	102/5510	15.00	14.77
	110/5550	15.00	14.41
	134/5670	15.00	14.05
	142/5710	15.00	13.95
802.11ax-HE80(MCS0)	106/5530	16.00	15.18
	122/5610	16.00	14.93
	138/5690	16.00	14.76
802.11ax-HE160(MCS0)	114/5570	15.00	14.14
802.11be-EHT20(MCS0)	100/5500	17.50	16.89
	116/5580	17.50	17.23
	140/5700	17.50	16.78

	144/5720	17.50	15.61
802.11be-EHT40(MCS0)	102/5510	16.00	15.63
	110/5550	16.00	15.32
	134/5670	16.00	14.90
	142/5710	16.00	14.84
802.11be-EHT80(MCS0)	106/5530	17.00	16.19
	122/5610	17.00	15.91
	138/5690	17.00	15.56
802.11be-EHT160(MCS0)	114/5570	15.00	13.56
Note. Initial test configuration is 802.11a mode.			

5GHz Wi-Fi (U-NII-3) Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a(6M)	144/5720	11.00	9.96
	149/5745	18.00	16.81
	157/5785	18.00	17.23
	165/5825	18.00	17.46
802.11nHT20(MCS0)	144/5720	11.00	9.44
	149/5745	18.00	16.87
	157/5785	18.00	17.21
	165/5825	18.00	17.39
802.11nHT40(MCS0)	144/5720	5.00	4.35
	151/5755	18.00	17.18
	159/5795	18.00	**17.56**
802.11ac-VHT20(MCS0)	144/5720	11.00	9.46
	149/5745	17.00	15.90
	157/5785	17.00	16.19
	165/5825	17.00	16.35
802.11ac-VHT40(MCS0)	142/5710	5.00	4.34
	151/5755	17.00	16.55
	159/5795	17.00	16.92
802.11ac-VHT80(MCS0)	138/5690	3.00	1.77
	155/5775	16.00	15.33
802.11ax-HE20(MCS0)	144/5720	11.00	8.92
	149/5745	18.00	16.98
	157/5785	18.00	17.27
	165/5825	18.00	17.40
802.11ax-HE40(MCS0)	142/5710	6.00	4.95
	151/5755	18.00	17.57
	159/5795	18.00	17.90
802.11ac-VHT80(MCS0)	138/5690	3.00	2.58
	155/5775	17.00	16.51
802.11be-EHT20(MCS0)	144/5720	11.00	10.79

	149/5745	18.00	16.80
	157/5785	18.00	17.12
	165/5825	18.00	17.40
802.11be-EHT40(MCS0)	142/5710	6.50	5.90
	151/5755	18.00	17.43
	159/5795	18.00	17.81
802.11be-EHT80(MCS0)	138/5690	17.00	16.50
	155/5775	17.00	16.50
Note. Initial test configuration is 802.11n HT40 mode.			

5GHz Wi-Fi U-NII-1	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11a(6M)	36/5180	21.00	**20.12**	17.23	16.99
	40/5200	21.00	20.12	17.37	16.91
	48/5240	21.00	19.88	16.85	16.96
802.11nHT20(MCS0)	36/5180	21.00	20.17	17.23	17.35
	40/5200	21.00	20.19	17.37	17.30
	48/5240	21.00	19.91	16.85	17.32
802.11nHT40(MCS0)	38/5190	21.00	19.76	16.80	16.83
	46/5230	21.00	19.49	16.43	16.68
802.11ac-VHT20(MCS0)	36/5180	20.00	19.05	16.18	16.16
	40/5200	20.00	19.03	16.30	16.08
	48/5240	20.00	18.85	15.80	16.28
802.11ac-VHT40(MCS0)	38/5190	20.00	19.72	16.97	16.77
	46/5230	20.00	19.50	16.51	16.70
802.11ac-VHT80(MCS0)	42/5210	19.00	17.88	15.01	14.88
802.11ac-VHT160 (MCS0)	50/5250	13.00	11.82	11.46	11.96
802.11ax-HE20(MCS0)	36/5180	21.00	20.13	17.31	17.32
	40/5200	21.00	20.15	17.53	17.30
	48/5240	21.00	19.99	16.98	17.32
802.11ax-HE40(MCS0)	38/5190	21.00	19.74	16.90	16.75
	46/5230	21.00	19.48	16.46	16.72
802.11ax-HE80(MCS0)	42/5210	20.00	19.11	16.29	16.22
802.11ax-HE160(MCS0)	50/5250	16.00	14.89	11.75	12.27
802.11be-EHT20(MCS0)	36/5180	21.00	20.09	17.38	17.18
	40/5200	21.00	20.12	17.49	17.20
	48/5240	21.00	20.00	17.04	17.23
802.11be-EHT40(MCS0)	38/5190	21.00	20.80	17.85	17.77
	46/5230	21.00	20.50	17.43	17.62
802.11be-EHT80(MCS0)	42/5210	20.00	19.20	16.37	16.20
802.11be-EHT160(MCS0)	50/5250	16.00	14.26	11.31	11.53
Note. Initial test configuration is 802.11a mode.					

5GHz Wi-Fi (U-NII-2A)	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11a(6M)	52/5260	21.00	19.68	16.63	16.58
	56/5280	21.00	19.57	16.54	16.39
	64/5320	21.00	19.15	16.36	15.74
802.11nHT20(MCS0)	52/5260	21.00	19.71	16.89	16.94
	56/5280	21.00	19.59	16.75	16.82
	64/5320	21.00	19.15	16.62	15.98
802.11nHT40(MCS0)	54/5270	20.00	18.24	15.19	15.24
	62/5310	20.00	18.03	15.33	14.99
802.11ac-VHT20(MCS0)	52/5260	20.00	18.67	15.87	15.87
	56/5280	20.00	18.60	15.82	15.71
	64/5320	20.00	18.21	15.83	15.11
802.11ac-VHT40(MCS0)	54/5270	20.00	18.20	15.37	15.18
	62/5310	20.00	18.04	15.49	14.91
802.11ac-VHT80(MCS0)	58/5290	19.00	17.26	14.27	14.38
802.11ax-HE20(MCS0)	52/5260	21.00	19.77	17.04	17.09
	56/5280	21.00	19.66	16.94	16.96
	64/5320	21.00	19.18	16.77	16.63
802.11ax-HE40(MCS0)	54/5270	21.00	19.31	16.70	17.33
	62/5310	21.00	19.15	16.61	17.47
802.11ax-HE80(MCS0)	58/5290	20.00	18.43	15.66	16.20
802.11be-EHT20(MCS0)	52/5260	21.00	19.81	16.92	16.85
	56/5280	21.00	19.64	16.92	16.71
	64/5320	21.00	19.13	16.74	15.90
802.11be-EHT40(MCS0)	54/5270	21.00	20.35	17.40	17.23
	62/5310	21.00	20.17	17.48	16.79
802.11be-EHT80(MCS0)	58/5290	20.00	18.51	15.69	15.53

5GHz Wi-Fi U-NII-2C	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11a (6M)	100/5500	21.00	19.81	16.85	16.95
	116/5580	21.00	19.82	16.64	17.24
	140/5700	21.00	19.63	16.82	16.81
	144/5720	20.50	18.67	15.91	15.85
802.11nHT20 (MCS0)	100/5500	20.00	18.81	15.96	15.98
	116/5580	20.00	18.84	15.76	16.16
	140/5700	20.00	18.66	15.93	15.75
	144/5720	19.50	17.66	14.98	14.77
802.11nHT40 (MCS0)	102/5510	19.00	17.53	14.41	14.86
	110/5550	19.00	17.49	14.55	14.51
	134/5670	19.00	17.01	14.13	14.05
	142/5710	18.50	16.92	14.05	14.03

802.11ac-VHT20 (MCS0)	100/5500	20.00	18.83	15.98	15.92
	116/5580	20.00	18.84	15.91	16.11
	140/5700	20.00	18.67	16.03	15.77
	144/5720	19.50	17.67	15.14	14.77
802.11ac-VHT40 (MCS0)	102/5510	19.00	17.54	14.45	14.80
	110/5550	19.00	17.47	14.64	14.45
	134/5670	19.00	17.01	14.22	14.05
	142/5710	18.50	16.91	14.12	14.09
802.11ac-VHT80 (MCS0)	106/5530	19.00	17.91	14.98	15.08
	122/5610	19.00	17.56	14.53	14.80
	138/5690	19.00	17.56	14.70	14.63
802.11ac-VHT160 (MCS0)	114/5570	18.00	17.08	14.68	13.99
802.11ax-HE20(MCS0)	100/5500	19.50	17.92	15.12	15.03
	116/5580	19.50	17.91	14.84	15.21
	140/5700	19.50	17.84	15.05	14.92
	144/5720	18.50	16.63	14.08	13.80
802.11ax-HE40(MCS0)	102/5510	18.50	17.51	14.52	14.77
	110/5550	18.50	17.43	14.68	14.41
	134/5670	18.50	17.03	14.24	14.05
	142/5710	18.50	16.80	14.09	13.95
802.11ax-HE80(MCS0)	106/5530	19.50	18.05	15.17	15.18
	122/5610	19.50	17.68	14.76	14.93
	138/5690	19.50	17.60	14.87	14.76
802.11ax-HE160(MCS0)	114/5570	18.00	17.35	14.68	14.14
802.11be-EHT20(MCS0)	100/5500	21.00	19.78	17.05	16.89
	116/5580	21.00	19.78	16.86	17.23
	140/5700	21.00	19.78	16.97	16.78
	144/5720	21.00	19.78	15.83	15.61
802.11be-EHT40(MCS0)	102/5510	21.00	19.90	15.42	15.63
	110/5550	21.00	19.90	15.48	15.32
	134/5670	21.00	19.90	15.02	14.90
	142/5710	21.00	19.90	14.96	14.84
802.11be-EHT80(MCS0)	106/5530	20.00	19.68	16.23	16.19
	122/5610	20.00	19.68	15.94	15.91
	138/5690	20.00	19.68	15.91	15.56
802.11be-EHT160(MCS0)	114/5570	19.50	18.48	13.99	13.56

5GHz Wi-Fi U-NII-3	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11a(6M)	144/5720	14.00	12.73	9.97	9.96
	149/5745	21.00	19.71	15.85	16.81
	157/5785	21.00	20.07	15.94	17.23
	165/5825	21.00	20.16	16.30	17.46

802.11nHT20(MCS0)	144/5720	14.00	12.24	9.63	9.44
	149/5745	21.00	19.71	16.00	16.87
	157/5785	21.00	20.09	16.17	17.21
	165/5825	21.00	20.15	16.34	17.39
802.11nHT40(MCS0)	144/5720	9.00	7.18	4.24	4.35
	151/5755	21.00	20.54	16.66	17.18
	159/5795	21.00	20.79	16.83	17.56
802.11ac-VHT20(MCS0)	144/5720	14.00	12.27	9.79	9.46
	149/5745	20.00	18.78	16.06	15.90
	157/5785	20.00	19.09	16.23	16.19
	165/5825	20.00	19.19	16.34	16.35
802.11ac-VHT40(MCS0)	142/5710	9.00	7.17	4.38	4.34
	151/5755	20.00	19.50	16.64	16.55
	159/5795	20.00	19.77	16.90	16.92
802.11ac-VHT80(MCS0)	138/5690	3.00	1.87	1.91	1.77
	155/5775	19.00	18.24	15.33	15.33
802.11ax-HE20(MCS0)	144/5720	13.00	11.71	9.15	8.92
	149/5745	21.00	19.77	16.03	16.98
	157/5785	21.00	20.06	16.23	17.27
	165/5825	21.00	20.19	16.32	17.40
802.11ax-HE40(MCS0)	142/5710	9.00	7.89	5.03	4.95
	151/5755	21.00	20.44	16.50	17.57
	159/5795	20.00	18.07	16.82	17.90
802.11ac-VHT80(MCS0)	138/5690	7.00	5.60	2.80	2.58
	155/5775	20.00	19.35	16.53	16.51
802.11be-EHT20(MCS0)	144/5720	15.00	13.53	10.89	10.79
	149/5745	21.00	19.76	15.86	16.80
	157/5785	21.00	20.06	16.41	17.12
	165/5825	19.00	18.11	16.21	17.40
802.11be-EHT40(MCS0)	142/5710	18.00	17.39	5.91	5.90
	151/5755	21.00	20.30	16.69	17.43
	159/5795	21.00	20.51	16.57	17.81
802.11be-EHT80(MCS0)	138/5690	18.00	17.30	3.73	16.50
	155/5775	18.00	16.74	15.13	16.50

9.1.4 Wi-Fi 6GHz Mode

6GHz Wi-Fi (U-NII-5) Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	1/5955	8.00	6.39
	45/6175	8.00	7.14
	93/6415	8.00	7.12
802.11ax-HE40(MCS0)	3/5965	11.50	10.53
	43/6165	11.50	10.30
	91/6405	11.50	10.41
802.11ax-HE80(MCS0)	7/5985	11.50	10.71
	39/6145	11.50	10.28
	87/6385	11.50	10.41
802.11ax-HE160(MCS0)	15/6025	11.50	11.20
	47/6185	11.50	11.29
	79/6345	11.50	11.04
802.11be-EHT20(MCS0)	1/5955	8.00	6.40
	45/6175	8.00	7.17
	93/6415	8.00	7.14
802.11be-EHT40(MCS0)	3/5965	11.50	10.36
	43/6165	11.50	10.12
	91/6405	11.50	10.17
802.11be-EHT80(MCS0)	7/5985	11.50	10.66
	39/6145	11.50	10.24
	87/6385	11.50	10.34
802.11be-EHT160(MCS0)	15/6025	11.50	10.53
	47/6185	11.50	10.69
	79/6345	11.50	10.32
802.11be-EHT320(MCS0)	63/6265	11.50	**11.19**
Note. Initial test configuration is 802.11be-EHT160 mode.			

6GHz Wi-Fi (U-NII-6)Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	97/6435	8.00	7.21
	105/6475	8.00	6.49
	113/6515	8.00	7.13
802.11ax-HE40(MCS0)	99/6445	9.00	8.26
	107/6485	9.00	8.49
	115/6525	9.00	7.88
802.11ax-HE80(MCS0)	103/6465	10.00	9.26
	119/6545	10.00	8.84
802.11ax-HE160(MCS0)	111/6505	10.00	**9.80**
802.11be-EHT20(MCS0)	97/6435	8.00	7.22

	105/6475	8.00	6.53
	113/6515	8.00	7.15
802.11be-EHT40(MCS0)	99/6445	9.00	8.02
	107/6485	9.00	8.09
	115/6525	9.00	8.18
802.11be-EHT80(MCS0)	103/6465	10.00	9.47
	119/6545	10.00	8.94
802.11be-EHT160(MCS0)	111/6505	10.00	9.68
Note. Initial test configuration is 802.11ax-HE160 mode.			

6GHz Wi-Fi (U-NII-7)Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	117/6535	8.00	6.81
	149/6695	8.00	7.39
	185/6875	8.00	7.77
802.11ax-HE40(MCS0)	123/6565	9.50	8.57
	147/6685	9.50	8.90
	179/6845	9.50	8.39
	187/6885	9.50	8.82
802.11ax-HE80(MCS0)	135/6625	9.50	8.45
	151/6705	9.50	8.76
	183/6865	9.50	8.82
802.11ax-HE160(MCS0)	143/6665	10.50	**10.16**
	175/6825	10.50	9.89
802.11be-EHT20(MCS0)	117/6535	8.00	6.80
	149/6695	8.00	7.39
	185/6875	8.00	7.80
802.11be-EHT40(MCS0)	123/6565	9.50	8.42
	147/6685	9.50	8.92
	179/6845	9.50	8.38
	187/6885	9.50	8.53
802.11be-EHT80(MCS0)	135/6625	9.50	8.53
	151/6705	9.50	8.74
	183/6865	9.50	8.81
802.11be-EHT160(MCS0)	143/6665	10.00	9.44
	175/6825	10.00	9.27
802.11be-EHT320(MCS0)	127/6585	10.00	9.06
Note. Initial test configuration is 802.11ax-HE160 mode.			

6GHz Wi-Fi (U-NII-8)Ant0	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	189/6895	8.00	7.59
	209/6995	8.00	7.45
	229/7095	8.00	7.81
802.11ax-HE40(MCS0)	203/6965	9.50	8.62
	227/7085	9.50	9.08
802.11ax-HE80(MCS0)	199/6945	9.50	8.58
	215/7025	9.50	8.29
802.11ax-HE160(MCS0)	207/6985	10.50	**10.03**
802.11be-EHT20(MCS0)	189/6895	8.00	7.64
	209/6995	8.00	7.46
	229/7095	8.00	7.65
802.11be-EHT40(MCS0)	203/6965	9.50	8.31
	227/7085	9.50	8.90
802.11be-EHT80(MCS0)	199/6945	9.50	8.72
	215/7025	9.50	8.67
802.11be-EHT160(MCS0)	207/6985	10.50	9.41
802.11be-EHT320(MCS0)	191/6905	10.00	9.57
Note. Initial test configuration is 802.11ax-HE160 mode.			

6GHz Wi-Fi (U-NII-5) Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	1/5955	8.00	6.25
	45/6175	8.00	5.79
	93/6415	8.00	6.37
802.11ax-HE40(MCS0)	3/5965	11.50	10.50
	43/6165	11.50	9.87
	91/6405	11.50	10.27
802.11ax-HE80(MCS0)	7/5985	11.50	10.52
	39/6145	11.50	9.79
	87/6385	11.50	10.10
802.11ax-HE160(MCS0)	15/6025	11.50	11.13
	47/6185	11.50	10.54
	79/6345	11.50	**11.15**
802.11be-EHT20(MCS0)	1/5955	8.00	6.32
	45/6175	8.00	5.87
	93/6415	8.00	6.43
802.11be-EHT40(MCS0)	3/5965	11.50	10.24
	43/6165	11.50	9.66
	91/6405	11.50	10.07
802.11be-EHT80(MCS0)	7/5985	11.50	10.56

	39/6145	11.50	9.58
	87/6385	11.50	10.06
802.11be-EHT160(MCS0)	15/6025	11.50	10.23
	47/6185	11.50	10.04
	79/6345	11.50	10.42
802.11be-EHT320(MCS0)	63/6265	11.00	10.82
Note. Initial test configuration is 802.11ax-HE160 mode.			

6GHz Wi-Fi (U-NII-6)Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	97/6435	8.00	6.64
	105/6475	8.00	6.40
	113/6515	8.00	6.41
802.11ax-HE40(MCS0)	99/6445	9.00	7.96
	107/6485	9.00	7.98
	115/6525	9.00	8.31
802.11ax-HE80(MCS0)	103/6465	10.00	8.61
	119/6545	10.00	8.89
802.11ax-HE160(MCS0)	111/6505	10.00	**9.73**
802.11be-EHT20(MCS0)	97/6435	8.00	6.68
	105/6475	8.00	6.43
	113/6515	8.00	6.44
802.11be-EHT40(MCS0)	99/6445	9.00	7.61
	107/6485	9.00	7.59
	115/6525	9.00	8.06
802.11be-EHT80(MCS0)	103/6465	10.00	8.92
	119/6545	10.00	9.07
802.11be-EHT160(MCS0)	111/6505	10.00	9.42
Note. Initial test configuration is 802.11ax-HE160 mode.			

6GHz Wi-Fi (U-NII-7)Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	117/6535	8.00	6.33
	149/6695	8.00	6.33
	185/6875	8.00	6.47
802.11ax-HE40(MCS0)	123/6565	9.50	8.36
	147/6685	9.50	8.56
	179/6845	9.50	8.38
	187/6885	9.50	8.16
802.11ax-HE80(MCS0)	135/6625	9.50	8.34
	151/6705	9.50	8.15
	183/6865	9.50	8.11
802.11ax-HE160(MCS0)	143/6665	10.00	9.26

	175/6825	10.00	**9.42**
802.11be-EHT20(MCS0)	117/6535	8.00	6.36
	149/6695	8.00	6.41
	185/6875	8.00	6.50
802.11be-EHT40(MCS0)	123/6565	9.50	8.21
	147/6685	9.50	8.39
	179/6845	9.50	8.17
	187/6885	9.50	7.85
802.11be-EHT80(MCS0)	135/6625	9.50	8.38
	151/6705	9.50	8.18
	183/6865	9.50	7.97
802.11be-EHT160(MCS0)	143/6665	10.00	8.58
	175/6825	10.00	8.72
802.11be-EHT320(MCS0)	127/6585	9.50	8.95
Note. Initial test configuration is 802.11ax-HE160 mode.			

6GHz Wi-Fi (U-NII-8)Ant1	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11ax-HE20(MCS0)	189/6895	8.00	6.34
	209/6995	8.00	6.65
	229/7095	8.00	6.92
802.11ax-HE40(MCS0)	203/6965	9.50	8.13
	227/7085	9.50	8.09
802.11ax-HE80(MCS0)	199/6945	9.50	8.41
	215/7025	9.50	8.08
802.11ax-HE160(MCS0)	207/6985	10.00	**9.44**
802.11be-EHT20(MCS0)	189/6895	8.00	6.34
	209/6995	8.00	6.65
	229/7095	8.00	6.84
802.11be-EHT40(MCS0)	203/6965	9.50	7.95
	227/7085	9.50	7.77
802.11be-EHT80(MCS0)	199/6945	9.50	8.34
	215/7025	9.50	8.06
802.11be-EHT160(MCS0)	207/6985	10.00	9.06
802.11be-EHT320(MCS0)	191/6905	9.50	8.85
Note. Initial test configuration is 802.11ax-HE160 mode.			

6GHz Wi-Fi U-NII-5 MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11ax-HE20 (MCS0)	1/5955	4.00	3.09	0.16	0.00
	45/6175	4.00	3.35	0.02	0.64
	93/6415	4.00	3.58	0.92	0.19
802.11ax-HE40 (MCS0)	3/5965	8.00	6.58	3.63	3.50
	43/6165	8.00	6.54	4.07	2.91
	91/6405	8.00	7.18	4.58	3.72
802.11ax-HE80 (MCS0)	7/5985	11.00	9.65	6.89	6.38
	39/6145	11.00	9.51	7.14	5.75
	87/6385	11.00	10.08	7.43	6.67
802.11ax-HE160 (MCS0)	15/6025	13.00	11.98	9.13	8.80
	47/6185	13.00	11.99	9.35	8.57
	79/6345	13.00	12.63	9.72	9.52
802.11be-EHT20 (MCS0)	1/5955	4.00	3.08	0.15	-0.01
	45/6175	4.00	3.36	0.01	0.67
	93/6415	4.00	3.59	0.95	0.18
802.11be-EHT40 (MCS0)	3/5965	8.00	6.33	3.36	3.28
	43/6165	8.00	6.22	3.69	2.68
	91/6405	8.00	6.93	4.32	3.48
802.11be-EHT80 (MCS0)	7/5985	11.00	9.69	6.83	6.52
	39/6145	11.00	9.62	7.17	5.96
	87/6385	11.00	10.14	7.43	6.81
802.11be-EHT160 (MCS0)	15/6025	13.00	11.44	8.77	8.06
	47/6185	13.00	11.48	8.98	7.88
	79/6345	13.00	12.03	9.20	8.83
802.11be-EHT320 (MCS0)	63/6265	16.00	**15.71**	12.75	12.64
Note. Initial test configuration is 802.11be-EHT320 mode.					

6GHz Wi-Fi U-NII-6 MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11ax-HE20 (MCS0)	97/6435	5.00	3.76	0.68	0.82
	105/6475	5.00	3.78	0.75	0.78
	113/6515	5.00	3.88	0.91	0.82
802.11ax-HE40 (MCS0)	99/6445	8.00	7.29	4.44	4.12
	107/6485	8.00	7.17	4.44	3.87
	115/6525	8.00	7.09	4.29	3.85
802.11ax-HE80 (MCS0)	103/6465	11.00	9.66	6.80	6.50
	119/6545	11.00	9.79	7.11	6.43
802.11ax-HE160 (MCS0)	111/6505	13.00	**12.36**	9.67	9.01
802.11be-EHT20 (MCS0)	97/6435	5.00	3.79	0.67	0.88
	105/6475	5.00	3.78	0.72	0.82

	113/6515	5.00	3.86	0.86	0.84
802.11be-EHT40 (MCS0)	99/6445	8.00	7.08	4.21	3.93
	107/6485	8.00	6.96	4.24	3.63
	115/6525	8.00	6.86	4.11	3.58
802.11be-EHT80 (MCS0)	103/6465	11.00	9.74	6.80	6.66
	119/6545	11.00	9.89	7.14	6.60
802.11be-EHT160 (MCS0)	111/6505	13.00	11.72	9.09	8.30
Note. Initial test configuration is 802.11ax-HE160 mode.					

6GHz Wi-Fi U-NII-7 MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11ax-HE20 (MCS0)	117/6535	5.00	3.92	0.62	1.18
	149/6695	5.00	4.29	0.89	1.63
	185/6875	5.00	3.89	0.72	1.04
802.11ax-HE40 (MCS0)	123/6565	8.00	7.00	4.23	3.73
	147/6685	8.00	7.20	4.58	3.77
	179/6845	8.00	7.43	4.74	4.08
	187/6885	8.00	7.40	4.78	3.95
802.11ax-HE80 (MCS0)	135/6625	11.00	10.13	7.48	6.72
	151/6705	11.00	10.12	7.69	6.43
	183/6865	11.00	10.15	7.90	6.21
802.11ax-HE160 (MCS0)	143/6665	13.00	12.86	10.25	9.40
	175/6825	13.00	12.80	10.37	9.12
802.11be-EHT20 (MCS0)	117/6535	5.00	3.91	0.67	1.11
	149/6695	5.00	4.32	0.91	1.68
	185/6875	5.00	3.88	0.67	1.07
802.11be-EHT40 (MCS0)	123/6565	8.00	6.81	4.10	3.47
	147/6685	8.00	7.05	4.52	3.50
	179/6845	8.00	7.26	4.60	3.86
	187/6885	8.00	7.24	4.62	3.80
802.11be-EHT80 (MCS0)	135/6625	11.00	10.19	7.51	6.82
	151/6705	11.00	10.19	7.69	6.59
	183/6865	11.00	10.23	7.83	6.52
802.11be-EHT160 (MCS0)	143/6665	13.00	12.21	9.71	8.63
	175/6825	13.00	12.21	9.84	8.46
802.11be-EHT320 (MCS0)	127/6585	15.00	**14.03**	11.21	10.95
Note. Initial test configuration is 802.11be-EHT320 mode.					

6GHz Wi-Fi U-NII-8 MIMO	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant0	Ant1
802.11ax-HE20 (MCS0)	189/6895	5.00	3.81	0.69	0.91
	209/6995	5.00	3.97	0.50	1.37
	229/7095	5.00	4.67	1.31	1.98
802.11ax-HE40 (MCS0)	203/6965	8.00	7.05	4.44	3.59
	227/7085	8.00	7.63	5.29	3.82
802.11ax-HE80 (MCS0)	199/6945	11.00	9.73	7.30	6.04
	215/7025	11.00	10.45	7.96	6.84
802.11ax-HE160 (MCS0)	207/6985	13.00	12.75	10.09	9.36
802.11be-EHT20 (MCS0)	189/6895	5.00	3.82	0.64	0.97
	209/6995	5.00	3.89	0.35	1.36
	229/7095	5.00	4.59	1.13	1.98
802.11be-EHT40 (MCS0)	203/6965	8.00	6.90	4.33	3.41
	227/7085	8.00	7.48	5.16	3.64
802.11be-EHT80 (MCS0)	199/6945	11.00	9.75	7.21	6.22
	215/7025	11.00	10.51	7.99	6.94
802.11be-EHT160 (MCS0)	207/6985	13.00	12.12	9.44	8.75
802.11be-EHT320 (MCS0)	191/6905	15.00	**13.90**	10.98	10.62
Note. Initial test configuration is 802.11be-EHT320 mode.					

9.2 MRU Mode

2.4GHz Wi-Fi Mode	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	3/2422	52+106	LOW	15.00	14.09	10.87	11.28
	201860		HIGH	14.50	13.54	10.56	10.50
802.11be-EHT40 (MCS0)	3/2422	106+26	LOW	15.00	14.04	10.83	11.22
	201860		HIGH	14.50	13.40	10.38	10.39
5GHz Wi-Fi U-NII-1	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	38/5190	52+106	LOW	18.00	16.76	13.54	13.94
	46/5230		HIGH	18.00	16.81	13.83	13.76
802.11be-EHT40 (MCS0)	36/5180	106+26	LOW	20.00	19.20	16.52	15.84
	48/5240		HIGH	20.00	18.74	15.86	15.60
802.11be-EHT80 (MCS0)	42/5210	484+242	LOW	20.00	18.76	15.88	15.61
	42/5210		HIGH	20.00	18.58	15.72	15.40
802.11be-EHT80 (MCS0)	42/5210	484+484punc242	HIGH	20.00	18.61	15.81	15.38
802.11be-EHT80 (MCS0)	42/5210	484punc242+484	LOW	20.00	18.57	15.70	15.42
5GHz Wi-Fi (U-NII-2A)	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	54/5270	52+26	LOW	18.00	16.77	13.91	13.62
	62/5310		HIGH	18.00	16.73	14.44	12.85
802.11be-EHT40 (MCS0)	54/5270	106+26	LOW	20.00	18.82	15.89	15.73
	62/5310		HIGH	20.00	18.67	16.30	14.91
802.11be-EHT80 (MCS0)	58/5290	484+242	LOW	20.00	18.68	15.86	15.48
	58/5290		HIGH	20.00	18.34	15.54	15.10
802.11be-EHT80 (MCS0)	58/5290	484punc242+484	LOW	20.00	18.14	15.17	15.09
802.11be-EHT80 (MCS0)	58/5290	484+484punc242	HIGH	20.00	18.28	15.31	15.23
802.11be-EHT160 (MCS0)	50/5250	996punc242+996	LOW	18.00	17.02	14.33	13.65
802.11be-EHT160 (MCS0)	50/5250	996+996punc242	HIGH	18.00	17.22	14.46	13.94
802.11be-EHT160 (MCS0)	50/5250	996+484	LOW	18.00	16.98	14.20	13.72
	50/5250		HIGH	18.00	17.00	14.26	13.70
802.11be-EHT160 (MCS0)	50/5250	996punc484+996	LOW	18.00	16.85	14.08	13.58
802.11be-EHT160 (MCS0)	50/5250	996+996punc484	HIGH	18.00	17.21	14.43	13.95

5GHz Wi-Fi U-NII-2C	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	102/5510	52+26	LOW	18.00	17.27	14.35	14.16
	134/5670		HIGH	18.00	17.60	14.62	14.57
802.11be-EHT40 (MCS0)	102/5510	106+26	LOW	18.00	17.17	14.25	14.07
	134/5670		HIGH	18.00	17.57	14.57	14.54
802.11be-EHT80 (MCS0)	106/5530	484+242	LOW	20.00	18.10	15.03	15.16
	106/5530		HIGH	20.00	18.14	15.04	15.22
802.11be-EHT80 (MCS0)	106/5530	484+484punc242	HIGH	20.00	18.04	14.95	15.11
802.11be-EHT80 (MCS0)	106/5530	484punc242+484	LOW	20.00	18.08	14.96	15.18
802.11be-EHT160 (MCS0)	114/5570	996+484	LOW	18.00	17.03	14.35	13.66
	114/5570		HIGH	18.00	16.92	14.14	13.66
802.11be-EHT160 (MCS0)	114/5570	996+996punc242	HIGH	18.00	16.76	14.05	13.42
802.11be-EHT160 (MCS0)	114/5570	996punc242+996	LOW	18.00	16.75	14.01	13.45
802.11be-EHT160 (MCS0)	114/5570	996+996punc484	HIGH	18.00	16.92	14.23	13.57
802.11be-EHT160 (MCS0)	114/5570	996punc484+996	LOW	18.00	16.87	14.08	13.63
5GHz Wi-Fi U-NII-3	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	151/5755	52+26	LOW	21.00	20.11	17.15	17.06
	159/5795		HIGH	21.00	20.19	17.32	17.03
802.11be-EHT40 (MCS0)	151/5755	106+26	LOW	21.00	19.98	17.04	16.90
	159/5795		HIGH	21.00	20.11	17.24	16.95
802.11be-EHT80 (MCS0)	155/5775	484+242	LOW	20.00	18.69	15.78	15.58
	155/5775		HIGH	20.00	18.74	15.87	15.58
802.11be-EHT80 (MCS0)	155/5775	484+484punc242	HIGH	20.00	18.69	15.80	15.57
802.11be-EHT80 (MCS0)	155/5775	484punc242+484	LOW	20.00	18.71	15.83	15.56
6GHz Wi-Fi U-NII-5	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	03/5965	52+26	LOW	0.00	-1.20	-3.65	-4.85
	91/6405		HIGH	0.00	-1.21	-3.53	-5.03
802.11be-EHT40 (MCS0)	03/5965	106+26	LOW	2.00	0.89	-1.54	-2.79
	91/6405		HIGH	2.00	0.73	-1.56	-3.14
802.11be-EHT80 (MCS0)	7/5985	484+242	LOW	9.00	8.15	4.80	5.45
	87/6385		HIGH	9.00	8.32	5.22	5.39
802.11be-EHT(80-20) (MCS0)	7/5985	242+484	3	9.00	8.09	4.80	5.35
	87/6385		2	9.00	8.12	5.07	5.15
802.11be-EHT160 (MCS0)	15/6025	996+484	LOW	12.50	10.86	8.12	7.56
	79/6345		HIGH	12.50	10.82	8.14	7.46
802.11be-EHT160-20) (MCS0)	15/6025	242+484+996	1	12.50	11.07	8.29	7.82
	79/6345		8	12.50	10.95	8.25	7.61
802.11be-EHT160-40) (MCS0)	15/6025	484+996	1	12.50	11.05	8.26	7.80
	79/6345		4	12.50	10.96	8.26	7.62

802.11be-EHT320 (MCS0)	31/6105	996+996+996+484	LOW	15.00	13.65	10.88	10.38
	63/6265		HIGH	15.00	14.44	11.17	11.68
802.11be-EHT(320-40) (MCS0)	31/6105	484+996*3	1	15.00	13.69	10.89	10.45
	63/6265		8	15.00	14.58	11.32	11.81
802.11be-EHT(320-80) (MCS0)	31/6105	996x3	1	15.00	13.61	10.78	10.41
	63/6265		4	15.00	13.53	10.24	10.79
802.11be-EHT(320-120) (MCS0)	31/6105	996x2+484	8	15.00	13.50	10.45	10.52
	63/6265		5	15.00	13.81	10.56	11.02
6GHz Wi-Fi U-NII-6	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	99/6445	52+26	LOW	0.00	-0.79	-3.02	-4.75
	107/6485		HIGH	0.00	-0.38	-2.69	-4.22
802.11be-EHT40 (MCS0)	99/6445	106+26	LOW	2.00	1.15	-1.10	-2.78
	107/6485		HIGH	2.00	0.58	-1.72	-3.28
802.11be-EHT80 (MCS0)	103/6465	484+242	LOW	9.00	8.46	5.84	5.01
	103/6465		HIGH	9.00	8.37	5.75	4.93
802.11be-EHT(80-20) (MCS0)	103/6465	242+484	3	9.00	8.34	5.68	4.94
	103/6465		2	9.00	8.38	5.73	4.97
802.11be-EHT160 (MCS0)	111/6505	996+484	LOW	12.50	10.76	7.72	7.78
	111/6505		HIGH	12.50	10.72	7.60	7.82
802.11be-EHT160-20) (MCS0)	111/6505	242+484+996	1	12.50	11.82	8.72	8.89
	111/6505		8	12.50	11.83	8.75	8.89
802.11be-EHT160-40) (MCS0)	111/6505	484+996	1	12.50	10.96	7.83	8.06
	111/6505		4	12.50	10.97	7.93	7.99
6GHz Wi-Fi U-NII-7	Channel /Freq.(MHz)	RU Size (Tone)	Maximum Output Power (dBm)				
			RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	115/6525	52+26	LOW	0.00	-0.46	-2.80	-4.26
	179/6845		HIGH	0.00	-0.33	-3.28	-3.40
802.11be-EHT40 (MCS0)	115/6525	106+26	LOW	2.00	1.55	-0.82	-2.21
	179/6845		HIGH	2.00	0.57	-2.43	-2.46
802.11be-EHT80 (MCS0)	119/6545	484+242	LOW	9.00	8.58	5.89	5.23
	183/6865		HIGH	9.00	7.85	4.94	4.73
802.11be-EHT(80-20) (MCS0)	119/6545	242+484	3	9.00	8.47	5.71	5.20
	183/6865		2	9.00	8.04	5.13	4.92
802.11be-EHT160 (MCS0)	143/6665	996+484	LOW	12.50	10.83	7.85	7.78
	175/6825		HIGH	12.50	10.81	7.99	7.61
802.11be-EHT160-20) (MCS0)	143/6665	242+484+996	1	12.50	12.16	9.07	9.23
	175/6825		8	12.50	11.94	9.15	8.70
802.11be-EHT160-40) (MCS0)	143/6665	484+996	1	12.50	10.98	8.05	7.89
	175/6825		4	12.50	11.13	8.30	7.94
802.11be-EHT320 (MCS0)	159/6745	996+996+996+484	LOW	15.00	13.28	10.21	10.33
	127/6585		HIGH	15.00	13.49	10.41	10.55
802.11be-EHT(320-40)	159/6745	484+996*3	1	15.00	13.43	10.40	10.43

(MCS0)	127/6585		8	15.00	13.70	10.60	10.77
802.11be-EHT(320-80)	159/6745	996x3	1	15.00	13.30	10.31	10.27
(MCS0)	127/6585		4	15.00	13.65	10.57	10.70
802.11be-EHT(320-120)	159/6745	996x2+484	8	15.00	13.43	10.43	10.41
(MCS0)	127/6585		5	15.00	13.86	10.82	10.87
6GHz Wi-Fi	Channel	RU Size	Maximum Output Power (dBm)				
U-NII-8	/Freq.(MHz)	(Tone)	RU Index	Tune-up	Meas.	Ant0	Ant1
802.11be-EHT40 (MCS0)	187/6885	52+26	LOW	0.00	-0.52	-3.53	-3.54
	227/7085		HIGH	0.00	-0.50	-2.64	-4.60
802.11be-EHT40 (MCS0)	187/6885	106+26	LOW	2.00	1.44	-1.49	-1.66
	227/7085		HIGH	2.00	1.41	-0.77	-2.63
802.11be-EHT80 (MCS0)	199/6945	484+242	LOW	9.00	7.73	4.28	5.11
	215/7025		HIGH	9.00	7.97	5.04	4.87
802.11be-EHT(80-20)	199/6945	242+484	3	9.00	7.77	4.33	5.15
(MCS0)	215/7025		2	9.00	7.99	5.03	4.93
802.11be-EHT160 (MCS0)	207/6985	996+484	LOW	12.50	10.98	7.78	8.15
	207/6985		HIGH	12.50	11.13	7.90	8.32
802.11be-EHT160-20)	207/6985	242+484+996	1	12.50	11.24	8.06	8.39
(MCS0)	207/6985		8	12.50	11.23	8.04	8.40
802.11be-EHT160-40)	207/6985	484+996	1	12.50	11.21	8.03	8.36
(MCS0)	207/6985		4	12.50	11.26	8.07	8.42
802.11be-EHT320 (MCS0)	191/6905	996+996+996+484	LOW	15.00	13.64	10.48	10.78
	191/6905		HIGH	15.00	13.56	10.42	10.67
802.11be-EHT(320-40)	191/6905	484+996*3	1	15.00	13.57	10.40	10.71
(MCS0)	191/6905		8	15.00	13.59	10.43	10.73
802.11be-EHT(320-80)	191/6905	996x3	1	15.00	13.49	10.33	10.63
(MCS0)	191/6905		4	15.00	13.60	10.48	10.70
802.11be-EHT(320-120)	191/6905	996x2+484	8	15.00	13.87	10.67	11.05
(MCS0)	191/6905		5	15.00	13.97	10.83	11.08

9.3 Bluetooth Mode

Bluetooth	Conducted Power(dBm)			Tune-up Limit (dBm)
	Channel/Frequency (MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	5.37	6.18	4.79	9.00
π/4DQPSK	2.54	3.14	1.72	7.00
8DPSK	2.28	3.00	1.73	7.00
Bluetooth LE	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	4.24	5.26	3.90	9.00
GFSK(2M)	1.73	2.53	1.15	9.00
GFSK(S=2)	4.07	4.88	3.51	9.00
GFSK(S=8)	5.65	6.51	5.07	9.00

10 Test Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations Refer to Chapter 5.4.

Distance of the Antenna to the EUT Surface/Edge										
Antenna	Back Side	Front Side1-TS8	Front Side2-TS9	Left Edge-TS4	Right Edge-TS5	Top Edge1-TS6	Top Edge2-TS7	Bottom Edge1-TS1	Bottom Edge2-TS2	Bottom Edge3-TS3
Wi-Fi 2.4GHz/ 5GHz / Bluetooth Antenna (ANT0)	＞25mm	＜25mm	＞25mm	＜25mm	＞25mm	＜25mm	＞25mm	＜25mm	＞25mm	＜25mm
Wi-Fi 2.4GHz/ 5GHz Antenna (ANT1)	＞25mm	＞25mm	＜25mm	＞25mm	＜25mm	＞25mm	＜25mm	＞25mm	＜25mm	＜25mm
nRF 2.4GHz Antenna (ANT2)	＞25mm	＜25mm	＜25mm	＞25mm	＞25mm	＜25mm	＜25mm	＞25mm	＞25mm	＞25mm
Positions for SAR Tests										
Antenna	Back Side	Front Side1-TS8	Front Side2-TS9	Left Edge-TS4	Right Edge-TS5	Top Edge1-TS6	Top Edge2-TS7	Bottom Edge1-TS1	Bottom Edge2-TS2	Bottom Edge3-TS3
Wi-Fi 2.4GHz/ 5GHz / Bluetooth Antenna (ANT0)	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes
Wi-Fi 2.4GHz/ 5GHz Antenna (ANT1)	N/A	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Yes	Yes
nRF 2.4GHz Antenna (ANT2)	N/A	Yes	Yes	N/A	N/A	Yes	Yes	N/A	N/A	N/A

Note:
1. Per KDB 941225 D06, SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
2. Per FCC KDB 447498 D01, for each exposure position, testing of other requised channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
a) ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100MHz
b) ≤ 0.6 W/kg or 1.5 W/kg, for1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
c) ≤ 0.4 W/kg or 1.0 Wkg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz.

10.2 Standalone SAR Test Exclusion Considerations

Per KDB 447498 D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for product specific 10-g SAR

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Band	Configuration	Distance (mm)	MAX Power (dBm)	Frequency (MHz)	Ratio	Evaluation
Bluetooth	Head SAR	0	9.00	2480	2.50	No
	Extremity SAR	0	9.00	2480	2.50	No
nRF 2.4GHz	Head SAR	0	8.00	2480	1.99	No
	Extremity SAR	0	8.00	2480	1.99	No

10.3 SAR & APD Test Results

Note:

1. The value with blue color is the maximum SAR Value of each test band.
2. 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.
3. 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.
4. SAR assessment for 6G-7.2G is according to IEC/IEEE 62209-1528:2020
5. 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.
6. 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.

Head SAR (by face down phantom)

Band	Antenna	Test Position	Dist. (mm)	Mode	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 2.4GHz	ANT0	TS10	0	802.11b	100.0%	1/2412	18.00	17.23	0.198	-0.036	1.19	0.236	10
	ANT1	TS10	0	802.11b	100.0%	11/2462	18.50	18.30	0.030	0.100	1.05	0.031	/
Wi-Fi U-NII-2A	ANT0	TS10	0	802.11ax-HE40	100.0%	54/5270	18.00	16.70	0.063	-0.174	1.35	0.085	/
	ANT1	TS10	0	802.11ax-HE40	100.0%	62/5310	18.00	17.47	0.112	0.037	1.13	0.127	/
Wi-Fi U-NII-2C	ANT0	TS10	0	802.11a	100.0%	100/5500	17.50	16.85	0.434	-0.156	1.16	0.504	11
	ANT1	TS10	0	802.11a	100.0%	116/5580	17.50	17.24	0.132	0.045	1.06	0.140	/
Wi-Fi U-NII-3	ANT0	TS10	0	802.11nHT40	100.0%	159/5795	18.00	17.75	0.043	0.020	1.06	0.046	/
	ANT1	TS10	0	802.11nHT40	100.0%	159/5795	18.50	18.07	0.159	-0.170	1.10	0.176	/

Band	Antenna	Test Position	Dist. (mm)	Mode	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	ANT0	TS10	0	802.11be EHT320	100.0%	63/6265	11.50	11.19	0.015	0.142	0.010	1.07	0.016	0.153	/
	ANT1	TS10	0	802.11ax HE160	100.0%	79/6345	11.50	11.15	0.033	0.248	-0.049	1.08	0.036	0.269	/
Wi-Fi U-NII-6	ANT0	TS10	0	802.11ax HE160	100.0%	111/6505	10.00	9.80	0.102	0.782	0.027	1.05	0.107	0.819	12
	ANT1	TS10	0	802.11ax HE160	100.0%	111/6505	10.00	9.73	0.041	0.329	0.011	1.06	0.044	0.350	/
Wi-Fi U-NII-7	ANT0	TS10	0	802.11ax HE160	100.0%	143/6665	10.50	10.16	0.051	0.463	0.029	1.08	0.055	0.501	/
	ANT1	TS10	0	802.11ax HE160	100.0%	175/6825	10.00	9.42	0.007	0.015	0.049	1.14	0.008	0.017	/
Wi-Fi U-NII-8	ANT0	TS10	0	802.11ax HE160	100.0%	207/6985	10.50	10.03	0.034	0.312	-0.040	1.11	0.038	0.348	/
	ANT1	TS10	0	802.11ax HE160	100.0%	207/6985	10.00	9.44	0.051	0.457	0.100	1.14	0.058	0.520	/

Extremity SAR

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g (W/Kg)	Power Drift (dB)	Scaling Factor	Report SAR10g (W/kg)	Plot No.
Wi-Fi 2.4GHz	ANT0	Back Side	0	802.11b	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11b	100.0%	1/2412	17.00	16.42	0.612	-0.060	1.14	0.699	/
		Left Edge-TS4	0	802.11b	100.0%	1/2412	17.00	16.42	0.043	0.100	1.14	0.049	/
		Right Edge-TS5	0	802.11b	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11b	100.0%	1/2412	17.00	16.42	0.034	0.073	1.14	0.038	/
		Bottom Edge1-TS1	0	802.11b	100.0%	1/2412	17.00	16.42	0.069	0.040	1.14	0.079	/
		Bottom Edge3-TS3	0	802.11b	100.0%	1/2412	17.00	16.42	0.042	0.015	1.14	0.048	/
	ANT1	Back Side	0	802.11b	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11b	100.0%	11/2462	18.00	17.43	0.853	-0.070	1.14	0.973	13
		Left Edge-TS4	0	802.11b	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge-TS5	0	802.11b	100.0%	11/2462	18.00	17.43	0.556	0.050	1.14	0.634	/
		Top Edge2-TS7	0	802.11b	100.0%	11/2462	18.00	17.43	0.031	0.020	1.14	0.035	/
		Bottom Edge2-TS2	0	802.11b	100.0%	11/2462	18.00	17.43	0.263	0.038	1.14	0.300	/
		Bottom Edge3-TS3	0	802.11b	100.0%	11/2462	18.00	17.43	0.164	-0.020	1.14	0.187	/
Wi-Fi U-NII-2A	ANT0	Back Side	0	802.11ax-HE40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11ax-HE40	100.0%	54/5270	18.00	16.70	0.455	-0.100	1.35	0.614	/
		Left Edge-TS4	0	802.11ax-HE40	100.0%	54/5270	18.00	16.70	0.115	0.124	1.35	0.155	/
		Right Edge-TS5	0	802.11ax-HE40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11ax-HE40	100.0%	54/5270	18.00	16.70	0.065	0.100	1.35	0.088	/
		Bottom Edge1-TS1	0	802.11ax-HE40	100.0%	54/5270	18.00	16.70	0.072	0.100	1.35	0.097	/
		Bottom Edge3-TS3	0	802.11ax-HE40	100.0%	54/5270	18.00	16.70	0.009	0.013	1.35	0.012	/
	ANT1	Back Side	0	802.11ax-HE40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11ax-HE40	100.0%	62/5310	18.00	17.47	1.100	-0.050	1.13	1.243	14
		Left Edge-TS4	0	802.11ax-HE40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge-TS5	0	802.11ax-HE40	100.0%	62/5310	18.00	17.47	0.673	0.090	1.13	0.760	/
		Top Edge2-TS7	0	802.11ax-HE40	100.0%	62/5310	18.00	17.47	0.083	0.017	1.13	0.094	/
		Bottom Edge2-TS2	0	802.11ax-HE40	100.0%	62/5310	18.00	17.47	0.082	0.100	1.13	0.093	/
		Bottom Edge3-TS3	0	802.11ax-HE40	100.0%	62/5310	18.00	17.47	0.046	0.040	1.13	0.052	/
Wi-Fi U-NII-2C	ANT0	Back Side	0	802.11a	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11a	100.0%	100/5500	17.50	16.85	0.497	0.050	1.16	0.577	/
		Left Edge-TS4	0	802.11a	100.0%	100/5500	17.50	16.85	0.075	0.031	1.16	0.087	/
		Right Edge-TS5	0	802.11a	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11a	100.0%	100/5500	17.50	16.85	0.021	0.100	1.16	0.024	/
		Bottom Edge1-TS1	0	802.11a	100.0%	100/5500	17.50	16.85	0.041	-0.060	1.16	0.048	/
		Bottom Edge3-TS3	0	802.11a	100.0%	100/5500	17.50	16.85	0.010	0.032	1.16	0.011	/
	ANT1	Back Side	0	802.11a	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11a	100.0%	116/5580	17.50	17.24	0.873	-0.030	1.06	0.927	/
		Left Edge-TS4	0	802.11a	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/

		Right Edge-TS5	0	802.11a	100.0%	116/5580	17.50	17.24	0.641	0.010	1.06	0.681	/
		Top Edge2-TS7	0	802.11a	100.0%	116/5580	17.50	17.24	0.048	-0.041	1.06	0.051	/
		Bottom Edge2-TS2	0	802.11a	100.0%	116/5580	17.50	17.24	0.083	0.100	1.06	0.088	/
		Bottom Edge3-TS3	0	802.11a	100.0%	116/5580	17.50	17.24	0.049	0.065	1.06	0.052	/
Wi-Fi U-NII-3	ANT0	Back Side	0	802.11nHT40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11nHT40	100.0%	159/5795	17.00	16.83	0.516	0.060	1.04	0.537	/
		Left Edge-TS4	0	802.11nHT40	100.0%	159/5795	17.00	16.83	0.102	0.081	1.04	0.106	/
		Right Edge-TS5	0	802.11nHT40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11nHT40	100.0%	159/5795	17.00	16.83	0.034	0.099	1.04	0.035	/
		Bottom Edge1-TS1	0	802.11nHT40	100.0%	159/5795	17.00	16.83	0.087	0.023	1.04	0.090	/
		Bottom Edge3-TS3	0	802.11nHT40	100.0%	159/5795	17.00	16.83	0.017	0.190	1.04	0.017	/
	ANT1	Back Side	0	802.11nHT40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11nHT40	100.0%	159/5795	18.00	17.56	0.873	0.090	1.11	0.966	/
		Left Edge-TS4	0	802.11nHT40	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge-TS5	0	802.11nHT40	100.0%	159/5795	18.00	17.56	0.585	0.060	1.11	0.647	/
		Top Edge2-TS7	0	802.11nHT40	100.0%	159/5795	18.00	17.56	0.073	0.100	1.11	0.081	/
		Bottom Edge2-TS2	0	802.11nHT40	100.0%	159/5795	18.00	17.56	0.063	0.065	1.11	0.070	/
		Bottom Edge3-TS3	0	802.11nHT40	100.0%	159/5795	18.00	17.56	0.025	-0.022	1.11	0.028	/

Band	Antenna	Test Position	Dist. (mm)	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g (W/Kg)	Measured APD (W/m^2)	Power Drift (dB)	Scaling Factor	Report SAR10g (W/Kg)	Report APD (W/m^2)	Plot No.
Wi-Fi U-NII-5	ANT0	Back Side	0	802.11be EHT320	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11be EHT320	100.0%	63/6265	11.50	11.19	0.196	4.710	-0.010	1.07	0.211	5.058	/
		Left Edge-TS4	0	802.11be EHT320	100.0%	63/6265	11.50	11.19	0.070	1.560	-0.130	1.07	0.075	1.675	/
		Right Edge-TS5	0	802.11be EHT320	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11be EHT320	100.0%	63/6265	11.50	11.19	0.008	0.181	-0.132	1.07	0.009	0.194	/
		Bottom Edge1-TS1	0	802.11be EHT320	100.0%	63/6265	11.50	11.19	0.052	1.120	0.011	1.07	0.056	1.203	/
		Bottom Edge3-TS3	0	802.11be EHT320	100.0%	63/6265	11.50	11.19	0.004	0.084	0.029	1.07	0.004	0.090	/
	ANT1	Back Side	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11ax-HE160	100.0%	79/6345	11.50	11.15	0.192	4.480	-0.030	1.08	0.208	4.856	/
		Left Edge-TS4	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Right Edge-TS5	0	802.11ax-HE160	100.0%	79/6345	11.50	11.15	0.128	3.040	-0.070	1.08	0.139	3.295	/
		Top Edge2-TS7	0	802.11ax-HE160	100.0%	79/6345	11.50	11.15	0.018	0.400	-0.063	1.08	0.020	0.434	/
		Bottom Edge2-TS2	0	802.11ax-HE160	100.0%	79/6345	11.50	11.15	0.011	0.293	-0.180	1.08	0.012	0.318	/
		Bottom Edge3-TS3	0	802.11ax-HE160	100.0%	79/6345	11.50	11.15	0.005	0.108	0.041	1.08	0.005	0.117	/
Wi-Fi U-NII-6	ANT0	Back Side	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11ax-HE160	100.0%	111/6505	10.00	9.80	0.239	5.730	-0.080	1.05	0.250	6.000	/
		Left Edge-TS4	0	802.11ax-HE160	100.0%	111/6505	10.00	9.80	0.080	1.780	0.170	1.05	0.084	1.864	/
		Right Edge-TS5	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11ax-HE160	100.0%	111/6505	10.00	9.80	0.020	0.433	-0.106	1.05	0.021	0.453	/
		Bottom Edge1-TS1	0	802.11ax-HE160	100.0%	111/6505	10.00	9.80	0.045	1.030	0.025	1.05	0.047	1.079	/
		Bottom Edge3-TS3	0	802.11ax-HE160	100.0%	111/6505	10.00	9.80	0.008	0.175	0.030	1.05	0.008	0.183	/

		Back Side	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11ax-HE160	100.0%	111/6505	10.00	9.73	0.127	2.920	-0.020	1.06	0.135	3.107	/
		Left Edge-TS4	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT1	Right Edge-TS5	0	802.11ax-HE160	100.0%	111/6505	10.00	9.73	0.089	2.110	-0.050	1.06	0.095	2.245	/
		Top Edge2-TS7	0	802.11ax-HE160	100.0%	111/6505	10.00	9.73	0.013	0.290	-0.081	1.06	0.014	0.309	/
		Bottom Edge2-TS2	0	802.11ax-HE160	100.0%	111/6505	10.00	9.73	0.016	0.394	-0.013	1.06	0.017	0.419	/
		Bottom Edge3-TS3	0	802.11ax-HE160	100.0%	111/6505	10.00	9.73	0.004	0.101	0.025	1.06	0.004	0.107	/
		Back Side	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11ax-HE160	100.0%	143/6665	10.50	10.16	0.270	6.500	-0.070	1.08	0.292	7.029	15
		Left Edge-TS4	0	802.11ax-HE160	100.0%	143/6665	10.50	10.16	0.100	2.240	0.054	1.08	0.108	2.422	/
	ANT0	Right Edge-TS5	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11ax-HE160	100.0%	143/6665	10.50	10.16	0.024	0.517	0.025	1.08	0.026	0.559	/
		Bottom Edge1-TS1	0	802.11ax-HE160	100.0%	143/6665	10.50	10.16	0.072	1.550	-0.028	1.08	0.078	1.676	/
Wi-Fi		Bottom Edge3-TS3	0	802.11ax-HE160	100.0%	143/6665	10.50	10.16	0.010	0.213	0.011	1.08	0.011	0.230	/
U-NII-7		Back Side	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11ax-HE160	100.0%	175/6825	10.00	9.42	0.136	3.160	0.090	1.14	0.155	3.611	/
		Left Edge-TS4	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT1	Right Edge-TS5	0	802.11ax-HE160	100.0%	175/6825	10.00	9.42	0.124	2.930	-0.010	1.14	0.142	3.349	/
		Top Edge2-TS7	0	802.11ax-HE160	100.0%	175/6825	10.00	9.42	0.013	0.285	0.042	1.14	0.015	0.326	/
		Bottom Edge2-TS2	0	802.11ax-HE160	100.0%	175/6825	10.00	9.42	0.023	0.462	-0.140	1.14	0.026	0.528	/
		Bottom Edge3-TS3	0	802.11ax-HE160	100.0%	175/6825	10.00	9.42	0.004	0.080	0.028	1.14	0.005	0.091	/
		Back Side	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side1-TS8	0	802.11ax-HE160	100.0%	207/6985	10.50	10.03	0.195	4.810	-0.050	1.11	0.217	5.360	/
		Left Edge-TS4	0	802.11ax-HE160	100.0%	207/6985	10.50	10.03	0.089	1.950	0.100	1.11	0.099	2.173	/
	ANT0	Right Edge-TS5	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Top Edge1-TS6	0	802.11ax-HE160	100.0%	207/6985	10.50	10.03	0.016	0.361	-0.091	1.11	0.018	0.402	/
		Bottom Edge1-TS1	0	802.11ax-HE160	100.0%	207/6985	10.50	10.03	0.046	0.456	0.024	1.11	0.051	0.508	/
Wi-Fi		Bottom Edge3-TS3	0	802.11ax-HE160	100.0%	207/6985	10.50	10.03	0.008	0.078	0.070	1.11	0.009	0.087	/
U-NII-8		Back Side	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
		Front Side2-TS9	0	802.11ax-HE160	100.0%	207/6985	10.00	9.44	0.138	2.790	0.015	1.14	0.157	3.174	/
		Left Edge-TS4	0	802.11ax-HE160	100.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	/
	ANT1	Right Edge-TS5	0	802.11ax-HE160	100.0%	207/6985	10.00	9.44	0.151	3.570	0.050	1.14	0.172	4.061	/
		Top Edge2-TS7	0	802.11ax-HE160	100.0%	207/6985	10.00	9.44	0.014	0.311	-0.048	1.14	0.016	0.354	/
		Bottom Edge2-TS2	0	802.11ax-HE160	100.0%	207/6985	10.00	9.44	0.024	0.506	-0.025	1.14	0.027	0.576	/
		Bottom Edge3-TS3	0	802.11ax-HE160	100.0%	207/6985	10.00	9.44	0.006	0.074	-0.010	1.14	0.007	0.084	/

Estimated SAR

Band	Configuration	Frequency (MHz)	Maximum Power (dBm)	Separation Distance (mm)	Estimated SAR (W/kg)
Bluetooth	Head SAR	2480	9.00	5	0.334
	Extremity SAR	2480	9.00	5	0.133
nRF 2.4GHz	Head SAR	2480	8.00	5	0.265
	Extremity SAR	2480	8.00	5	0.106
For simultaneous transmission analysis, Bluetooth SAR is estimated per KDB 447498 D01 based on the formula below. (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)/x] W/kg for test separation distances ≤ 50 mm; where x = 7.5 for 1-g SAR, and x = 18.75 for 10-g SAR.					

10.4 PD Test Results

1. The value with blue color is the maximum PD Value of each test band.
2. 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.
3. PD exposure is considered with two distances: 2mm (compliant distance) and λ/5.
4. 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 cm^2 and 4 cm^2. With this method, the reconstruction uncertainty (REC) is below 0.6 dB for d > λ/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 (ℓgrid) and grid extent (vgrid) are met. The grid is based on λ per DASY8 MODULE mmWAVE SYSTEM HANDBOOK and IEC/IEEE 63195: 2020.
5. 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	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.
Wi-Fi U-NII-5	ANT0	Front Side1-TS8	2	802.11be EHT320	100.0%	63/6265	11.50	11.19	1.350	2.840	-0.178	1.280	1.07	1.856	3.904	/
		Front Side1-TS8	9.9	802.11be EHT320	100.0%	63/6265	11.50	11.19	0.735	1.190	-0.142	1.280	1.07	1.010	1.636	/
Wi-Fi U-NII-6	ANT0	Front Side1-TS8	2	802.11ax HE160	100.0%	111/6505	10.00	9.80	2.430	4.360	-0.047	1.280	1.05	3.257	5.844	/
		Front Side1-TS8	9.2	802.11ax HE160	100.0%	111/6505	10.00	9.80	1.360	1.980	0.078	1.280	1.05	1.823	2.654	/
Wi-Fi U-NII-7	ANT0	Front Side1-TS8	2	802.11ax HE160	100.0%	143/6665	10.50	10.16	2.430	4.540	0.030	1.280	1.08	3.364	6.284	16
		Front Side1-TS8	9	802.11ax HE160	100.0%	143/6665	10.50	10.16	1.630	2.460	0.040	1.280	1.08	2.256	3.405	/
Wi-Fi U-NII-8	ANT0	Front Side1-TS8	2	802.11ax HE160	100.0%	207/6985	10.50	10.03	2.120	4.510	-0.038	1.280	1.11	3.024	6.433	/
		Front Side1-TS8	8.5	802.11ax HE160	100.0%	207/6985	10.50	10.03	1.560	2.260	0.110	1.280	1.11	2.225	3.223	/

10.5 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Head SAR	Extremity SAR
nRF 2.4GHz ANT2 + Bluetooth ANT0	Yes	Yes
Wi-Fi 2.4GHz ANT0 + Wi-Fi 2.4GHz ANT1+ nRF 2.4GHz ANT2	Yes	Yes
Wi-Fi 5GHz ANT0 + Wi-Fi 5GHz ANT1 + nRF 2.4GHz ANT2 + Bluetooth ANT0	Yes	Yes
Wi-Fi 6GHz ANT0 + Wi-Fi 6GHz ANT1 + nRF 2.4GHz ANT2 + Bluetooth ANT0	Yes	Yes
Wi-Fi 2.4GHz ANT0 + Wi-Fi 2.4GHz ANT1 + Wi-Fi 5GHz ANT0 + Wi-Fi 5GHz ANT1 + nRF 2.4GHz ANT2	Yes	Yes
Wi-Fi 2.4GHz ANT0 + Wi-Fi 2.4GHz ANT1 + Wi-Fi 6GHz ANT0 +Wi-Fi 6GHz ANT1 + nRF 2.4GHz ANT2	Yes	Yes
Wi-Fi 5GHz ANT0 + Wi-Fi 5GHz ANT1 + Wi-Fi 6GHz ANT0 + Wi-Fi 6GHz ANT1 + nRF 2.4GHz ANT2 + Bluetooth ANT0	Yes	Yes
Wi-Fi 5GHz ANT0 + Wi-Fi 5GHz ANT1 + nRF 2.4GHz ANT2 + Bluetooth ANT0	Yes	Yes

General Note:

Per KDB 447498 D01 ,TER＜1.

Address all applicable simultaneous transmission conditions using the compliance condition TER ≤ 1, where TER (total exposure ratio) in this context is defined as:

$$TER = \sum_{k=1}^{N_S} \left(\frac{SAR_k}{SAR_{\lim}} \right) + \sum_{k=1}^{N_f} \left(\frac{MPE_{field,\,k}}{MPE_{field,\,\lim}} \right)^2 + \sum_{k=1}^{N_{PD}} \left(\frac{MPE_{PD,\,k}}{MPE_{PD,\,\lim}} \right)$$

with NS, Nf, and NPD referring to sources requiring SAR, field-MPE, or PD-MPE, respectively, k referring to measured or estimated values for the source k, and “lim” to the corresponding applicable compliance limit.

The Maximum SAR Value (ANT0)

SAR_{1g} (W/kg) / Test Position		Wi-Fi 5GHz				Wi-Fi 6GHz				
		U-NII-2A	U-NII-2C	U-NII-3	MAX. SAR_{1g}	U-NII-5	U-NII-6	U-NII-7	U-NII-8	MAX. SAR_{1g}
Head SAR	TS10	0.085	0.504	0.046	0.504	0.016	0.107	0.055	0.038	0.107

SAR_{10g} (W/kg) / Test Position		Wi-Fi 5GHz				Wi-Fi 6GHz				
		U-NII-2A	U-NII-2C	U-NII-3	MAX. SAR_{10g}	U-NII-5	U-NII-6	U-NII-7	U-NII-8	MAX. SAR_{10g}
Extremity SAR	Back Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Front Side1-TS8	0.614	0.577	0.537	0.614	0.211	0.250	0.292	0.217	0.292
	Left Edge-TS4	0.155	0.087	0.106	0.155	0.075	0.084	0.108	0.099	0.108
	Right Edge-TS5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Top Edge1-TS6	0.088	0.024	0.035	0.088	0.009	0.021	0.026	0.018	0.026
	Bottom Edge1-TS1	0.097	0.048	0.090	0.097	0.056	0.047	0.078	0.051	0.078
	Bottom Edge3-TS3	0.012	0.011	0.017	0.017	0.004	0.008	0.011	0.009	0.011

The Maximum SAR Value (ANT1)

SAR_{1g} (W/kg) / Test Position		Wi-Fi 5GHz				Wi-Fi 6GHz				
		U-NII-2A	U-NII-2C	U-NII-3	MAX. SAR_{1g}	U-NII-5	U-NII-6	U-NII-7	U-NII-8	MAX. SAR_{1g}
Head SAR	TS10	0.127	0.140	0.176	0.176	0.036	0.044	0.008	0.058	0.058

SAR_{10g} (W/kg) / Test Position		Wi-Fi 5GHz				Wi-Fi 6GHz				
		U-NII-2A	U-NII-2C	U-NII-3	MAX. SAR_{10g}	U-NII-5	U-NII-6	U-NII-7	U-NII-8	MAX. SAR_{10g}
Extremity SAR	Back Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Front Side2-TS9	1.243	0.927	0.966	1.243	0.208	0.135	0.155	0.157	0.208
	Left Edge-TS4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge-TS5	0.760	0.681	0.647	0.760	0.139	0.095	0.142	0.172	0.172
	Top Edge2-TS7	0.094	0.051	0.081	0.094	0.020	0.014	0.015	0.016	0.020
	Bottom Edge2-TS2	0.093	0.088	0.070	0.093	0.012	0.017	0.026	0.027	0.027
	Bottom Edge3-TS3	0.052	0.052	0.028	0.052	0.005	0.004	0.005	0.007	0.007

About Wi-Fi / nRF 2.4GHz and Bluetooth Antenna for SAR

SAR_{1g} (W/kg)		Wi-Fi 2.4GHz		Wi-Fi 5GHz		Wi-Fi 6GHz		Bluetooth	nRF 2.4GHz	MAX. ΣSAR_{1g}		
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1	ANT0	ANT2			
Test Position		1	2	3	4	5	6	7	8	1+2+3+4+8	1+2+5+6+8	3+4+5+6+7+8
Head SAR	TS10	0.236	0.031	0.504	0.176	0.107	0.058	0.334	0.265	1.212	0.697	1.444

Note:

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

SAR_{10g}(W/kg)		Wi-Fi 2.4GHz		Wi-Fi 5GHz		Wi-Fi 6GHz		Bluetooth	nRF 2.4GHz	MAX. ΣSAR_{10g}		
		ANT0	ANT1	ANT0	ANT1	ANT0	ANT1	ANT0	ANT2			
Test Position		1	2	3	4	5	6	7	8	1+2+3+4+8	1+2+5+6+8	3+4+5+6+7+8
Extremity SAR	Back Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Front Side1-TS8	0.699	N/A	0.614	N/A	0.292	N/A	0.133	0.106	1.419	1.097	1.145
	Front Side2-TS9	N/A	0.973	N/A	1.243	N/A	0.208	N/A	0.106	2.322	1.287	1.557
	Left Edge-TS4	0.049	N/A	0.155	N/A	0.108	N/A	0.133	N/A	0.204	0.157	0.396
	Right Edge-TS5	N/A	0.634	N/A	0.760	N/A	0.172	N/A	N/A	1.394	0.806	0.932
	Top Edge1-TS6	0.038	N/A	0.088	N/A	0.026	N/A	0.133	0.106	0.232	0.170	0.353
	Top Edge2-TS7	N/A	0.035	N/A	0.094	N/A	0.020	N/A	0.106	0.235	0.161	0.220
	Bottom Edge1-TS1	0.079	N/A	0.097	N/A	0.078	N/A	0.133	N/A	0.176	0.157	0.308
	Bottom Edge2-TS2	N/A	0.300	N/A	0.093	N/A	0.027	N/A	N/A	0.393	0.327	0.120
	Bottom Edge3-TS3	0.048	0.187	0.017	0.052	0.011	0.007	0.133	N/A	0.304	0.253	0.220

Note:

1. The value with blue color is the maximum ΣSAR_{10g} Value.

MAX. ΣSAR_{1g} = 1.444 W/kg<1.6W/kg and MAX. ΣSAR_{10g} = 2.322 W/kg<4 W/kg,
so the Simultaneous transmission SAR with volume scan are not required for Wi-Fi / nRF 2.4GHz and Bluetooth Antenna.

About Wi-Fi Antenna and Bluetooth Antenna for PD

Test Position		SUM SAR_{10g} (W/kg)		Wi-Fi 6GHz ANT1		TER
		Max. (1+2+5+8, 3+4+5+7+8)	SAR Ratio	PD (W/m^2)	PD Ratio	
Extremity SAR	Front Side1-TS8	1.145	0.29	6.433	0.64	0.98
	Front Side2-TS9	1.349	**0.34**			

Note:

SAR Ratio = SAR_{10g} / SAR_{10g} Limit

SAR_{10g} Limit = 4.0W/kg

PD Ratio = PD / PD Limit

PD Limit = 10 W/m^2

Thus TER = SAR Ratio + PD Ratio ＜1, it is compliant with IEC/IEEE 62209-1528:2020, so So the limit is kept.

11 Measurement Uncertainty

For SAR

Measurement uncertainty evaluation template for DUT SAR test (Frequency band: 300MHz - 3GHz range)

Symbol	Error Description	Uncertainty value	Probability Distribution	Div.	ci (1 g)	ci (10 g)	Standard uncer-tainty (1 g)	Standard uncer-tainty (10 g)
Measurement System Errors								
CF	Probe Calibration	± 12.0%	N	2	1	1	± 6.0%	± 6.0%
CF_{drift}	Probe Calibration Drift	± 1.7%	R	$\sqrt{3}$	1	1	± 1.0%	± 1.0%
LIN	Probe Linearity	± 4.7%	R	$\sqrt{3}$	1	1	± 2.7%	± 2.7%
BBS	Broadband Signal	± 3.0%	R	$\sqrt{3}$	1	1	± 1.7%	± 1.7%
ISO	Probe Isotropy	± 7.6%	R	$\sqrt{3}$	1	1	± 4.4%	± 4.4%
DAE	Data Acquisition	± 0.3%	N	1	1	1	± 0.3%	± 0.3%
AMB	RF Ambient	± 1.8%	N	1	1	1	± 1.8%	± 1.8%
Δ_{sys}	Probe Positioning	± 0.006mm	N	1	0.14	0.14	± 0.10%	± 0.10%
DAT	Data Processing	± 1.2%	N	1	1	1	± 1.2%	± 1.2%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)^{DAK}	± 2.5%	N	1	0.78	0.71	± 2.0%	± 1.8%
LIQ(T_σ)	Conductivity (temp.)^{BB}	± 3.3%	R	$\sqrt{3}$	0.78	0.71	± 1.5%	± 1.4%
EPS	Phantom Permittivity	± 14.0%	R	$\sqrt{3}$	0	0	± 0%	± 0%
DIS	Distance DUT - TSL	± 2.0%	N	1	2	2	± 4.0%	± 4.0%
D_{xyz}	Device Positioning	± 1.0%	N	1	1	1	± 1.0%	± 1.0%
H	Device Holder	± 3.6%	N	1	1	1	± 3.6%	± 3.6%
MOD	DUT Modulation^{m}	± 2.4%	R	$\sqrt{3}$	1	1	± 1.4%	± 1.4%
TAS	Time-average SAR	± 1.7%	R	$\sqrt{3}$	1	1	± 1.0%	± 1.0%
RF_{drift}	DUT drift	± 2.5%	N	1	1	1	± 2.5%	± 2.5%
VAL	Val Antenna Unc.^{val}	± 0.0%	N	1	1	1	± 0%	± 0%
P_{in}	Unc. In accepted power (validation measurement only)	± 0.0%	N	1	1	1	± 0%	± 0%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	± 1.9%	N	1	1	0.84	± 1.9%	± 1.6%
C(R)	SAR scaling^{p}	± 0%	R	$\sqrt{3}$	1	1	± 0%	± 0%
u(ΔSAR)	Combined Uncertainty						± 10.9%	± 10.9%
U	Expanded Uncertainty						± 21.9%	± 21.8%

Measurement uncertainty evaluation template for DUT SAR test (Frequency band: 3GHz - 6GHz range)

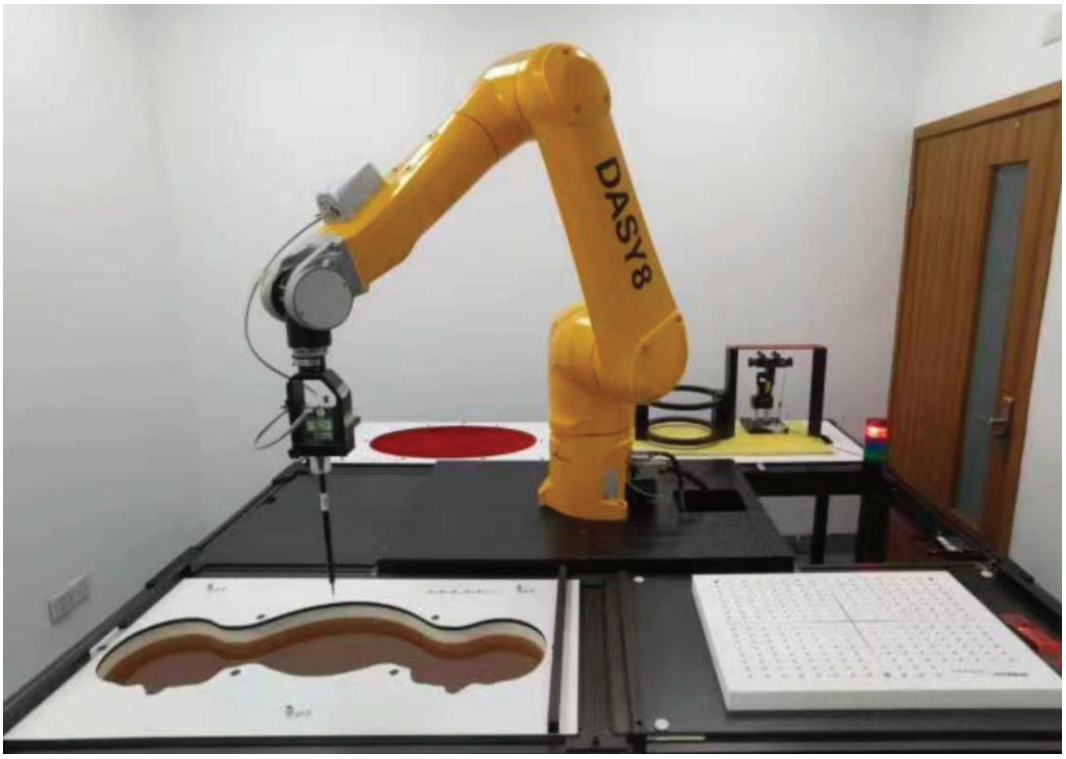
Symbol	Error Description	Uncertainty value	Probability Distribution	Div.	*ci* (1 g)	*ci* (10 g)	Standard uncer-tainty (1 g)	Standard uncer-tainty (10 g)
Measurement System Errors								
CF	Probe Calibration	±13.1%	N	2	1	1	± 6.55%	± 6.55%
CF_{drift}	Probe Calibration Drift	± 1.7%	R	$\sqrt{3}$	1	1	± 1.0%	± 1.0%
LIN	Probe Linearity	± 4.7%	R	$\sqrt{3}$	1	1	± 2.7%	± 2.7%
BBS	Broadband Signal	± 2.6%	R	$\sqrt{3}$	1	1	± 1.5%	± 1.5%
ISO	Probe Isotropy	± 7.6%	R	$\sqrt{3}$	1	1	± 4.4%	± 4.4%
DAE	Data Acquisition	± 0.3%	N	1	1	1	± 0.3%	± 0.3%
AMB	RF Ambient	± 1.8%	N	1	1	1	± 1.8%	± 1.8%
Δ_{sys}	Probe Positioning	± 0.005mm	N	1	0.29	0.29	± 0.15%	± 0.15%
DAT	Data Processing	± 2.3%	N	1	1	1	± 2.3%	± 2.3%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)^{DAK}	± 2.5%	N	1	0.78	0.71	± 2.0%	± 1.8%
LIQ(T_σ)	Conductivity (temp.)^{BB}	± 3.4%	R	$\sqrt{3}$	0.78	0.71	± 1.5%	± 1.4%
EPS	Phantom Permittivity	± 14.0%	R	$\sqrt{3}$	0.25	0.25	± 2.0%	± 2.0%
DIS	Distance DUT - TSL	± 2.0%	N	1	2	2	± 4.0%	± 4.0%
D_{xyz}	Device Positioning	± 1.0%	N	1	1	1	± 1.0%	± 1.0%
H	Device Holder	± 3.6%	N	1	1	1	± 3.6%	± 3.6%
MOD	DUT Modulation^{m}	± 2.4%	R	$\sqrt{3}$	1	1	± 1.4%	± 1.4%
TAS	Time-average SAR	± 1.7%	R	$\sqrt{3}$	1	1	± 1.0%	± 1.0%
RF_{drift}	DUT drift	± 2.5%	N	1	1	1	± 2.5%	± 2.5%
VAL	Val Antenna Unc.^{val}	± 0.0%	N	1	1	1	± 0%	± 0%
P_{in}	Unc. In accepted power (validation measurement only)	± 0.0%	N	1	1	1	± 0%	± 0%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	± 1.9%	N	1	1	0.84	± 1.9%	± 1.6%
C(R)	SAR scaling^{p}	± 0%	R	$\sqrt{3}$	1	1	± 0%	± 0%
u(ΔSAR)	Combined Uncertainty						± 11.6%	± 11.5%
U	Expanded Uncertainty						± 23.2%	± 23.0%

For PD

DASY8 Uncertainty Budget for PD (avg ≥1 cm²) Evaluation Distances to the Antennas ≤λ/5							
Error Description		**Unc.value**	**Probab. Distri.**	**Div**	**(Ci)**	**Std.Unc. (±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 ≤ 1 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

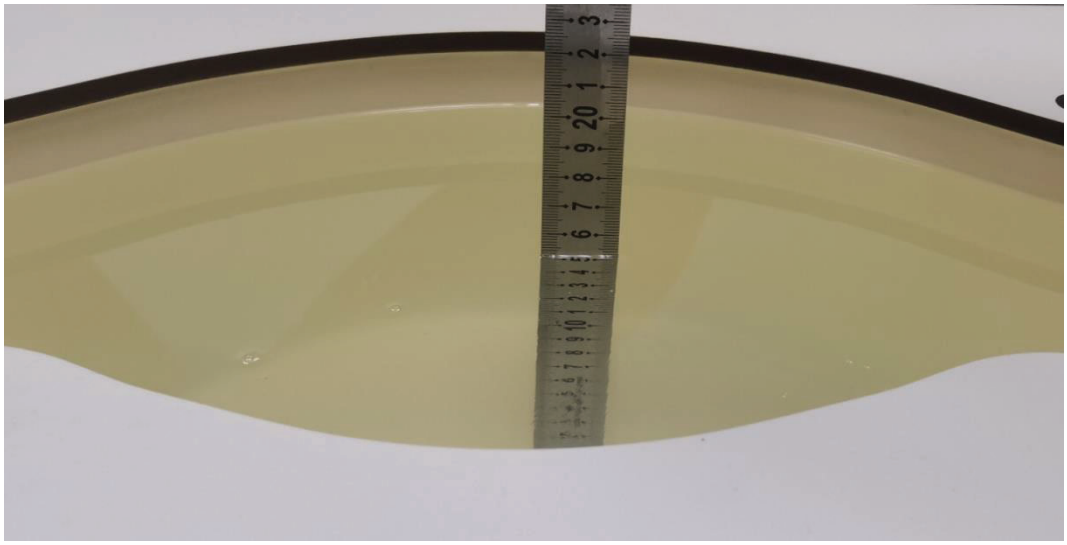
DASY 5 test system



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: 2024/12/26

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

Medium parameters used: f = 2450 MHz; σ = 1.78 S/m; ε_r = 40.76; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

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 Sn1291; Calibrated: 2024/4/12

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

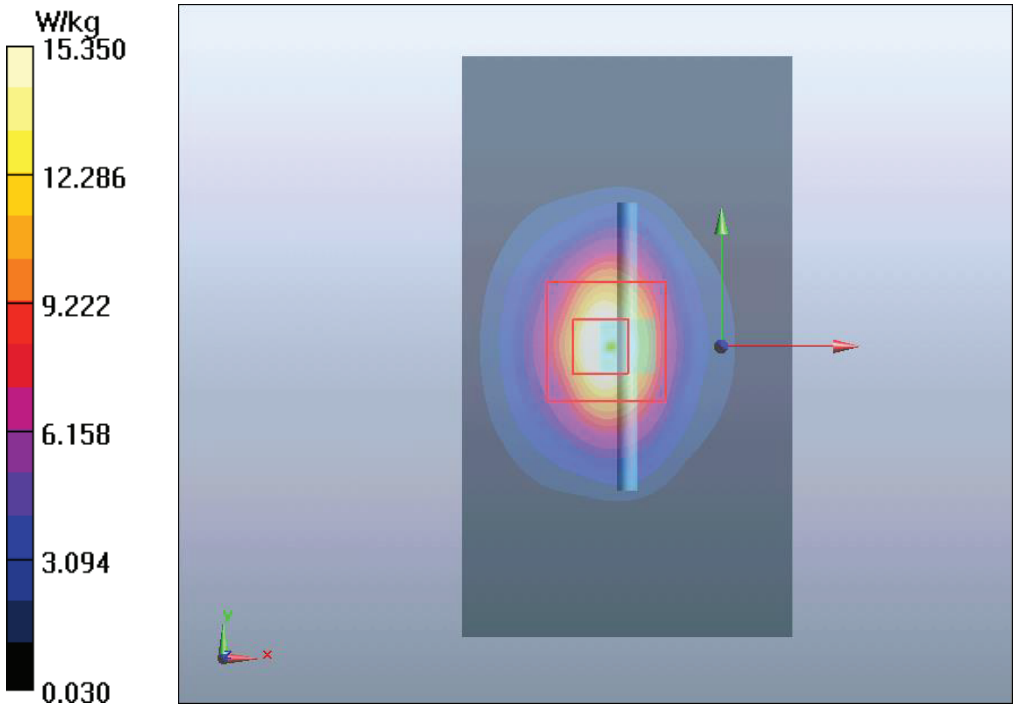
Peak SAR (extrapolated) = 28.46 W/kg

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: 2024/12/26

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

Medium parameters used: f = 5200 MHz; σ = 4.49 S/m; ε_r = 34.65; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

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 Sn1291; Calibrated: 2024/4/12

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

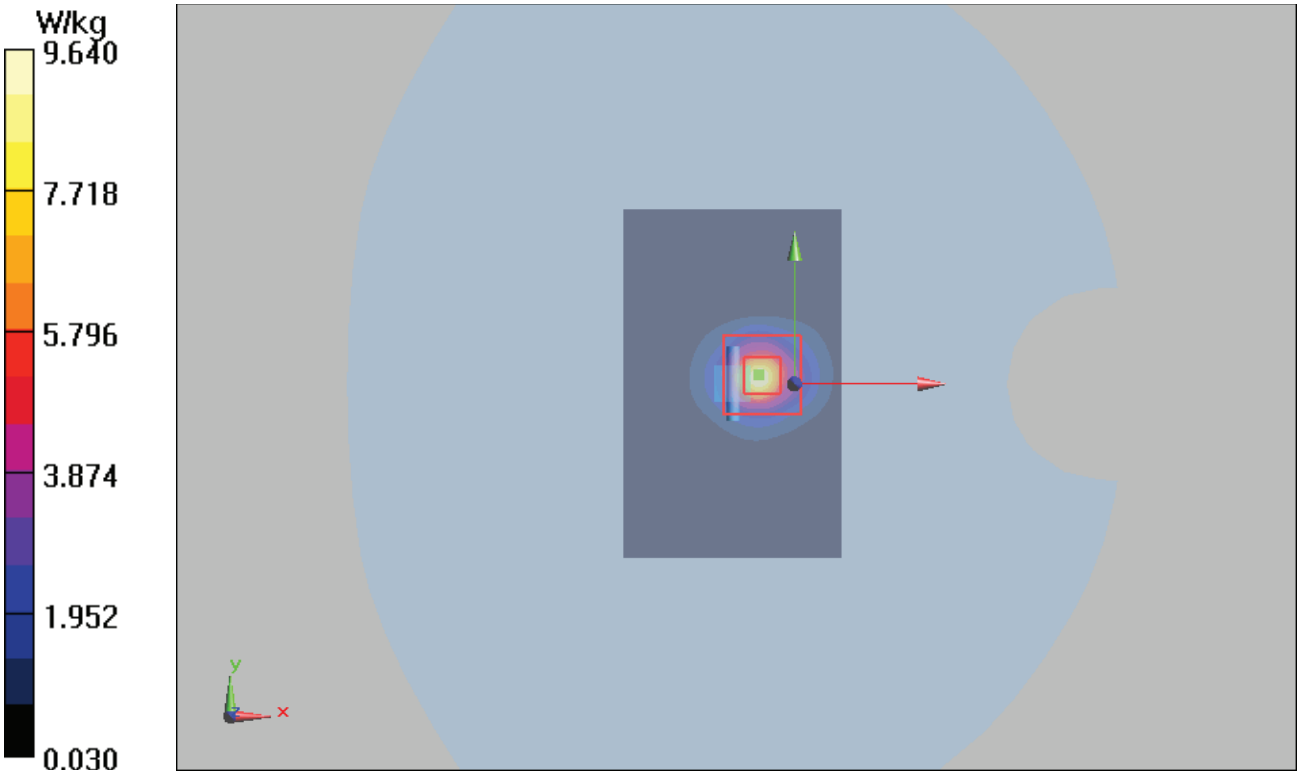
Peak SAR (extrapolated) = 50.15 W/kg

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: 2024/12/28

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

Medium parameters used: f = 5600 MHz; σ = 4.87 S/m; ε_r = 34.02; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

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 Sn1291; Calibrated: 2024/4/12

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

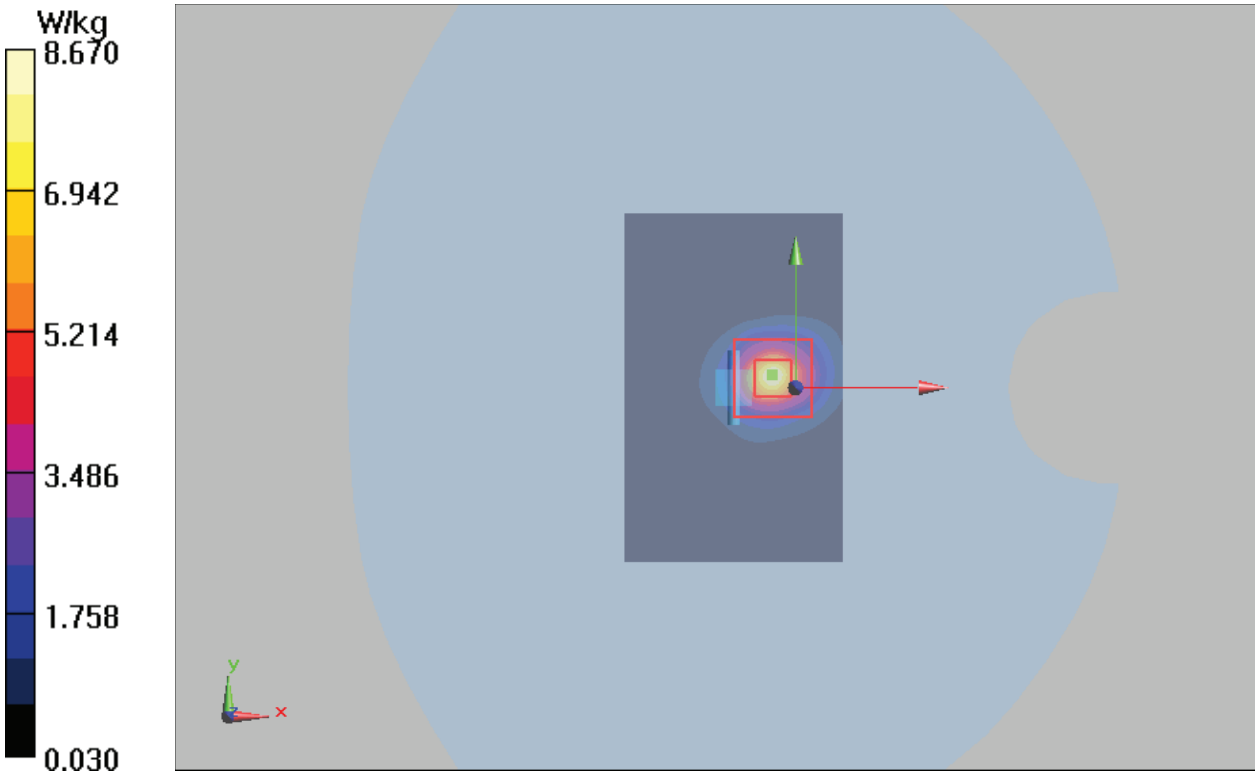
Peak SAR (extrapolated) = 22.9 W/kg

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: 2024/12/2

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

Medium parameters used: f = 5750 MHz; σ = 5.05 S/m; ε_r = 33.77; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

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 Sn1291; Calibrated: 2024/4/12

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

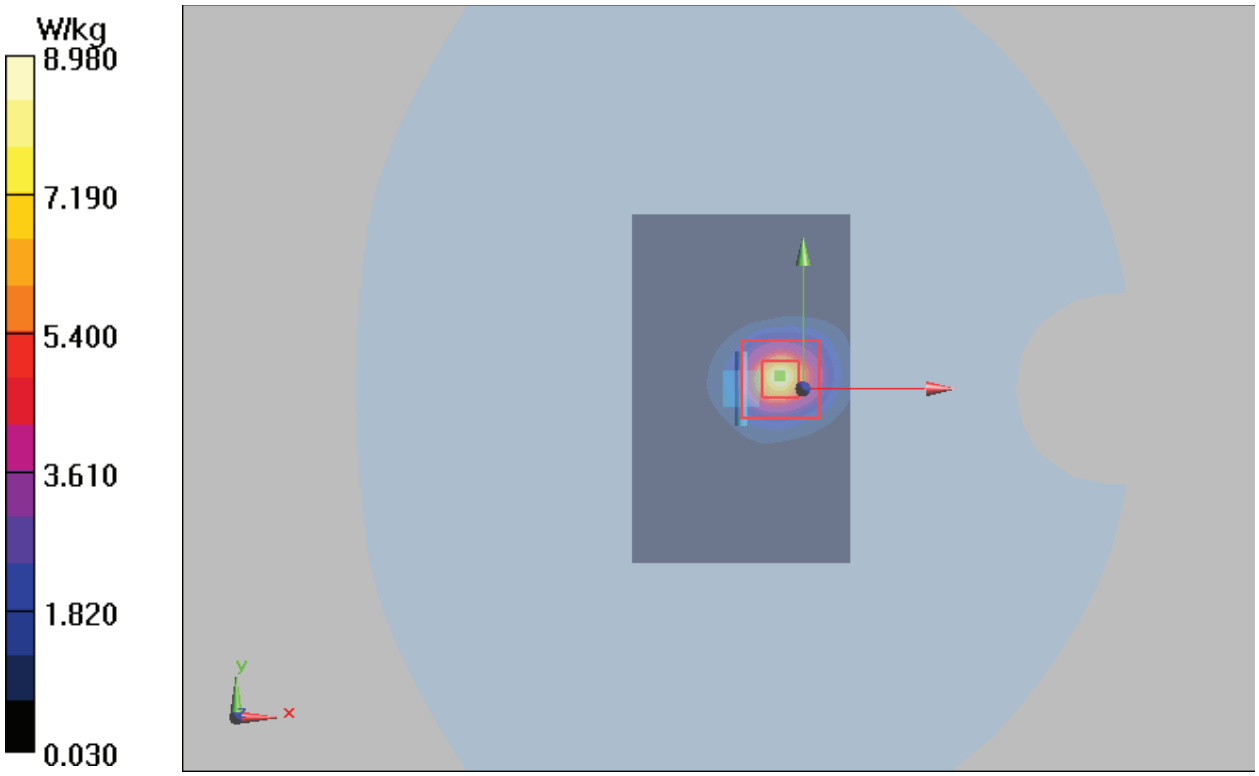
Peak SAR (extrapolated) = 23.4 W/kg

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 Sn1291, 2024-04-12

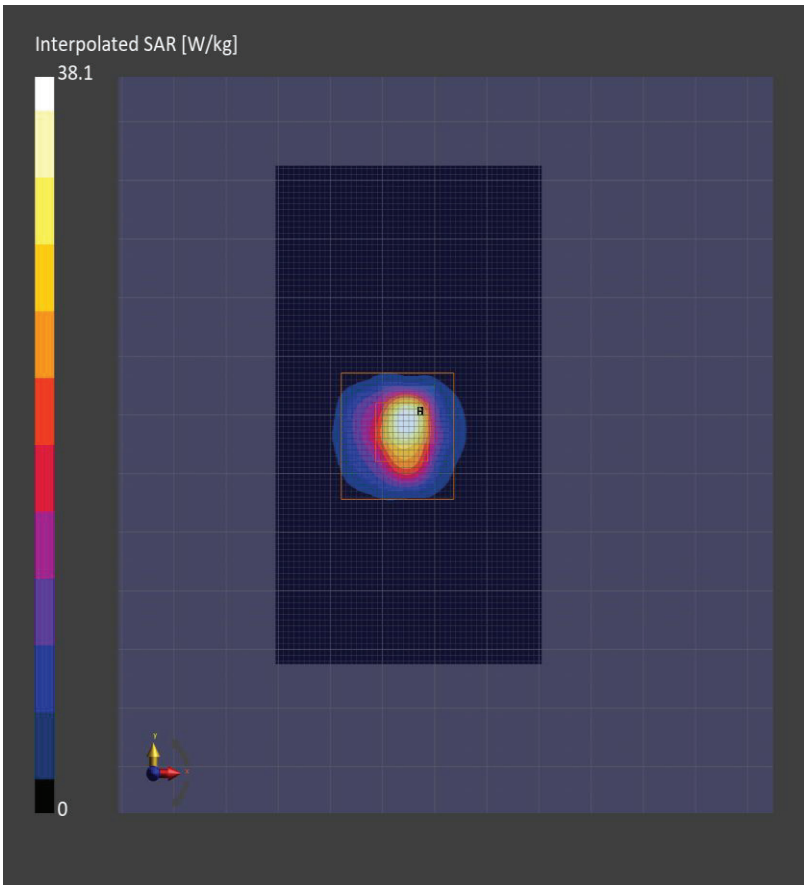
Scans Setup

	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	2024-12-07	2024-12-07
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 Sn1291, 2024-04-12

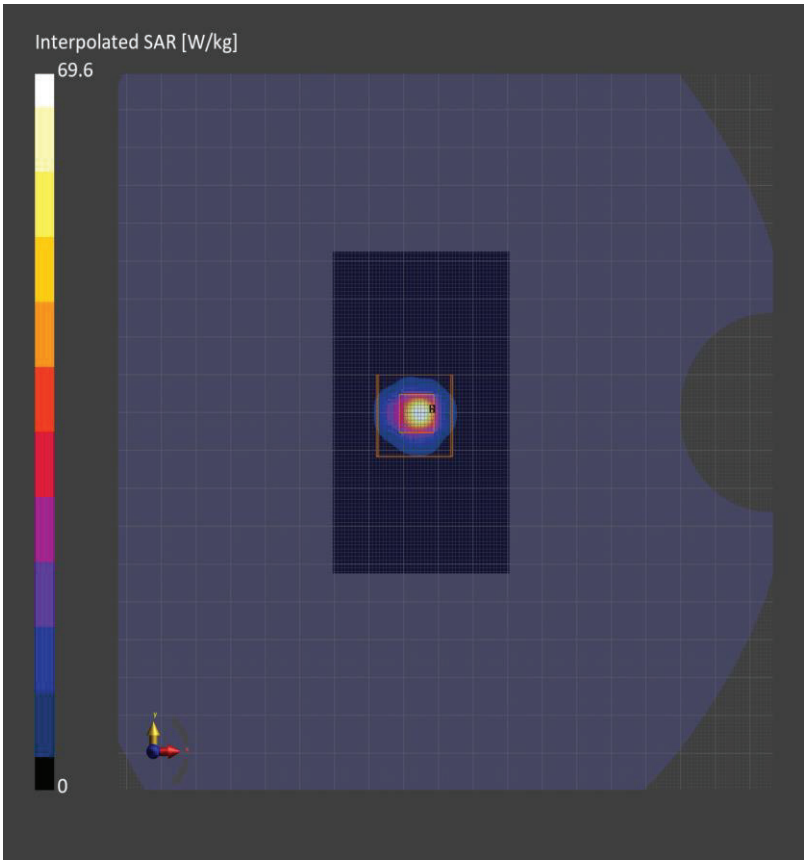
Scans Setup

	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	2024-12-09	2024-12-09
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 Sn1291, 2024-04-12

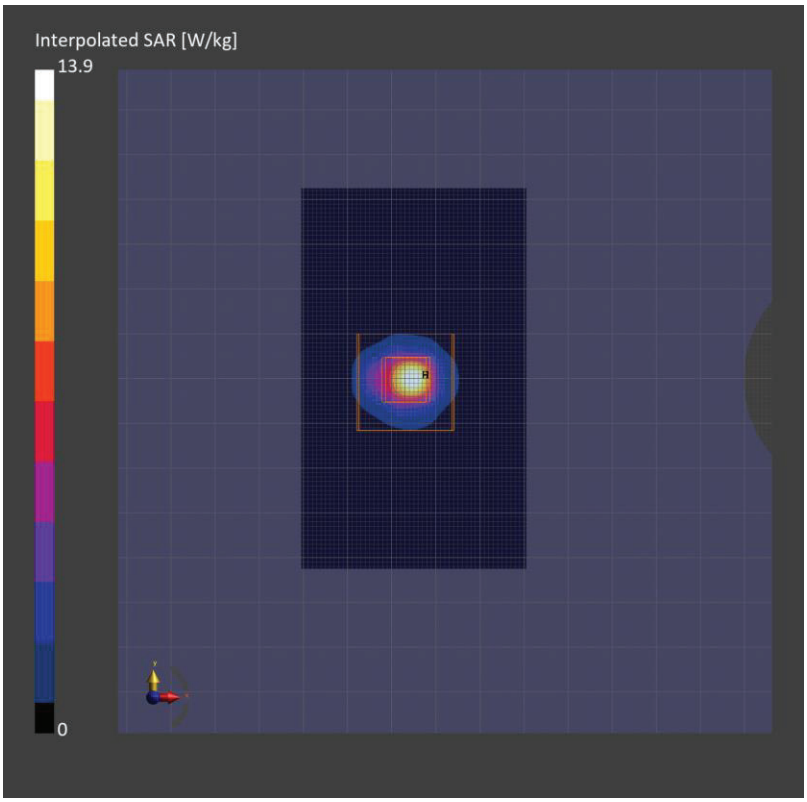
Scans Setup

	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	2024-12-27	2024-12-27
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 Measurement Report for Device, CW, Channel 0 (6500.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	N/A x N/A x N/A		-

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--	6500.000, 0	5.85	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 Sn1291, 2024-04-12

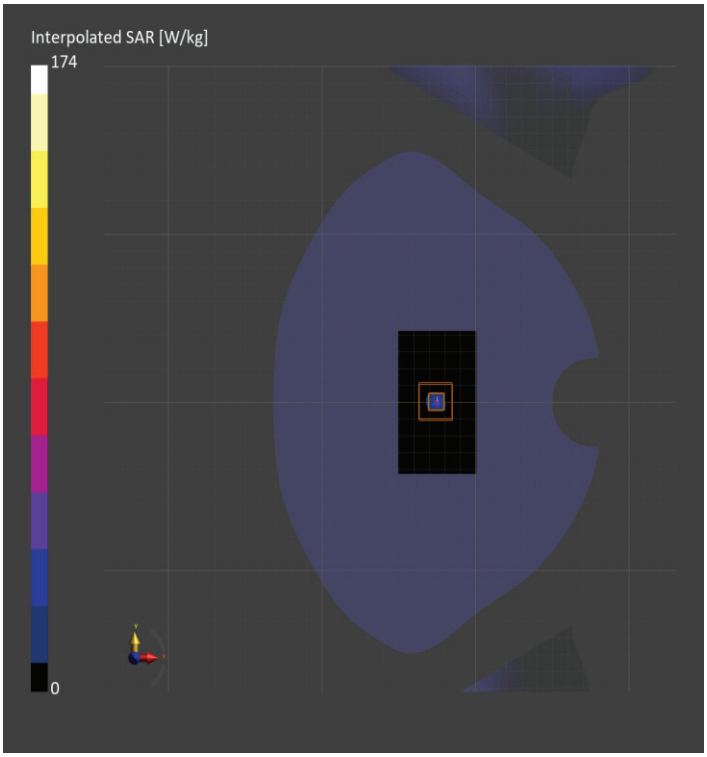
Scans Setup

	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	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-12-07	2024-12-07
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



Plot 9 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

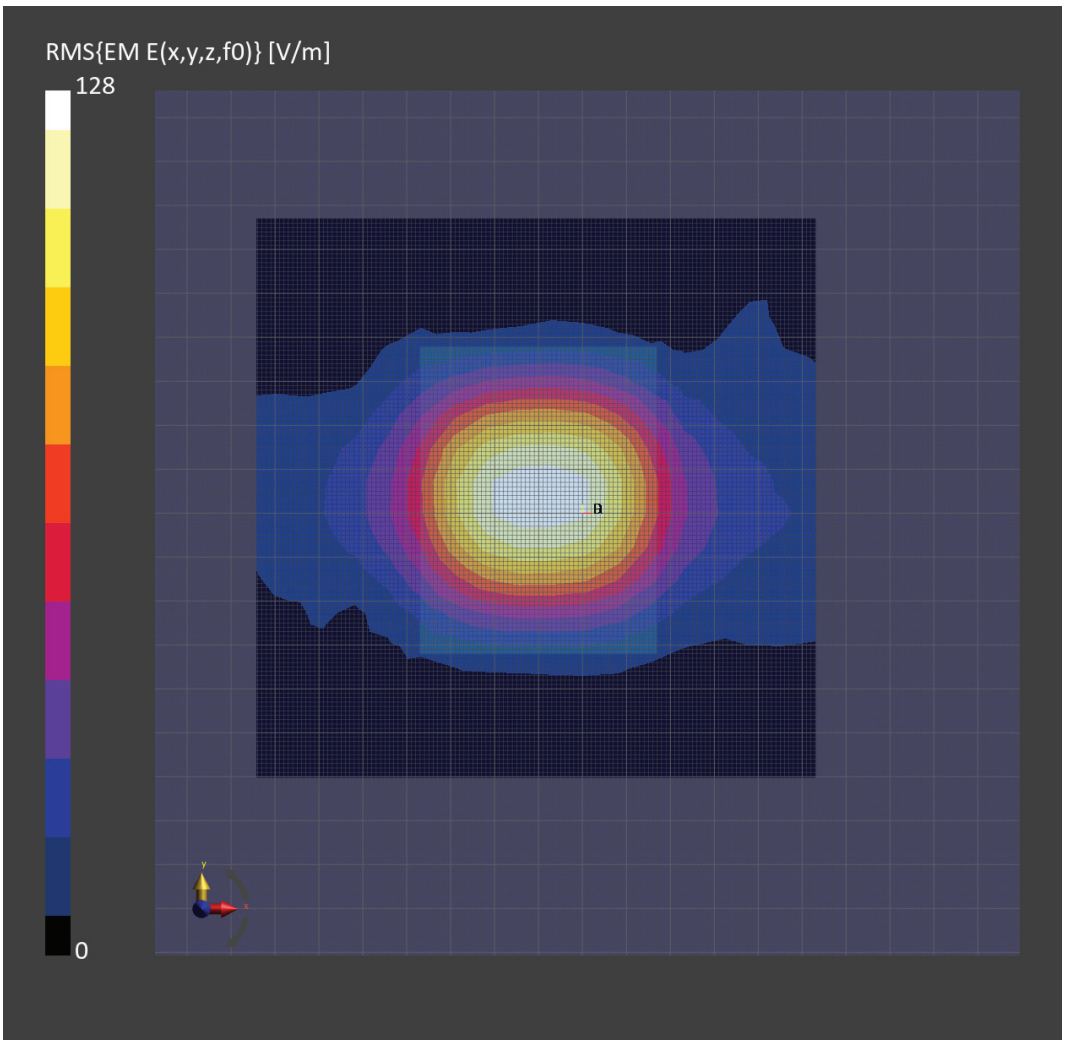
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9642_F1-55GHz, 2024-07-10	DAE4 Sn1291, 2024-04-12

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	2024-12-07
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 10 Measurement Report for Device, DEFAULT, WLAN 2.4GHz, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps), Channel 1 (2412.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	170.0 x 90.0 x 60.0		Other

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	WLAN 2.4GHz	WLAN, 10012-CAB	2412.000, 1	7.62	1.79	41.0

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0 - xxxx	HBBL-600-10000 Charge:xxxx, --	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1291, 2024-04-12

Scans Setup

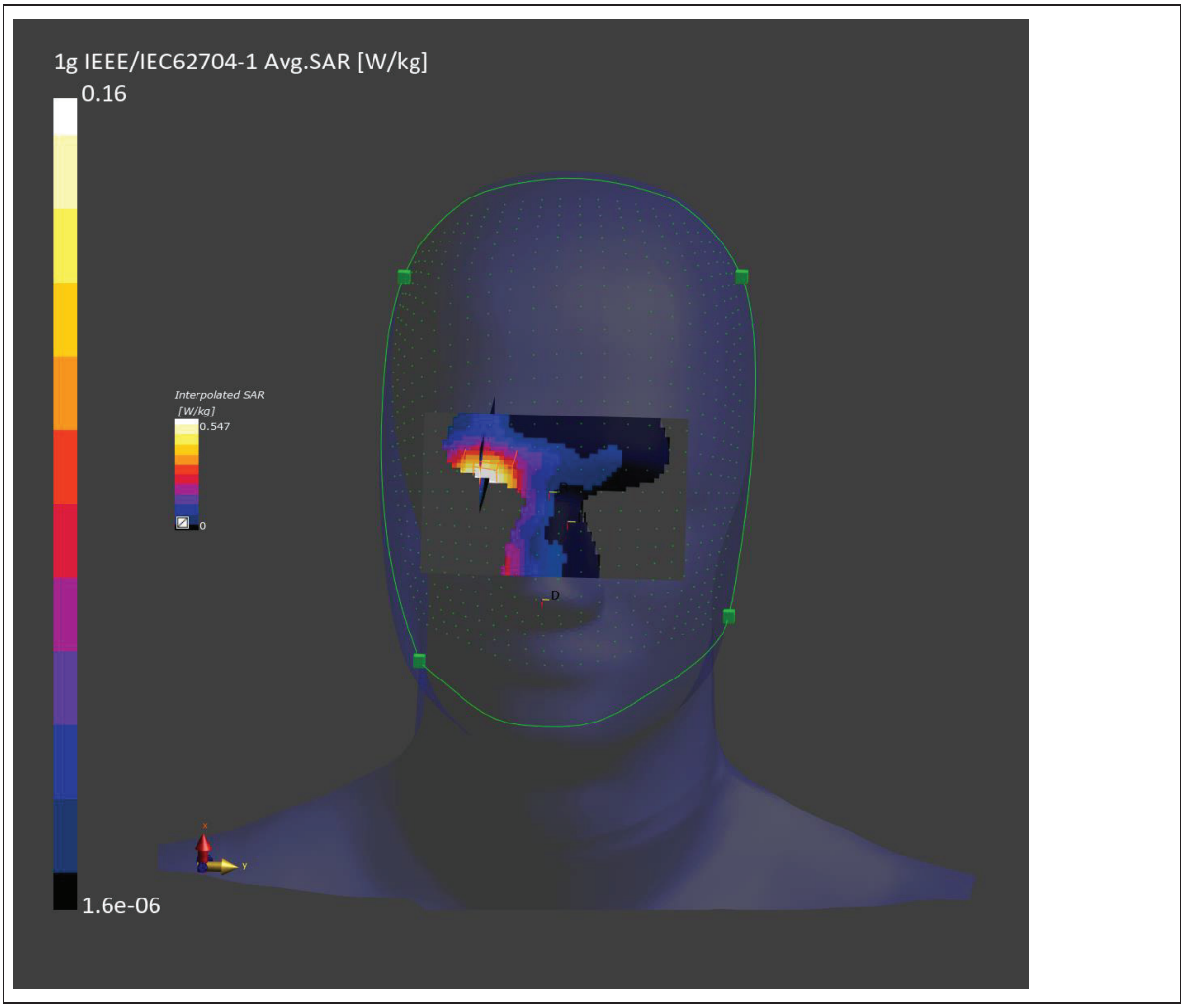
	FastVolume Scan	Zoom Scan
Grid Extents [mm]	190 x 120	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	3.0
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.5
MAIA	Y	N/A
Surface Detection	VMS	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-12-28	2024-12-28

psSAR1g [W/Kg]	0.160	0.198
psSAR10g [W/Kg]	0.082	0.075
Power Drift [dB]	-1.68	-0.36
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		77.3
Dist 3dB Peak [mm]		6.6

SAR Pattern



Plot 11 Measurement Report for Device, DEFAULT, WLAN 5GHz, IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps), Channel 100 (5500.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	170.0 x 90.0 x 60.0		Other

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	WLAN 5GHz	WLAN, 10062-CAE	5500.000, 100	5.33	4.88	35.8

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0 - xxxx	HBBL-600-10000 Charge:xxxx, --	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1291, 2024-04-12

Scans Setup

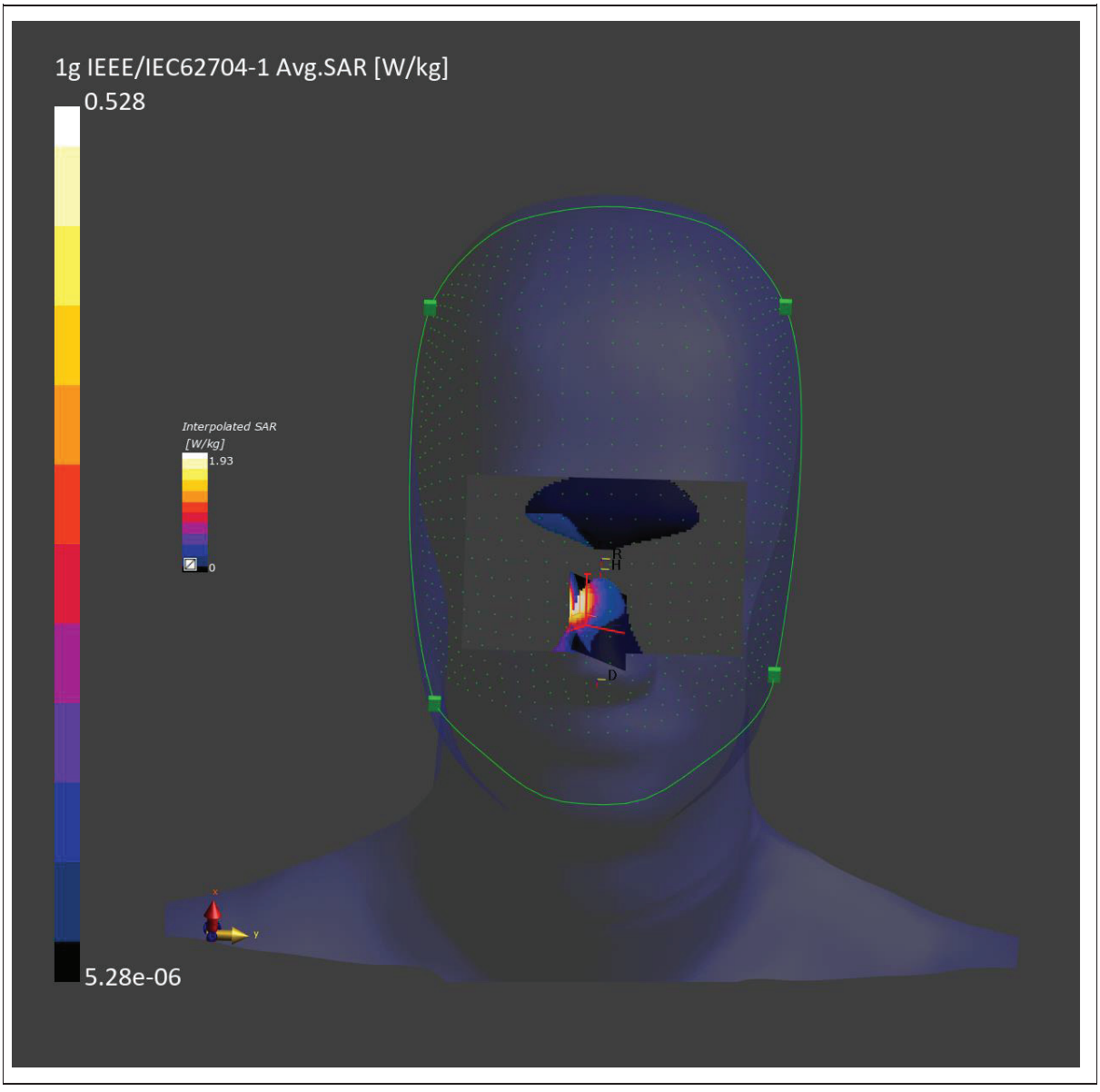
	FastVolume Scan	Zoom Scan
Grid Extents [mm]	190 x 120	24.0 x 24.0 x 24.0
Grid Steps [mm]	10.0 x 10.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	3.0
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS	VMS
Scan Method	Measured	Measured

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-12-28	2024-12-28
psSAR1g [W/Kg]	0.528	0.434

psSAR10g [W/Kg]	0.162	0.120
Power Drift [dB]	-0.21	-1.56
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		58.6
Dist 3dB Peak [mm]		5.7

SAR Pattern



Plot 12 Measurement Report for Device, DEFAULT, U-NII-6, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 111 (6505.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	170.0 x 90.0 x 60.0		Other

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	U-NII-6	WLAN, 10743-AAC	6505.000, 111	6.03	6.39	33.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0 - xxxx	HBBL-600-10000 Charge:xxxx, --	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1291, 2024-04-12

Scans Setup

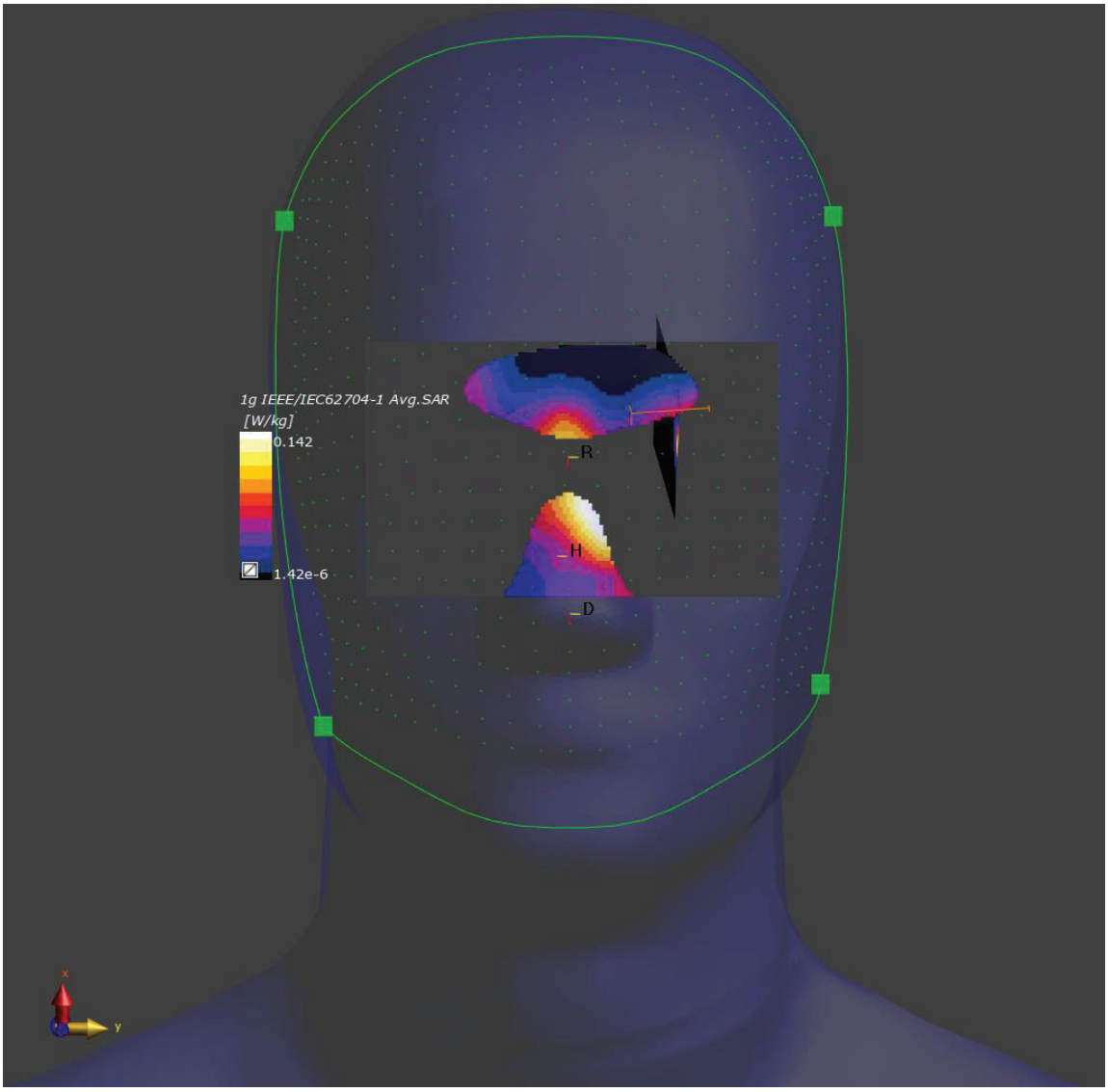
	FastVolume Scan	Zoom Scan
Grid Extents [mm]	190 x 120	24.0 x 24.0 x 24.0
Grid Steps [mm]	10.0 x 10.0	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	3.0
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	Y	Y
Surface Detection	VMS	VMS + 6p
Scan Method	Measured	Measured

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-12-28	2024-12-28
psSAR1g [W/Kg]	0.043	0.102

psSAR10g [W/Kg]	0.020	0.045
Power Drift [dB]	0.100	0.027
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		56.4
Dist 3dB Peak [mm]		5.1

SAR Pattern



Plot 13 802.11b Front Side2-TS9 0mm High

Date: 2024/12/26

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2462 MHz; σ = 1.796 S/m; ε_r = 38.612; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

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 Sn1291; Calibrated: 2024/4/12

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

802.11b Front Side 0mm/High/Area Scan (12x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 2.71 W/kg

802.11b Front Side 0mm/High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.585 V/m; Power Drift = -0.07 dB

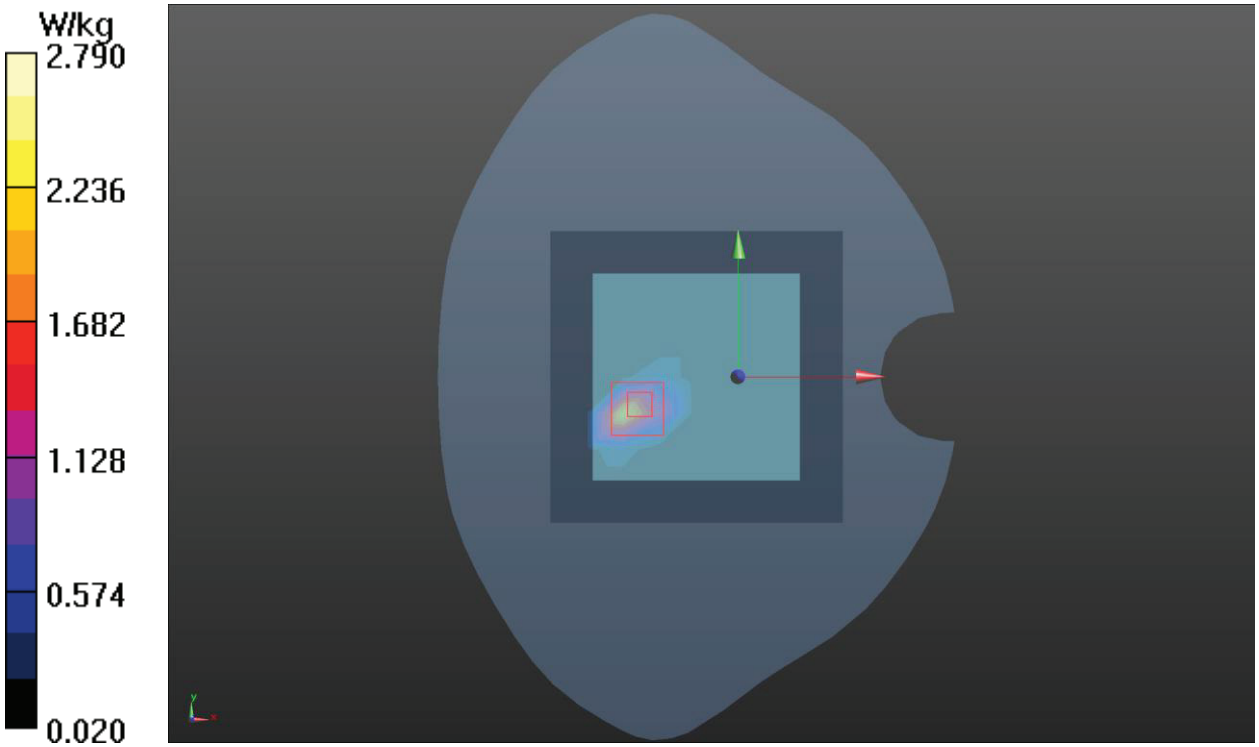
Peak SAR (extrapolated) = 4.73 W/kg

SAR(1 g) = 2.64 W/kg; SAR(10 g) = 0.853 W/kg

Smallest distance from peaks to all points 3 dB beHigh = 15.1 mm

Ratio of SAR at M2 to SAR at M1 = 45.7%

Maximum value of SAR (measured) = 2.79 W/kg



Plot 14 802.11ax HE40 Front Side2-TS9 0mm High

Date: 2024/12/26

Communication System: UID 0, 802.11ax HE40 (0); Frequency: 5310 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5310 MHz; σ = 4.831 S/m; ε_r = 35.798; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

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 Sn1291; Calibrated: 2024/4/12

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

802.11ax HE40 Front Side 0mm/High/Area Scan (14x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 4.86 W/kg

802.11ax HE40 Front Side 0mm/High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.178 V/m; Power Drift = -0.050 dB

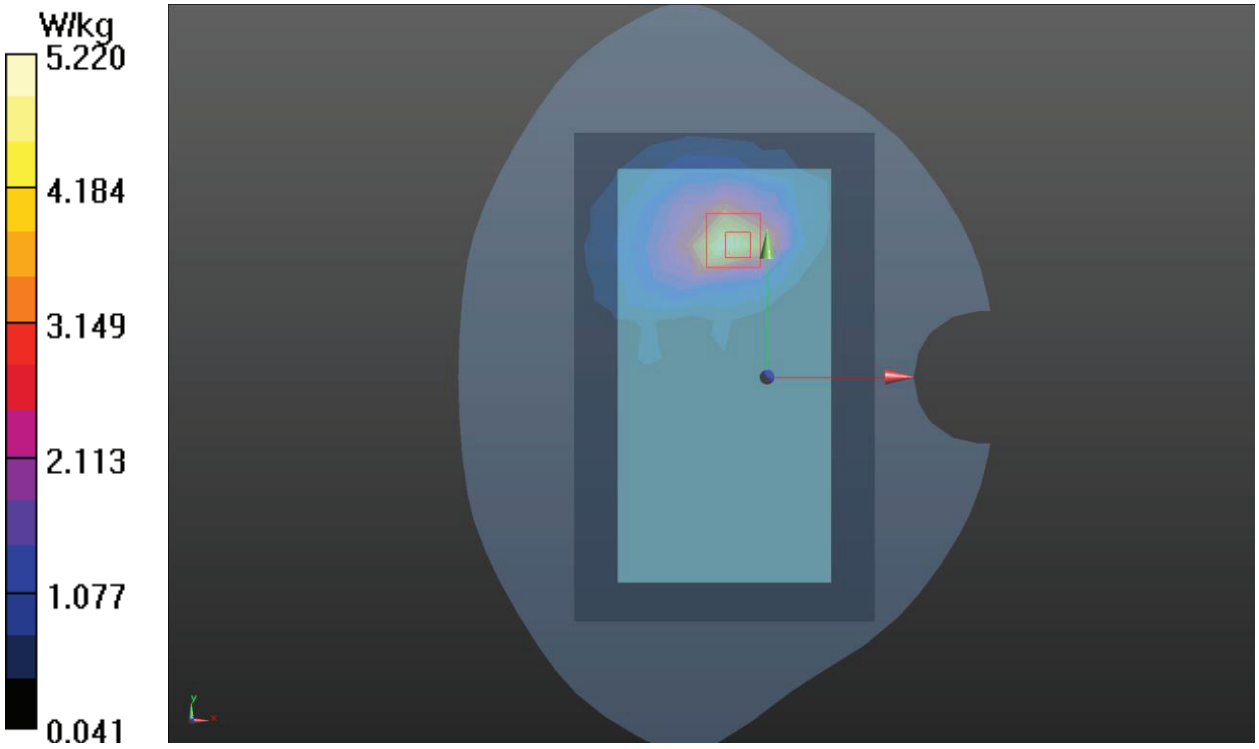
Peak SAR (extrapolated) = 6.73 W/kg

SAR(1 g) = 4.73 W/kg; SAR(10 g) = 1.10 W/kg

Smallest distance from peaks to all points 3 dB below = 9.6 mm

Ratio of SAR at M2 to SAR at M1 = 41.3%

Maximum value of SAR (measured) = 5.22 W/kg



Plot 15 Measurement Report for Device, Front Side1-TS8, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 143 (6665.000 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	170.0 x 90.0 x 60.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 0.00	U-NII-7	WLAN, 10743-AAC	6665.000, 143	6.03	6.39	33.6

Hardware Setup

Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V8.0 (30deg probe tilt) - 2072	HBBL-600-10000 Charge:xxxx, --	EX3DV4 - SN7689, 2024-06-04	DAE4 Sn1291, 2024-04-12

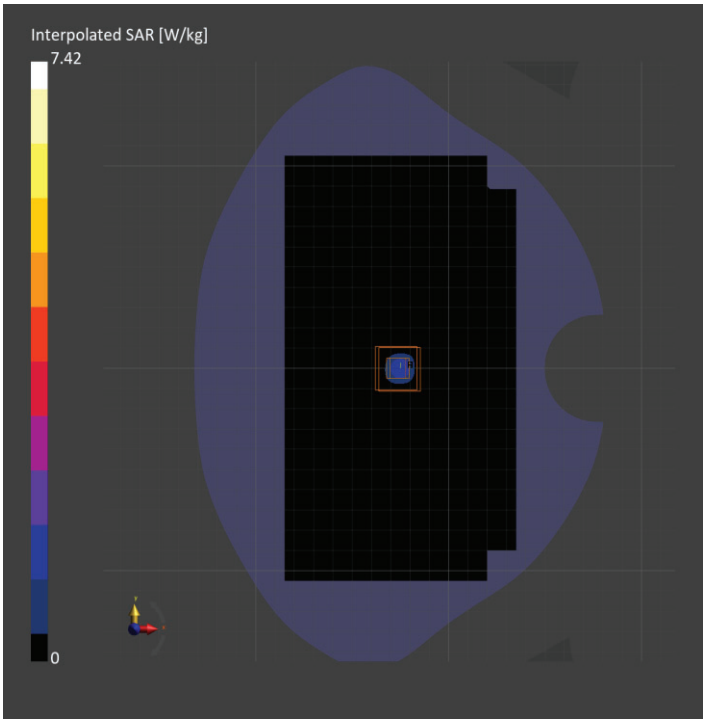
Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	120.0 x 210.0	24.0 x 24.0 x 24.0
Grid Steps [mm]	15.0 x 15.0	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	2024-12-07	2024-12-07

psSAR1g [W/kg]	1.13	1.27
psSAR10g [W/kg]	0.271	0.270
psAPD (1.0cm2, sq) [W/m2]		12.7
psAPD (4.0cm2, sq) [W/m2]		6.50
Power Drift [dB]	0.02	-0.07
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		51.9
Dist 3dB Peak [mm]		5.5



Plot 16 Measurement Report for Device, FRONT, U-NII-7, IEEE 802.11ax (160MHz, MCS0, 90pc duty cycle), Channel 143 (6665.0 MHz)

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	270.0 x 188.0 x 110.0		

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 2.00	U-NII-7	WLAN, 10743-AAC	6665.0, 143	1.0

Hardware Setup

Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9642_F1-55GHz, 2024-07-10	DAE4 Sn1291, 2024-04-12

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	90.0 x 90.0
Grid Steps [lambda]	0.003 x 0.003
Sensor Surface [mm]	2.0
MAIA	Y

Measurement Results

Scan Type	5G Scan
Date	2024-12-07
Avg. Area [cm^2]	4.00
psPDn+ [W/m^2]	2.43
psPDtot+ [W/m^2]	4.54
psPDmod+ [W/m^2]	5.81
E_{max} [V/m]	61.9
Power Drift [dB]	0.03