FCC SAR TEST REPORT

FCC ID	:	**QXO-AP5050**
Equipment	:	**Access Point**
Brand Name	:	**Extreme Networks**
Model Name	:	**AP5050U**
Applicant	:	**Extreme Networks, Inc. 2121 RDU Center Drive Morrisville North Carolina United States 27560**
Manufacturer	:	**Extreme Networks, Inc. 2121 RDU Center Drive Morrisville North Carolina United States 27560**
Standard	:	**FCC 47 CFR Part 2 (2.1093)**

The product was received on Jul. 04, 2022 and testing was started from Jul. 15, 2022 and completed on Aug. 11, 2022. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR Part 2.1093 and FCC KDB and has been pass the FCC requirement.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.

Approved by: Cona Huang / Deputy Manager

Sporton International Inc. EMC & Wireless Communications Laboratory
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History of this test report

Report No.	Version	Description	Issued Date
FA251735	01	Initial issue of report	Oct. 04, 2022

1. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) for **Extreme Networks, Inc., Access Point, AP5050U**, are as follows.

Equipment Class	Frequency Band		Highest SAR Summary		Highest Simultaneous Transmission 1g SAR (W/kg)	Highest Simultaneous Transmission 10g SAR (W/kg)
			Body (Separation 25mm)	Extremity (Separation 0mm)		
			1g SAR (W/kg)	10g SAR (W/kg)		
DTS	WLAN	2.4GHz WLAN	0.45	1.39	1.59	3.82
NII		5GHz WLAN	1.15	2.42	1.59	3.82
DSS	2.4GHz Band	Bluetooth	< 0.01	< 0.01	1.59	3.82
DSS		Thread	< 0.01	< 0.01	1.59	3.82
Date of Testing:			2022/7/15 ~ 2022/8/11			

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg for Partial-Body 1g SAR, 4.0 W/kg for Extremity 10g SAR) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013 and FCC KDB publications

Reviewed by: Jason Wang
Report Producer: Daisy Peng

2. Guidance Applied

The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards, the below KDB standard may not including in the TAF code without accreditation.

- FCC 47 CFR Part 2 (2.1093)
- ANSI/IEEE C95.1-1992
- IEEE 1528-2013
- FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 248227 D01 802.11 Wi-Fi SAR v02r02

3. Equipment Under Test (EUT) Information

3.1 General Information

Product Feature & Specification	
Equipment Name	Access Point
Brand Name	Extreme Networks
Model Name	AP5050U
FCC ID	QXO-AP5050
Wireless Technology and Frequency Range	WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz Thread: 2405 MHz ~ 2480 MHz
Mode	WLAN 2.4GHz : 802.11b/g/ax HEW20 WLAN 5GHz : 802.11a/n/ax HEW20/HEW40/HEW80 Bluetooth LE Thread: O-QPSK
EUT Stage	Identical Prototype
Remark: 1. The EUT has three radios, the information as following table.	

Radio	Function (Non-beamforming mode)		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth / Thread
1	V	V	-
2	-	V	-
3	-	-	V

Radio	Function (Beamforming mode)		
	WLAN 2.4GHz	WLAN 5GHz	Bluetooth / Thread
1	V	-	-
2	-	V	-
3	-	-	V

4. RF Exposure Limits

4.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

4.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

Limits for General Population/Uncontrolled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

1. Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

5. Specific Absorption Rate (SAR)

5.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

5.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\mathbf{SAR} = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\mathbf{dm}}\right) = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\boldsymbol{\rho}\mathbf{dv}}\right)$$

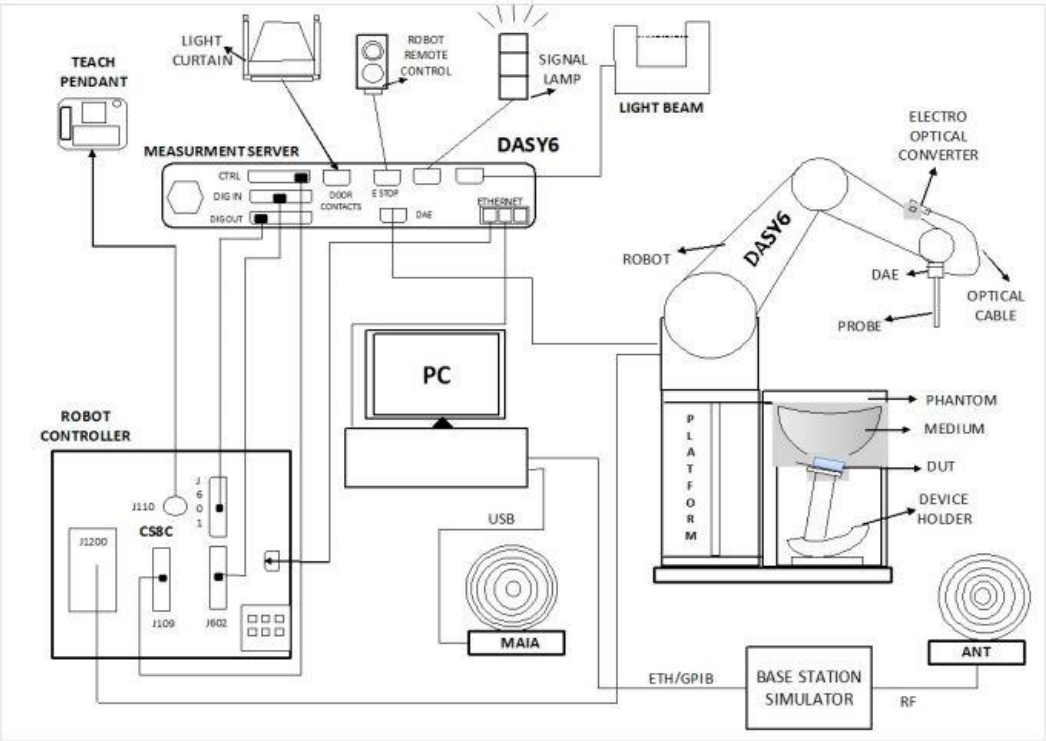
SAR is expressed in units of Watts per kilogram (W/kg)

$$\mathbf{SAR} = \frac{\boldsymbol{\sigma}|\mathbf{E}|^{\mathbf{2}}}{\boldsymbol{\rho}}$$

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

6. System Description and Setup

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



- The DASY system in SAR Configuration is shown above
- 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 software 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.

6.1 Test Site Location

The SAR measurement facilities used to collect data are within both Sporton Lab list below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190 and 3786) and the FCC designation No. TW1190 and TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Test Site	EMC & Wireless Communications Laboratory		Wensan Laboratory		
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan		TW3786 No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan		
Test Site No.	SAR01-HY	SAR03-HY	SAR08-HY	SAR09-HY	SAR15-HY
	SAR04-HY	SAR05-HY	SAR11-HY	SAR12-HY	
	SAR06-HY	SAR10-HY	SAR13-HY	SAR14-HY	

6.2 E-Field Probe

The SAR measurement is conducted with the dosimetric probe (manufactured by SPEAG).The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency. This probe has a built in optical surface detection system to prevent from collision with phantom.

<ES3DV3 Probe>

Construction	Symmetric design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – 4 GHz; Linearity: ±0.2 dB (30 MHz – 4 GHz)	
Directivity	±0.2 dB in TSL (rotation around probe axis) ±0.3 dB in TSL (rotation normal to probe axis)	
Dynamic Range	5 µW/g – >100 mW/g; Linearity: ±0.2 dB	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 3.9 mm (body: 12 mm) Distance from probe tip to dipole centers: 3.0 mm	

<EX3DV4 Probe>

Construction	Symmetric design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz – >6 GHz Linearity: ±0.2 dB (30 MHz – 6 GHz)	
Directivity	±0.3 dB in TSL (rotation around probe axis) ±0.5 dB in TSL (rotation normal to probe axis)	
Dynamic Range	10 µW/g – >100 mW/g Linearity: ±0.2 dB (noise: typically <1 µW/g)	
Dimensions	Overall length: 337 mm (tip: 20 mm) Tip diameter: 2.5 mm (body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	

6.3 Data Acquisition Electronics (DAE)

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

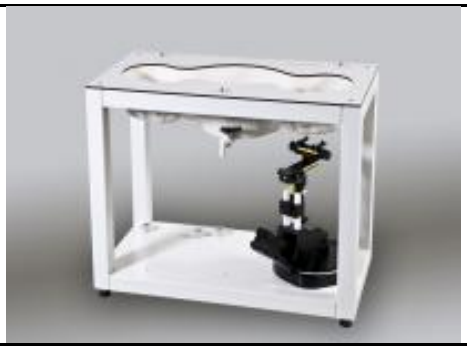
The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

Fig 5.1 Photo of DAE

6.4 Phantom

<SAM Twin Phantom>

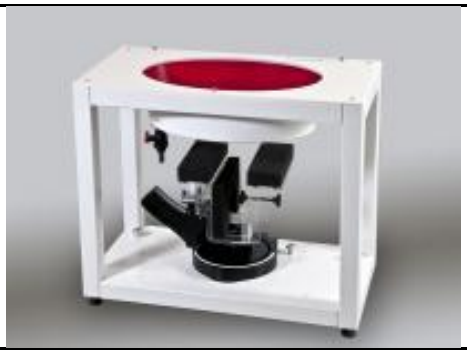
Shell Thickness	2 ± 0.2 mm; Center ear point: 6 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Length: 1000 mm; Width: 500 mm; Height: adjustable feet
Measurement Areas	Left Hand, Right Hand, Flat Phantom



The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

<ELI Phantom>

Shell Thickness	2 ± 0.2 mm (sagging: <1%)
Filling Volume	Approx. 30 liters
Dimensions	Major ellipse axis: 600 mm Minor axis: 400 mm



The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

6.5 Device Holder

<Mounting Device for Hand-Held Transmitter>

In combination with the Twin SAM V5.0/V5.0c or ELI phantoms, the Mounting Device for Hand-Held Transmitters enables rotation of the mounted transmitter device to specified spherical coordinates. At the heads, the rotation axis is at the ear opening. Transmitter devices can be easily and accurately positioned according to IEC 62209-1, IEEE 1528, FCC, or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat). And upgrade kit to Mounting Device to enable easy mounting of wider devices like big smart-phones, e-books, small tablets, etc. It holds devices with width up to 140 mm.

Mounting Device for Hand-Held Transmitters

Mounting Device Adaptor for Wide-Phones

<Mounting Device for Laptops and other Body-Worn Transmitters>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the mounting device in place of the phone positioned. The extension is fully compatible with the SAM Twin and ELI phantoms.

Mounting Device for Laptops

7. Measurement Procedures

The measurement procedures are as follows:

(a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT WLAN/BT continuously transmission, at maximum RF power, in the highest power channel.
(b) Place the EUT in the positions as Appendix D demonstrates.
(c) Set scan area, grid size and other setting on the DASY software.
(d) Measure SAR results for the highest power channel on each testing position.
(e) Find out the largest SAR result on these testing positions of each band
(f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

(a) Power reference measurement
(b) Area scan
(c) Zoom scan
(d) Power drift measurement

7.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

(a) Extraction of the measured data (grid and values) from the Zoom Scan
(b) Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
(c) Generation of a high-resolution mesh within the measured volume
(d) Interpolation of all measured values form the measurement grid to the high-resolution grid
(e) Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
(f) Calculation of the averaged SAR within masses of 1g and 10g

7.2 Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

7.3 Area Scan

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB0 is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.

Area scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

7.4 Zoom Scan

Zoom scans are used assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube shoes base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01v01r04 SAR measurement 100 MHz to 6 GHz.

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.5 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

7.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

8. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	2450MHz System Validation Kit	D2450V2	736	Aug. 17, 2021	Aug. 17, 2022
SPEAG	5GHz System Validation Kit	D5GHzV2	1006	Sep. 15, 2021	Sep. 14, 2022
SPEAG	Data Acquisition Electronics	DAE4	376	Nov. 22, 2021	Nov. 21, 2022
SPEAG	Data Acquisition Electronics	DAE4	854	Aug. 19, 2021	Aug. 18, 2022
SPEAG	Dosimetric E-Field Probe	EX3DV4	3642	Apr. 28, 2022	Apr. 27, 2023
SPEAG	Dosimetric E-Field Probe	EX3DV4	7439	Mar. 02, 2022	Mar. 01, 2023
RCPTWN	Thermometer	HTC-1	TM685-1	Jun. 27, 2022	Jun. 26, 2023
RCPTWN	Thermometer	HTC-1	TM560-2	Mar. 15, 2022	Mar. 14, 2023
SPEAG	Device Holder	N/A	N/A	N/A	N/A
Anritsu	Signal Generator	MG3710A	6201502524	Oct. 24, 2021	Oct. 23, 2022
Keysight	ENA Network Analyzer	E5071C	MY46104758	Sep. 19, 2021	Sep. 18, 2022
SPEAG	Dielectric Probe Kit	DAK-3.5	1126	Sep. 24, 2021	Sep. 23, 2022
LINE SEIKI	Digital Thermometer	DTM3000-spezial	2942	Oct. 26, 2021	Oct. 25, 2022
Anritsu	Power Meter	ML2495A	1804003	Oct. 09, 2021	Oct. 08, 2022
Anritsu	Power Meter	ML2496A	2119003	Jun. 22, 2022	Jun. 21, 2023
Anritsu	Power Sensor	MA2411B	1726150	Oct. 09, 2021	Oct. 08, 2022
Anritsu	Power Sensor	MA2411B	1911334	Jun. 22, 2022	Jun. 21, 2023
Anritsu	Spectrum Analyzer	N9010A	MY53470118	Jan. 12, 2022	Jan. 11, 2023
Agilent	Spectrum Analyzer	E4408B	MY44211028	Aug. 19, 2021	Aug. 18, 2022
Mini-Circuits	Power Amplifier	ZVE-8G+	6418	Oct. 12, 2021	Oct. 11, 2022
Mini-Circuits	Power Amplifier	ZVE-8G+	479102029	Sep. 06, 2021	Sep. 05, 2022
ATM	Dual Directional Coupler	C122H-10	P610410z-02	Note 1	
Warison	Directional Coupler	WCOU-10-50S-10	WR889BMC4B1	Note 1	
Woken	Attenuator 1	WK0602-XX	N/A	Note 1	
PE	Attenuator 2	PE7005-10	N/A	Note 1	
PE	Attenuator 3	PE7005- 3	N/A	Note 1	

General Note:

1. Prior to system verification and validation, the path loss from the signal generator to the system check source and the power meter, which includes the amplifier, cable, attenuator and directional coupler, was measured by the network analyzer. The reading of the power meter was offset by the path loss difference between the path to the power meter and the path to the system check source to monitor the actual power level fed to the system check source.
2. The dipole calibration interval can be extended to 3 years with justification according to KDB 865664 D01. The dipoles are also not physically damaged, or repaired during the interval. The justification data in appendix C can be found which the return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration for each dipole.

9. System Verification

9.1 Tissue Verification

The tissue dielectric parameters of tissue-equivalent media used for SAR measurements must be characterized within a temperature range of 18℃ to 25℃, measured with calibrated instruments and apparatuses, such as network analyzers and temperature probes. The temperature of the tissue-equivalent medium during SAR measurement must also be within 18℃ to 25℃ and within ± 2℃ of the temperature when the tissue parameters are characterized. The tissue dielectric measurement system must be calibrated before use. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements.
The liquid tissue depth was at least 15cm in the phantom for all SAR testing

<Tissue Dielectric Parameter Check Results>

Frequency (MHz)	Liquid Temp. (℃)	Conductivity (σ)	Permittivity (ε_r)	Conductivity Target (σ)	Permittivity Target (ε_r)	Delta (σ) (%)	Delta (ε_r) (%)	Limit (%)	Date
2450	22.5	1.814	38.352	1.80	39.20	0.78	-2.16	±5	2022/7/15
2450	22.4	1.793	39.382	1.80	39.20	-0.39	0.46	±5	2022/7/19
5250	22.4	4.742	36.839	4.71	35.95	0.68	2.47	±5	2022/7/17
5250	22.5	4.675	35.339	4.71	35.95	-0.74	-1.70	±5	2022/7/18
5250	22.5	4.590	36.846	4.71	35.95	-2.55	2.49	±5	2022/7/20
5250	22.5	4.618	35.810	4.71	35.95	-1.95	-0.39	±5	2022/7/21
5250	22.5	4.650	36.129	4.71	35.95	-1.27	0.50	±5	2022/8/10
5250	22.5	4.710	36.097	4.71	35.95	0.00	0.41	±5	2022/8/11
5750	22.4	5.277	36.270	5.22	35.35	1.09	2.60	±5	2022/7/17
5750	22.5	5.204	34.770	5.22	35.35	-0.31	-1.64	±5	2022/7/18
5750	22.5	5.094	36.130	5.22	35.35	-2.41	2.21	±5	2022/7/20
5750	22.5	5.128	35.166	5.22	35.35	-1.76	-0.52	±5	2022/7/21
5750	22.5	5.128	35.166	5.22	35.35	-1.76	-0.52	±5	2022/7/21
5750	22.5	5.279	35.323	5.22	35.35	1.13	-0.08	±5	2022/8/10
5750	22.5	5.211	35.416	5.22	35.35	-0.17	0.19	±5	2022/8/11

9.2 System Performance Check Results

Comparing to the original SAR value provided by SPEAG, the verification data should be within its specification of 10 %. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion and the plots can be referred to Appendix A of this report.

Test Site	Date	Frequency (MHz)	Input Power (mW)	Dipole S/N	Probe S/N	DAE S/N	Power Drift (dB)	Measured 1g SAR (W/kg)	Targeted 1g SAR (W/kg)	Normalized 1g SAR (W/kg)	Deviation (%)	Measured 10g SAR (W/kg)	Targeted 10g SAR (W/kg)	Normalized 10g SAR (W/kg)	Deviation (%)
SAR01	2022/7/15	2450	50	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	-0.03	2.450	54.200	49	-9.59	1.170	25.300	23.4	-7.51
SAR01	2022/7/19	2450	250	D2450V2-736	EX3DV4 - SN3642	DAE4 Sn854	-0.05	12.400	54.200	49.6	-8.49	5.760	25.300	23.04	-8.93
SAR01	2022/7/17	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn854	-0.17	8.610	81.700	86.1	5.39	2.430	23.200	24.3	4.74
SAR01	2022/7/18	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn854	0.02	8.500	81.700	85	4.04	2.430	23.200	24.3	4.74
SAR01	2022/7/20	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn854	-0.1	8.340	81.700	83.4	2.08	2.420	23.200	24.2	4.31
SAR01	2022/7/21	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn854	0.02	8.390	81.700	83.9	2.69	2.400	23.200	24	3.45
SAR01	2022/8/10	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn854	-0.07	8.760	81.700	87.6	7.22	2.370	23.200	23.7	2.16
SAR01	2022/8/11	5250	100	D5GHzV2-1006-5250	EX3DV4 - SN3642	DAE4 Sn854	-0.17	8.550	81.700	85.5	4.65	2.410	23.200	24.1	3.88
SAR01	2022/7/17	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn854	-0.05	7.880	81.400	78.8	-3.19	2.170	22.900	21.7	-5.24
SAR01	2022/7/18	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn854	-0.02	7.770	81.400	77.7	-4.55	2.140	22.900	21.4	-6.55
SAR01	2022/7/20	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn854	-0.08	8.180	81.400	81.8	0.49	2.370	22.900	23.7	3.49
SAR01	2022/7/21	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn854	0.04	8.340	81.400	83.4	2.46	2.350	22.900	23.5	2.62
SAR05	2022/7/21	5750	50	D5GHzV2-1006-5750	EX3DV4 - SN7439	DAE4 Sn376	-0.01	3.840	81.400	76.8	-5.65	1.080	22.900	21.6	-5.68
SAR01	2022/8/10	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn854	-0.01	8.840	81.400	88.4	8.60	2.460	22.900	24.6	7.42
SAR01	2022/8/11	5750	100	D5GHzV2-1006-5750	EX3DV4 - SN3642	DAE4 Sn854	-0.04	8.500	81.400	85	4.42	2.390	22.900	23.9	4.37

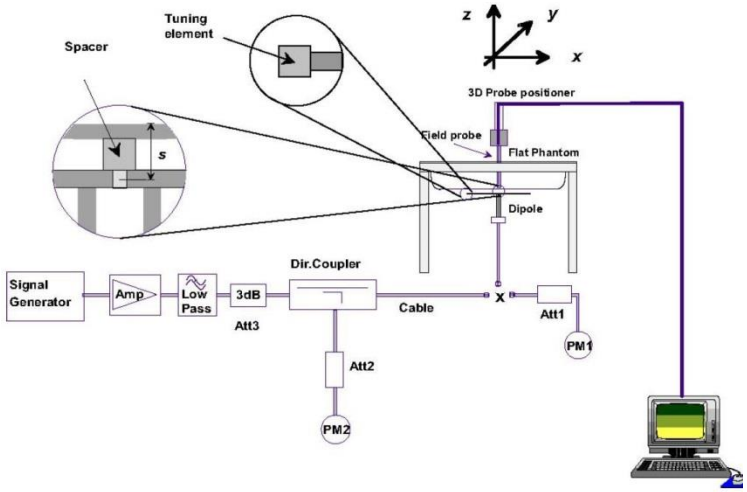


Fig 8.3.1 System Performance Check Setup

Fig 8.3.2 Setup Photo

10. Conducted RF Output Power (Unit: dBm)

<WLAN Conducted Power>

General Note:

1. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.
2. For 2.4 GHz 802.11b DSSS, either the initial test position procedure for multiple exposure test positions or the DSSS procedure for fixed exposure position is applied; these are mutually exclusive. For 2.4 GHz and 5 GHz OFDM configurations, the initial test configuration is applied to measure SAR using either the initial test position procedure for multiple exposure test position configurations or the initial test configuration procedures for fixed exposure test conditions. Based on the reported SAR of the measured configurations and maximum output power of the transmission mode configurations that are not included in the initial test configuration, the subsequent test configuration and initial test position procedures are applied to determine if SAR measurements are required for the remaining OFDM transmission configurations. In general, the number of test channels that require SAR measurement is minimized based on maximum output power measured for the test sample(s).
3. For OFDM transmission configurations in the 2.4 GHz and 5 GHz bands, When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel for each frequency band.
4. DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures.18 The initial test position procedure is described in the following:
    a. When the reported SAR of 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 802.11 transmission mode combinations within the frequency band or aggregated band.
    b. 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.
    c. 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.
5. Per 201904 TCBC workshops, General principles of FCC KDB Publication 248227 D01 can be applied to determine the SAR Initial Test Configurations and test reduction for 802.11ax SAR testing. For the table below the 802.11ax maximum power is SU (non-OFDMA), and the SU maximum power also higher than RU (OFDMA)
6. In applying the test guidance, the IEEE 802.11 mode with the maximum output power (out of all modes) should be considered for testing
7. For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
8. When SAR testing for 802.11ax is required
    a. If the maximum output power is highest for OFDMA scenarios, choose the tone size with the maximum number of tones and the highest maximum output power
    b. Otherwise, consider the fully allocated channel for SAR testing
    c. When SAR testing is required on RU sizes less than the fully allocated channel, use the RU number closest to the middle of the channel, choosing the higher RU number when two RUs are equidistant to the middle of the channel

<Non-beamforming mode>

<Radio 1>

<2.4GHz WLAN ANT1>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps_NSS1	1	2412	23.55	24.00	95.70
		6	2437	24.58	25.00	
		11	2462	22.54	23.00	
	802.11g 6Mbps_NSS1	1	2412	19.82	20.00	95.40
		6	2437	22.89	23.00	
		11	2462	19.57	20.00	
	802.11ax-HEW20 MCS0_NSS1	1	2412	19.43	19.50	98.40
		6	2437	22.66	23.00	
		11	2462	19.06	19.50	

<2.4GHz WLAN ANT1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps	1	2412	25.34	25.50	95.70
		6	2437	25.42	25.50	
		11	2462	25.39	25.50	
	802.11g 6Mbps	1	2412	21.41	21.50	95.40
		6	2437	25.27	25.50	
		11	2462	20.66	21.00	
	802.11ax-HEW20 MCS0_NSS2	1	2412	19.76	20.00	98.40
		6	2437	25.08	25.50	
		11	2462	24.72	25.50	

<2.4GHz WLAN ANT1+2+3+4>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11b 1Mbps_NSS1	1	2412	25.68	26.00	95.70
		6	2437	28.57	29.00	
		11	2462	28.06	29.00	
	802.11g 6Mbps_NSS1	1	2412	20.41	20.50	95.40
		6	2437	28.29	28.50	
		11	2462	18.74	19.00	
	802.11ax-HEW20 MCS0_NSS1	1	2412	21.81	22.00	98.40
		6	2437	27.33	27.50	
		11	2462	28.03	28.50	

<5GHz WLAN ANT1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps_NSS1	36	5180	23.44	23.50	95.10
		40	5200	23.76	24.00	
		44	5220	23.70	24.00	
		48	5240	22.46	22.50	
	802.11ax-HEW20 MCS0_NSS2	36	5180	23.32	23.50	96.80
		40	5200	23.83	24.00	
		44	5220	23.86	24.00	
		48	5240	23.09	23.50	
	802.11ax-HEW40 MCS0_NSS2	38	5190	20.43	21.00	94.40
		46	5230	23.88	24.00	
	802.11ax-HEW80 MCS0_NSS2	42	5210	20.13	21.00	90.60

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps_NSS1	149	5745	23.78	24.00	95.10
		157	5785	23.94	24.00	
		165	5825	23.71	24.00	
	802.11ax-HEW20 MCS0_NSS2	149	5745	23.49	23.50	96.80
		157	5785	23.51	24.00	
		165	5825	23.55	24.00	
	802.11ax-HEW40 MCS0_NSS2	151	5755	23.57	24.00	94.40
		159	5795	23.05	23.50	
	802.11ax-HEW80 MCS0_NSS2	155	5775	23.68	24.00	90.60

<Radio 2>

<5GHz WLAN ANT1>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps_NSS1	36	5180	20.63	21.00	95.10
		40	5200	22.36	22.50	
		44	5220	22.33	22.50	
		48	5240	22.40	22.50	
	802.11ax-HEW20 MCS0_NSS1	36	5180	21.38	22.00	96.80
		40	5200	22.22	22.50	
		44	5220	22.30	22.50	
		48	5240	22.31	22.50	
	802.11ax-HEW40 MCS0_NSS1	38	5190	18.85	19.00	94.40
		46	5230	22.42	22.50	
	802.11ax-HEW80 MCS0_NSS1	42	5210	18.88	19.00	90.60

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps_NSS1	149	5745	21.98	22.00	95.10
		157	5785	21.96	22.00	
		165	5825	21.99	22.00	
	802.11ax-HEW20 MCS0_NSS1	149	5745	22.02	22.50	96.80
		157	5785	22.05	22.50	
		165	5825	21.94	22.00	
	802.11ax-HEW40 MCS0_NSS1	151	5755	21.88	22.00	94.40
		159	5795	21.66	22.00	
	802.11ax-HEW80 MCS0_NSS1	155	5775	22.11	22.50	90.60

<5GHz WLAN ANT1+2>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps_NSS1	36	5180	23.43	24.00	95.10
		40	5200	23.79	24.00	
		44	5220	23.76	24.00	
		48	5240	23.85	24.00	
	802.11ax-HEW20 MCS0_NSS2	36	5180	23.68	24.00	96.80
		40	5200	23.72	24.00	
		44	5220	23.70	24.00	
		48	5240	23.90	24.00	
	802.11ax-HEW40 MCS0_NSS2	38	5190	20.81	21.00	94.40
		46	5230	23.48	23.50	
	802.11ax-HEW80 MCS0_NSS2	42	5210	19.66	20.00	90.60

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps_NSS1	149	5745	23.89	24.00	95.10
		157	5785	23.81	24.00	
		165	5825	23.72	24.00	
	802.11ax-HEW20 MCS0_NSS2	149	5745	23.58	24.00	96.80
		157	5785	23.72	24.00	
		165	5825	23.66	24.00	
	802.11ax-HEW40 MCS0_NSS2	151	5755	23.61	24.00	94.40
		159	5795	23.74	24.00	
	802.11ax-HEW80 MCS0_NSS2	155	5775	23.81	24.00	90.60

<5GHz WLAN ANT1+2+3+4>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11a 6Mbps_NSS1	36	5180	26.50	27.00	95.10
		40	5200	26.49	26.50	
		44	5220	26.55	27.00	
		48	5240	26.61	27.00	
	802.11ax-HEW20 MCS0_NSS1	36	5180	26.66	27.00	96.80
		40	5200	26.56	27.00	
		44	5220	26.51	27.00	
		48	5240	26.47	27.00	
	802.11ax-HEW40 MCS0_NSS1	38	5190	21.74	22.00	94.40
		46	5230	27.93	28.00	
	802.11ax-HEW80 MCS0_NSS4	42	5210	22.09	23.00	90.60

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11a 6Mbps_NSS1	149	5745	26.50	27.00	95.10
		157	5785	26.38	26.50	
		165	5825	26.32	26.50	
	802.11ax-HEW20 MCS0_NSS1	149	5745	26.37	26.50	96.80
		157	5785	26.51	27.00	
		165	5825	26.49	26.50	
	802.11ax-HEW40 MCS0_NSS1	151	5755	26.41	26.50	94.40
		159	5795	26.45	26.50	
	802.11ax-HEW80 MCS0_NSS4	155	5775	26.54	27.00	90.60

<Beamforming mode>

<Radio 1>

<2.4GHz WLAN ANT1+2+3+4>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
2.4GHz WLAN	802.11ax-HEW20 MCS0_NSS1	1	2412	21.81	22.00	98.40
		6	2437	27.33	27.50	
		11	2462	28.03	28.50	

<Radio 2>

<5GHz WLAN ANT1+2+3+4>

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.2GHz WLAN	802.11ax-HEW20 MCS0_NSS1	36	5180	26.66	27.00	96.80
		40	5200	27.39	27.50	
		44	5220	27.42	27.50	
		48	5240	27.45	27.50	
	802.11ax-HEW40 MCS0_NSS1	38	5190	21.74	22.00	94.40
		46	5230	27.43	27.50	
	802.11ax-HEW80 MCS0_Nss1	42	5210	22.09	22.50	90.60

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Duty Cycle %
5.8GHz WLAN	802.11ax-HEW20 MCS0_NSS1	149	5745	25.96	26.50	96.80
		157	5785	26.37	27.00	
		165	5825	25.95	26.50	
	802.11ax-HEW40 MCS0_NSS1	151	5755	25.97	26.50	94.40
		159	5795	25.95	26.50	
	802.11ax-HEW80 MCS0_NSS1	155	5775	25.46	27.00	90.60

<Radio 3>

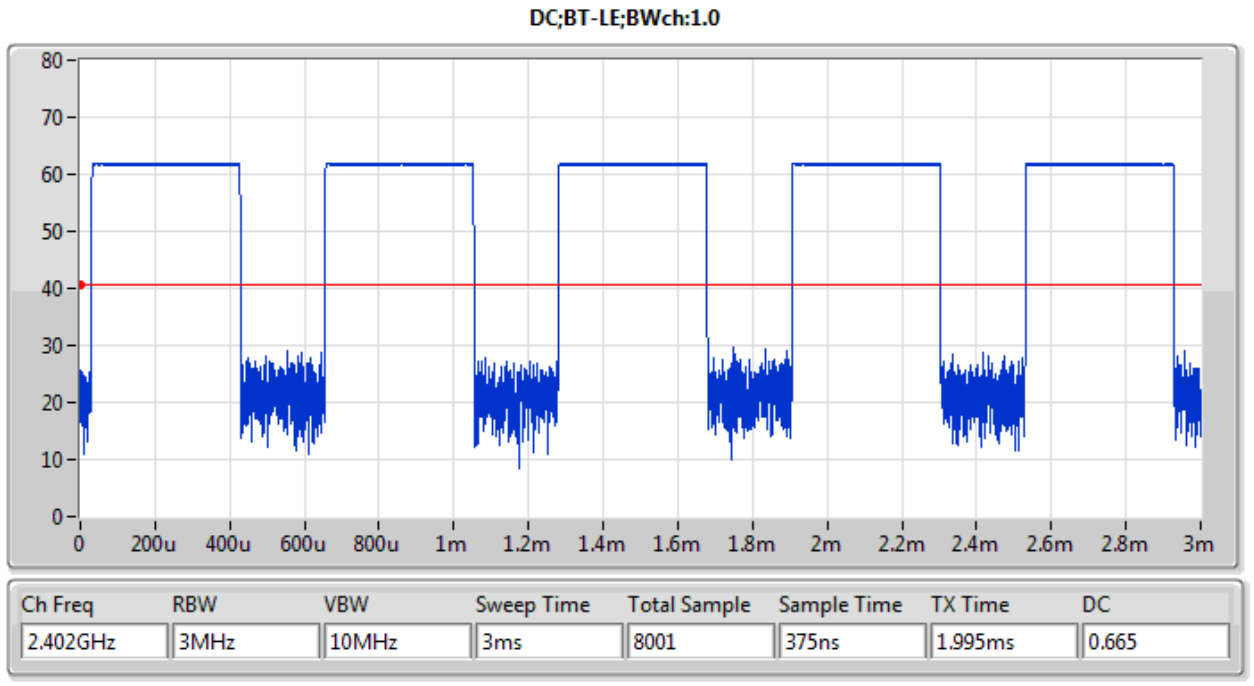
<2.4GHz Bluetooth>

General Note:

1. For 2.4GHz Bluetooth SAR testing was selected 1Mbps due to its highest average power and duty cycle is 63.6% considered in SAR testing, and the duty cycle would be scaled to theoretical 83.3% in reported SAR calculation.

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	4.07	3.82
	CH 13	2440	3.58	3.45
	CH 27	2480	3.35	3.22
Tune-up Limit			4.5	4

BT Duty cycle



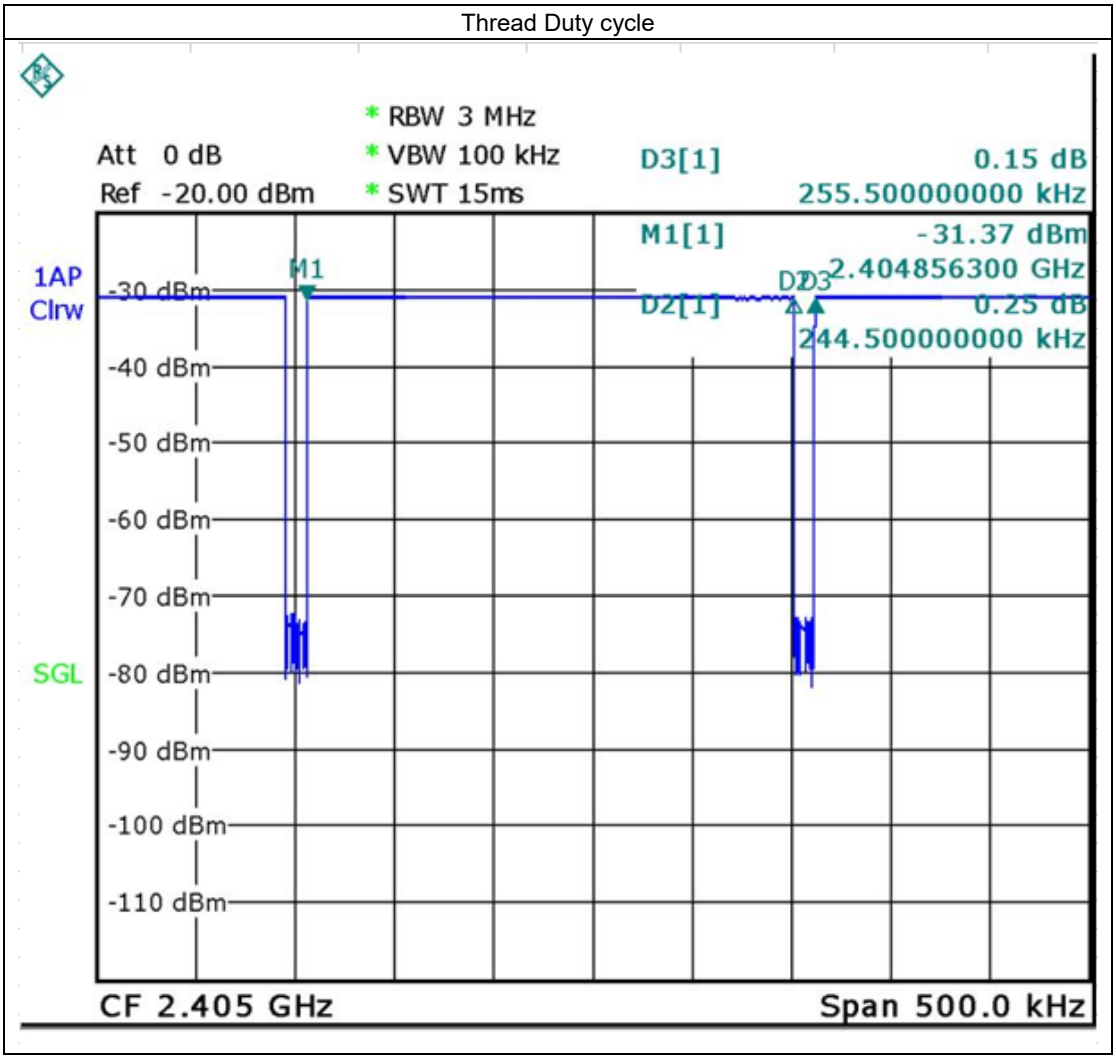
<2.4GHz Thread>

General Note:

1. The duty cycle is 99.9% considered in SAR testing, and the duty cycle would be scaled to 100% in reported SAR calculation.

Mode	Channel	Frequency (MHz)	Average power (dBm)
Thread	CH 11	2405	4.30
	CH 18	2440	3.78
	CH 26	2475	3.56
Tune-up Limit			4.5

Thread Duty cycle



11. SAR Test Results

General Note:

1. Per KDB 447498 D01v06, the reported SAR is the measured SAR value adjusted for maximum tune-up tolerance.
   a. Tune-up scaling Factor = tune-up limit power (mW) / EUT RF power (mW), where tune-up limit is the maximum rated power among all production units.
   b. For SAR testing of WLAN signal with non-100% duty cycle, the measured SAR is scaled-up by the duty cycle scaling factor which is equal to "1/(duty cycle)"
   c. For Bluetooth/Thread: Reported SAR(W/kg)= Measured SAR(W/kg)*Tune-up Scaling Factor
   d. For WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)* Duty Cycle scaling factor * Tune-up scaling factor
2. Per KDB 447498 D01v06, for each exposure position, testing of other required 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:
   - ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz
   - ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz
   - ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz
3. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.

WLAN Note:

1. Per KDB 248227 D01v02r02, for 2.4GHz 802.11g/n SAR testing is not required when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.
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. For modes with the same maximum output power, the guidance from section 5.3.2 a) of FCC KDB Publication 248227 D01 should be applied, with 802.11ax being considered as the highest 802.11 mode for the appropriate frequency bands
5. During SAR testing the WLAN transmission was verified using a spectrum analyzer.

11.1 Body SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
01	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	-0.12	0.390	0.449
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1	Radio 1	1	2412	23.55	24.00	1.109	95.7	1.045	-0.15	0.263	0.305
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1	Radio 1	11	2462	22.54	23.00	1.112	95.7	1.045	0.18	0.237	0.275
	WLAN2.4GHz	802.11b 1Mbps	Edge 1	25mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	-0.18	0.026	0.030
	WLAN2.4GHz	802.11b 1Mbps	Edge 2	25mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	0.08	0.057	0.066
	WLAN2.4GHz	802.11b 1Mbps	Edge 4	25mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	0.17	0.060	0.069
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	-0.06	0.255	0.271
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1+2	Radio 1	1	2412	25.34	25.5	1.038	95.7	1.045	0.04	0.222	0.241
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1+2	Radio 1	11	2462	25.39	25.5	1.026	95.7	1.045	-0.02	0.302	0.324
	WLAN2.4GHz	802.11b 1Mbps	Edge 1	25mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	0.1	0.049	0.052
	WLAN2.4GHz	802.11b 1Mbps	Edge 2	25mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	0.18	0.041	0.044
	WLAN2.4GHz	802.11b 1Mbps	Edge 4	25mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	-0.17	0.041	0.044
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	-0.03	0.275	0.317
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1+2+3+4	Radio 1	1	2412	25.68	26.00	1.076	95.7	1.045	0.06	0.154	0.173
	WLAN2.4GHz	802.11b 1Mbps	Front Face	25mm	Ant 1+2+3+4	Radio 1	11	2462	28.06	29.00	1.242	95.7	1.045	-0.01	0.336	0.436
	WLAN2.4GHz	802.11b 1Mbps	Edge 1	25mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	0.16	0.065	0.075
	WLAN2.4GHz	802.11b 1Mbps	Edge 2	25mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	-0.08	0.092	0.106
	WLAN2.4GHz	802.11b 1Mbps	Edge 4	25mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	-0.09	0.075	0.087
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	0.01	0.717	0.781
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1+2	Radio 1	38	5190	20.43	21.00	1.140	94.4	1.059	-0.16	0.538	0.650
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 1	25mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	0.13	0.086	0.094
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 2	25mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	-0.02	0.141	0.154
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 4	25mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	0.02	0.209	0.228
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	-0.03	0.510	0.550
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1	Radio 2	38	5190	18.85	19.00	1.035	94.4	1.059	0.02	0.285	0.312
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 1	25mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	0.02	0.160	0.173
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 2	25mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	-0.02	0.309	0.333
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 4	25mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	0.15	0.106	0.114
	WLAN5GHz	802.11a 6Mbps	Front Face	25mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	-0.09	0.452	0.492
	WLAN5GHz	802.11a 6Mbps	Front Face	25mm	Ant 1+2	Radio 2	36	5180	23.43	24	1.140	95.1	1.052	0.03	0.303	0.363
	WLAN5GHz	802.11a 6Mbps	Front Face	25mm	Ant 1+2	Radio 2	40	5200	23.79	24	1.050	95.1	1.052	-0.12	0.405	0.447
	WLAN5GHz	802.11a 6Mbps	Front Face	25mm	Ant 1+2	Radio 2	44	5220	23.76	24	1.057	95.1	1.052	-0.19	0.389	0.432
	WLAN5GHz	802.11a 6Mbps	Edge 1	25mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	-0.07	0.232	0.253
	WLAN5GHz	802.11a 6Mbps	Edge 2	25mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	-0.16	0.339	0.369
	WLAN5GHz	802.11a 6Mbps	Edge 4	25mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	0.18	0.093	0.101
02	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.12	1.070	1.152
	WLAN5GHz	802.11a 6Mbps	Front Face	25mm	Ant 1+2+3+4	Radio 2	48	5240	26.61	27.00	1.094	95.1	1.052	-0.09	0.980	1.128
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 1	25mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.11	0.229	0.246
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 2	25mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.01	0.451	0.485
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 4	25mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.06	0.208	0.224
	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	25mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	-0.06	0.837	0.995
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1+2	Radio 1	151	5755	23.57	24.00	1.104	94.4	1.059	0.05	0.752	0.879
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	25mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	0.12	0.034	0.040
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	25mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	-0.04	0.062	0.074
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	25mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	0.02	0.057	0.068
	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	25mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	-0.14	0.380	0.459
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	25mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	0.14	0.128	0.155
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	25mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	0.09	0.248	0.300
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	25mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	-0.07	0.084	0.101
	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	25mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	-0.12	0.464	0.535
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	25mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	-0.08	0.238	0.275
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	25mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	-0.02	0.348	0.401
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	25mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	0.1	0.095	0.110
03	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	25mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.07	0.924	1.134
	WLAN5GHz	802.11a 6Mbps	Front Face	25mm	Ant 1+2+3+4	Radio 2	149	5745	26.50	27.00	1.122	95.1	1.052	-0.08	0.769	0.908
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	25mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.01	0.169	0.207
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	25mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.07	0.159	0.195
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	25mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.09	0.149	0.183

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
	Bluetooth	1Mbps	Front Face	25mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	0.19	0.001	0.001
	Bluetooth	1Mbps	Front Face	25mm	Radio 3	13	2440	3.58	4.50	1.236	63.6	1.310	0.05	0.001	0.002
04	Bluetooth	1Mbps	Front Face	25mm	Radio 3	27	2480	3.35	4.50	1.303	63.6	1.310	-0.07	0.001	0.002
	Bluetooth	1Mbps	Edge 1	25mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	0	0.001	0.001
	Bluetooth	1Mbps	Edge 2	25mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	-0.15	0.001	0.001
	Bluetooth	1Mbps	Edge 4	25mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	0.08	0.001	0.001

<Thread SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
05	Thread	1Mbps	Front Face	25mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	-0.16	0.001	0.001
	Thread	1Mbps	Front Face	25mm	Radio 3	18	2440	3.78	4.50	1.180	99.9	1.001	0.06	0.001	0.001
	Thread	1Mbps	Front Face	25mm	Radio 3	26	2475	3.56	4.50	1.242	99.9	1.001	-0.16	0.001	0.001
	Thread	1Mbps	Edge 1	25mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	-0.02	0.001	0.001
	Thread	1Mbps	Edge 2	25mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	0.15	0.001	0.001
	Thread	1Mbps	Edge 4	25mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	0.07	0.001	0.001

11.2 Extremity SAR

<WLAN SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Antenna	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
06	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	0.13	1.210	1.393
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1	Radio 1	1	2412	23.55	24.00	1.109	95.7	1.045	0.05	0.800	0.927
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1	Radio 1	11	2462	22.54	23.00	1.112	95.7	1.045	-0.01	0.751	0.872
	WLAN2.4GHz	802.11b 1Mbps	Edge 1	0mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	-0.17	0.042	0.048
	WLAN2.4GHz	802.11b 1Mbps	Edge 2	0mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	0.02	0.184	0.212
	WLAN2.4GHz	802.11b 1Mbps	Edge 4	0mm	Ant 1	Radio 1	6	2437	24.58	25.00	1.102	95.7	1.045	-0.04	0.097	0.112
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	0.11	0.659	0.701
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1+2	Radio 1	1	2412	25.34	25.5	1.038	95.7	1.045	0.1	0.635	0.688
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1+2	Radio 1	11	2462	25.39	25.5	1.026	95.7	1.045	0.15	0.578	0.620
	WLAN2.4GHz	802.11b 1Mbps	Edge 1	0mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	-0.11	0.179	0.191
	WLAN2.4GHz	802.11b 1Mbps	Edge 2	0mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	0.04	0.104	0.111
	WLAN2.4GHz	802.11b 1Mbps	Edge 4	0mm	Ant 1+2	Radio 1	6	2437	25.42	25.5	1.019	95.7	1.045	-0.09	0.068	0.072
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	0.09	0.889	1.026
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1+2+3+4	Radio 1	1	2412	25.68	26.00	1.076	95.7	1.045	-0.07	0.387	0.435
	WLAN2.4GHz	802.11b 1Mbps	Front Face	0mm	Ant 1+2+3+4	Radio 1	11	2462	28.06	29.00	1.242	95.7	1.045	0.01	0.957	1.242
	WLAN2.4GHz	802.11b 1Mbps	Edge 1	0mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	0.06	0.263	0.303
	WLAN2.4GHz	802.11b 1Mbps	Edge 2	0mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	-0.09	0.282	0.325
	WLAN2.4GHz	802.11b 1Mbps	Edge 4	0mm	Ant 1+2+3+4	Radio 1	6	2437	28.57	29.00	1.104	95.7	1.045	-0.01	0.216	0.249
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	0.1	1.580	1.720
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1+2	Radio 1	38	5190	20.43	21.00	1.140	94.4	1.059	-0.13	1.140	1.377
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 1	0mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	-0.18	0.460	0.501
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 2	0mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	0.16	0.286	0.311
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 4	0mm	Ant 1+2	Radio 1	46	5230	23.88	24.00	1.028	94.4	1.059	-0.16	0.378	0.412
07	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	0.05	2.240	2.416
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1	Radio 2	38	5190	18.85	19.00	1.035	94.4	1.059	0.16	2.030	2.225
	WLAN5GHz	802.11a 6Mbps	Front Face	0mm	Ant 1	Radio 2	44	5220	22.33	22.50	1.040	95.1	1.052	-0.03	1.790	1.958
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 1	0mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	-0.17	0.051	0.055
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 2	0mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	-0.1	0.112	0.121
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 4	0mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	-0.16	0.039	0.042
	WLAN5GHz	802.11a 6Mbps	Front Face	0mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	0.18	1.580	1.721
	WLAN5GHz	802.11a 6Mbps	Front Face	0mm	Ant 1+2	Radio 2	36	5180	23.43	24	1.140	95.1	1.052	-0.02	1.450	1.739
	WLAN5GHz	802.11a 6Mbps	Front Face	0mm	Ant 1+2	Radio 2	40	5200	23.79	24	1.050	95.1	1.052	0.01	1.510	1.667
	WLAN5GHz	802.11a 6Mbps	Front Face	0mm	Ant 1+2	Radio 2	44	5220	23.76	24	1.057	95.1	1.052	-0.03	1.500	1.668
	WLAN5GHz	802.11a 6Mbps	Edge 1	0mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	-0.11	0.153	0.167
	WLAN5GHz	802.11a 6Mbps	Edge 2	0mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	-0.08	0.252	0.274
	WLAN5GHz	802.11a 6Mbps	Edge 4	0mm	Ant 1+2	Radio 2	48	5240	23.85	24	1.035	95.1	1.052	-0.08	0.069	0.075
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.01	2.140	2.303
	WLAN5GHz	802.11a 6Mbps	Front Face	0mm	Ant 1+2+3+4	Radio 2	48	5240	26.61	27.00	1.094	95.1	1.052	-0.03	1.290	1.485
	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1+2+3+4	Radio 2	38	5190	21.74	22.00	1.062	94.4	1.059	-0.19	1.940	2.181
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 1	0mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.06	0.159	0.171
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 2	0mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.12	0.253	0.272
	WLAN5GHz	802.11ax-HEW40 MCS0	Edge 4	0mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.14	0.125	0.135
	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	0mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	-0.18	1.580	1.878
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	0mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	-0.05	0.122	0.145
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	0mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	-0.12	0.527	0.626
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	0mm	Ant 1+2	Radio 1	155	5775	23.68	24.00	1.076	90.6	1.104	0.05	0.345	0.410
	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	0mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	-0.16	1.850	2.234
08	WLAN5GHz	802.11ax-HEW20 MCS0	Front Face	0mm	Ant 1	Radio 2	157	5785	22.05	22.50	1.109	96.8	1.033	-0.05	2.110	2.418
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	0mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	0.1	0.042	0.051
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	0mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	0.1	0.092	0.111
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	0mm	Ant 1	Radio 2	155	5775	22.11	22.50	1.094	90.6	1.104	-0.12	0.032	0.039
	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	0mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	-0.19	1.640	1.892
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	0mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	0.09	0.158	0.182
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	0mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	-0.17	0.261	0.301
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	0mm	Ant 1+2	Radio 2	155	5775	23.81	24.00	1.045	90.6	1.104	-0.16	0.071	0.082
	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	0mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.03	1.630	2.001
	WLAN5GHz	802.11a 6Mbps	Front Face	0mm	Ant 1+2+3+4	Radio 2	149	5745	26.50	27.00	1.122	95.1	1.052	-0.01	1.800	2.125
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 1	0mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.12	0.193	0.237
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 2	0mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.09	0.169	0.207
	WLAN5GHz	802.11ax-HEW80 MCS0	Edge 4	0mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.06	0.137	0.168

<Bluetooth SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
09	Bluetooth	1Mbps	Front Face	0mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	-0.09	0.008	0.012
	Bluetooth	1Mbps	Front Face	0mm	Radio 3	13	2440	3.58	4.50	1.236	63.6	1.310	0.15	0.005	0.008
	Bluetooth	1Mbps	Front Face	0mm	Radio 3	27	2480	3.35	4.50	1.303	63.6	1.310	0.19	0.004	0.007
	Bluetooth	1Mbps	Edge 1	0mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	0.06	0.001	0.001
	Bluetooth	1Mbps	Edge 2	0mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	-0.12	0.001	0.001
	Bluetooth	1Mbps	Edge 4	0mm	Radio 3	0	2402	4.07	4.50	1.104	63.6	1.310	0.08	0.001	0.001

<Thread SAR>

Plot No.	Band	Mode	Test Position	Gap (mm)	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
10	Thread	1Mbps	Front Face	0mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	-0.04	0.012	0.013
	Thread	1Mbps	Front Face	0mm	Radio 3	18	2440	3.78	4.50	1.180	99.9	1.001	-0.05	0.010	0.012
	Thread	1Mbps	Front Face	0mm	Radio 3	26	2475	3.56	4.50	1.242	99.9	1.001	0.12	0.009	0.011
	Thread	1Mbps	Edge 1	0mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	0	0.001	0.001
	Thread	1Mbps	Edge 2	0mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	0.03	0.001	0.001
	Thread	1Mbps	Edge 4	0mm	Radio 3	11	2405	4.30	4.50	1.047	99.9	1.001	0.13	0.001	0.001

11.3 Repeated SAR Measurement

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Ratio	Reported 1g SAR (W/kg)
1st	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	-0.12	1.070	-	1.152
2nd	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	25mm	Ant 1+2+3+4	Radio 2	46	5230	27.93	28.00	1.016	94.4	1.059	0.15	0.998	1.07	1.074
1st	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	25mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	-0.07	0.924	-	1.134
2nd	WLAN5GHz	802.11ax-HEW80 MCS0	Front Face	25mm	Ant 1+2+3+4	Radio 2	155	5775	26.54	27.00	1.112	90.6	1.104	0.05	0.863	1.07	1.059

No.	Band	Mode	Test Position	Gap (mm)	Antenna	Radio	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Ratio	Reported 10g SAR (W/kg)
1st	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	0.05	2.240	-	2.416
2nd	WLAN5GHz	802.11ax-HEW40 MCS0	Front Face	0mm	Ant 1	Radio 2	46	5230	22.42	22.50	1.019	94.4	1.059	0.03	2.010	1.11	2.168
1st	WLAN5GHz	802.11ax-HEW20 MCS0	Front Face	0mm	Ant 1	Radio 2	157	5785	22.05	22.50	1.109	96.8	1.033	-0.05	2.110	-	2.418
2nd	WLAN5GHz	802.11ax-HEW20 MCS0	Front Face	0mm	Ant 1	Radio 2	157	5785	22.05	22.50	1.109	96.8	1.033	0.12	2.010	1.05	2.303

General Note:

1. Per KDB 865664 D01v01r04, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/kg.
2. Per KDB 865664 D01v01r04, if the ratio among the repeated measurement is ≤ 1.2 and the measured SAR <1.45W/kg, only one repeated measurement is required.
3. Per KDB 865664 D01v01r04, if the extremity repeated SAR is necessary, 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.
4. The ratio is the difference in percentage between original and repeated *measured SAR*.
5. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

12. Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Body	Extremity
1.	WLAN2.4GHz (Radio 1) + WLAN 5GHz (Radio 2) + Bluetooth (Radio3)	Yes	Yes
2.	WLAN 5GHz (Radio 1) + WLAN 5GHz (Radio 2) + Bluetooth (Radio3)	Yes	Yes
3.	WLAN2.4GHz (Radio 1) + WLAN 5GHz (Radio 2) + Thread (Radio3)	Yes	Yes
4.	WLAN 5GHz (Radio 1) + WLAN 5GHz (Radio 2) + Thread (Radio3)	Yes	Yes

General Note:

1. The Scaled SAR summation is calculated based on the same configuration and test position.
2. Per KDB 447498 D01v06, simultaneous transmission SAR is compliant if,
   i) Scalar SAR summation < 1.6W/kg.
   ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.
   iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.
   iv) Simultaneously transmission SAR measurement, and the reported multi-band SAR < 1.6W/kg.

12.1 Body Exposure Conditions

Exposure Position	1 Radio 1_WLAN2.4GHz Ant 1 1g SAR (W/kg)	2 Radio 1_WLAN5GHz Ant 1 1g SAR (W/kg)	3 Radio 2_WLAN5GHz Ant 1 1g SAR (W/kg)	4 Radio 3_Bluetooth 1g SAR (W/kg)	5 Radio 3_Thread 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	2+3+4 Summed 1g SAR (W/kg)	2+3+5 Summed 1g SAR (W/kg)
Front Face at 25mm	0.449		0.550	0.002	0.001	**1.001**	**1.000**	**0.552**	**0.551**
Edge 1 at 25mm	0.030		0.173	0.001	0.001	**0.204**	**0.204**	**0.174**	**0.174**
Edge 2 at 25mm	0.066		0.333	0.001	0.001	**0.400**	**0.400**	**0.334**	**0.334**
Edge 4 at 25mm	0.069		0.114	0.001	0.001	**0.184**	**0.184**	**0.115**	**0.115**

Exposure Position	1 Radio 1_WLAN2.4GHz Ant 1+2 1g SAR (W/kg)	2 Radio 1_WLAN5GHz Ant 1+2 1g SAR (W/kg)	3 Radio 2_WLAN5GHz Ant 1+2 1g SAR (W/kg)	4 Radio 3_Bluetooth 1g SAR (W/kg)	5 Radio 3_Thread 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	2+3+4 Summed 1g SAR (W/kg)	2+3+5 Summed 1g SAR (W/kg)
Front Face at 25mm	0.324	0.995	0.535	0.002	0.001	**0.861**	**0.860**	**1.532**	**1.531**
Edge 1 at 25mm	0.052	0.094	0.275	0.001	0.001	**0.328**	**0.328**	**0.370**	**0.370**
Edge 2 at 25mm	0.044	0.154	0.401	0.001	0.001	**0.446**	**0.446**	**0.556**	**0.556**
Edge 4 at 25mm	0.044	0.228	0.110	0.001	0.001	**0.155**	**0.155**	**0.339**	**0.339**

Exposure Position	1 Radio 1_WLAN2.4GHz Ant 1+2+3+4 1g SAR (W/kg)	2 Radio 1_WLAN5GHz Ant 1+2+3+4 1g SAR (W/kg)	3 Radio 2_WLAN5GHz Ant 1+2+3+4 1g SAR (W/kg)	4 Radio 3_Bluetooth 1g SAR (W/kg)	5 Radio 3_Thread 1g SAR (W/kg)	1+3+4 Summed 1g SAR (W/kg)	1+3+5 Summed 1g SAR (W/kg)	2+3+4 Summed 1g SAR (W/kg)	2+3+5 Summed 1g SAR (W/kg)
Front Face at 25mm	0.436		1.152	0.002	0.001	**1.590**	**1.589**	**1.154**	**1.153**
Edge 1 at 25mm	0.075		0.246	0.001	0.001	**0.322**	**0.322**	**0.247**	**0.247**
Edge 2 at 25mm	0.106		0.485	0.001	0.001	**0.592**	**0.592**	**0.486**	**0.486**
Edge 4 at 25mm	0.087		0.224	0.001	0.001	**0.312**	**0.312**	**0.225**	**0.225**

12.2 Extremity Exposure Conditions

Exposure Position	1 Radio 1_WLAN2.4GHz Ant 1 10g SAR (W/kg)	2 Radio 1_WLAN5GHz Ant 1 10g SAR (W/kg)	3 Radio 2_WLAN5GHz Ant 1 10g SAR (W/kg)	4 Radio 3_Bluetooth 10g SAR (W/kg)	5 Radio 3_Thread 10g SAR (W/kg)	1+3+4 Summed 10g SAR (W/kg)	1+3+5 Summed 10g SAR (W/kg)	2+3+4 Summed 10g SAR (W/kg)	2+3+5 Summed 10g SAR (W/kg)
Front Face at 0mm	1.393		2.418	0.012	0.013	**3.823**	**3.824**	**2.430**	**2.431**
Edge 1 at 0mm	0.048		0.055	0.001	0.001	**0.104**	**0.104**	**0.056**	**0.056**
Edge 2 at 0mm	0.212		0.121	0.001	0.001	**0.334**	**0.334**	**0.122**	**0.122**
Edge 4 at 0mm	0.112		0.042	0.001	0.001	**0.155**	**0.155**	**0.043**	**0.043**

Exposure Position	1 Radio 1_WLAN2.4GHz Ant 1+2 10g SAR (W/kg)	2 Radio 1_WLAN5GHz Ant 1+2 10g SAR (W/kg)	3 Radio 2_WLAN5GHz Ant 1+2 10g SAR (W/kg)	4 Radio 3_Bluetooth 10g SAR (W/kg)	5 Radio 3_Thread 10g SAR (W/kg)	1+3+4 Summed 10g SAR (W/kg)	1+3+5 Summed 10g SAR (W/kg)	2+3+4 Summed 10g SAR (W/kg)	2+3+5 Summed 10g SAR (W/kg)
Front Face at 0mm	0.701	1.878	1.892	0.012	0.013	**2.605**	**2.606**	**3.782**	**3.783**
Edge 1 at 0mm	0.191	0.501	0.182	0.001	0.001	**0.374**	**0.374**	**0.684**	**0.684**
Edge 2 at 0mm	0.111	0.626	0.301	0.001	0.001	**0.413**	**0.413**	**0.928**	**0.928**
Edge 4 at 0mm	0.072	0.412	0.082	0.001	0.001	**0.155**	**0.155**	**0.495**	**0.495**

Exposure Position	1 Radio 1_WLAN2.4GHz Ant 1+2+3+4 10g SAR (W/kg)	2 Radio 1_WLAN5GHz Ant 1+2+3+4 10g SAR (W/kg)	3 Radio 2_WLAN5GHz Ant 1+2+3+4 10g SAR (W/kg)	4 Radio 3_Bluetooth 10g SAR (W/kg)	5 Radio 3_Thread 10g SAR (W/kg)	1+3+4 Summed 10g SAR (W/kg)	1+3+5 Summed 10g SAR (W/kg)	2+3+4 Summed 10g SAR (W/kg)	2+3+5 Summed 10g SAR (W/kg)
Front Face at 0mm	1.242		2.303	0.012	0.013	**3.557**	**3.558**	**2.315**	**2.316**
Edge 1 at 0mm	0.303		0.237	0.001	0.001	**0.541**	**0.541**	**0.238**	**0.238**
Edge 2 at 0mm	0.325		0.272	0.001	0.001	**0.598**	**0.598**	**0.273**	**0.273**
Edge 4 at 0mm	0.249		0.168	0.001	0.001	**0.418**	**0.418**	**0.169**	**0.169**

Test Engineer： EN Liu, Dennis Hsieh and Luke Lee

13. Uncertainty Assessment

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be ≤ 30%, for a confidence interval of k = 2. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. For this device, the highest measured 1-g SAR is less 1.5W/kg and highest measured 10-g SAR is less 3.75W/kg. Therefore, the measurement uncertainty table is not required in this report.
Declaration of Conformity:
The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

14. References

[1] FCC 47 CFR Part 2 “Frequency Allocations and Radio Treaty Matters; General Rules and Regulations”

[2] ANSI/IEEE Std. C95.1-1992, “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”, September 1992

[3] IEEE Std. 1528-2013, “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”, Sep 2013

[4] SPEAG DASY System Handbook

[5] FCC KDB 248227 D01 v02r02, “SAR Guidance for IEEE 802.11 (WiFi) Transmitters”, Oct 2015.

[6] FCC KDB 447498 D01 v06, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, Oct 2015

[7] FCC KDB 865664 D01 v01r04, "SAR Measurement Requirements for 100 MHz to 6 GHz", Aug 2015.

[8] FCC KDB 865664 D02 v01r02, “RF Exposure Compliance Reporting and Documentation Considerations” Oct 2015.

System Check_Head_2450MHz

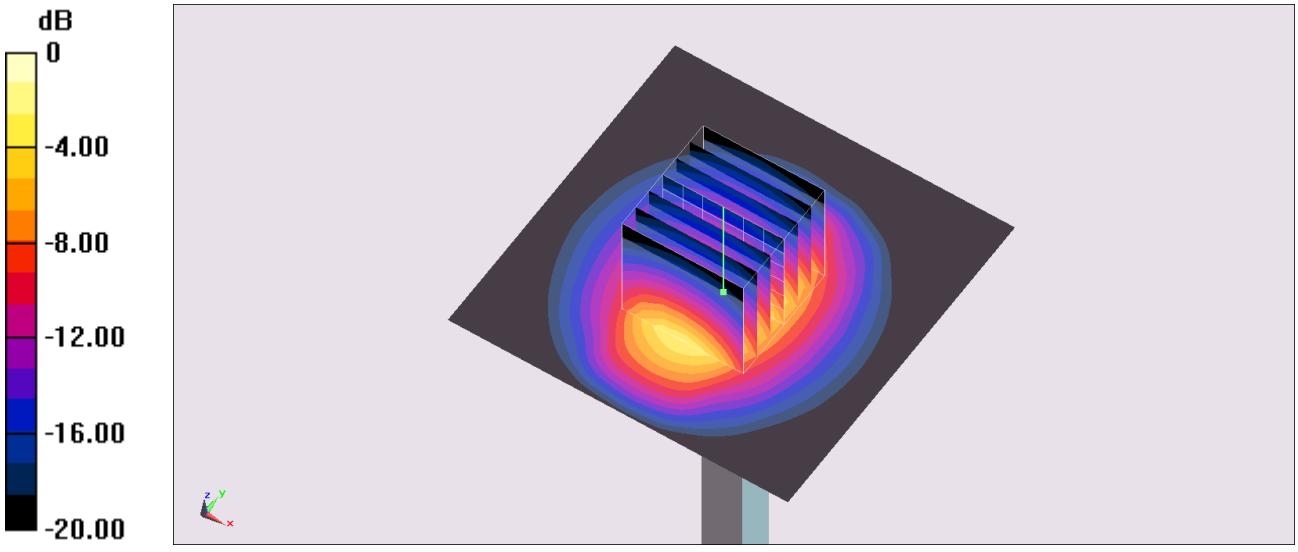
DUT: D2450V2-736

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL_2450_220715 Medium parameters used: f = 2450 MHz; σ = 1.814 S/m; ε_r = 38.352; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2450 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 3.97 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.29 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 5.15 W/kg
SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.17 W/kg
Maximum value of SAR (measured) = 4.19 W/kg



0 dB = 3.97 W/kg = 5.99 dBW/kg

System Check_Head_2450MHz

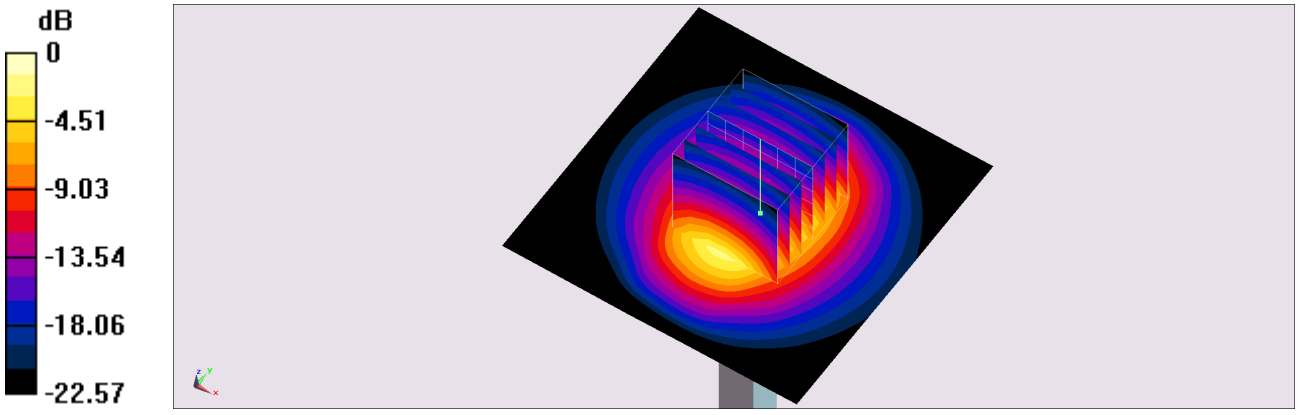
DUT: D2450V2-736

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL_2450_220719 Medium parameters used: f = 2450 MHz; σ = 1.793 S/m; ε_r = 39.382; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2450 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=250mW/Area Scan (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 21.4 W/kg

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 105.9 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 25.5 W/kg
SAR(1 g) = 12.4 W/kg; SAR(10 g) = 5.76 W/kg
Maximum value of SAR (measured) = 20.7 W/kg



0 dB = 20.7 W/kg = 13.16 dBW/kg

System Check_Head_5250MHz

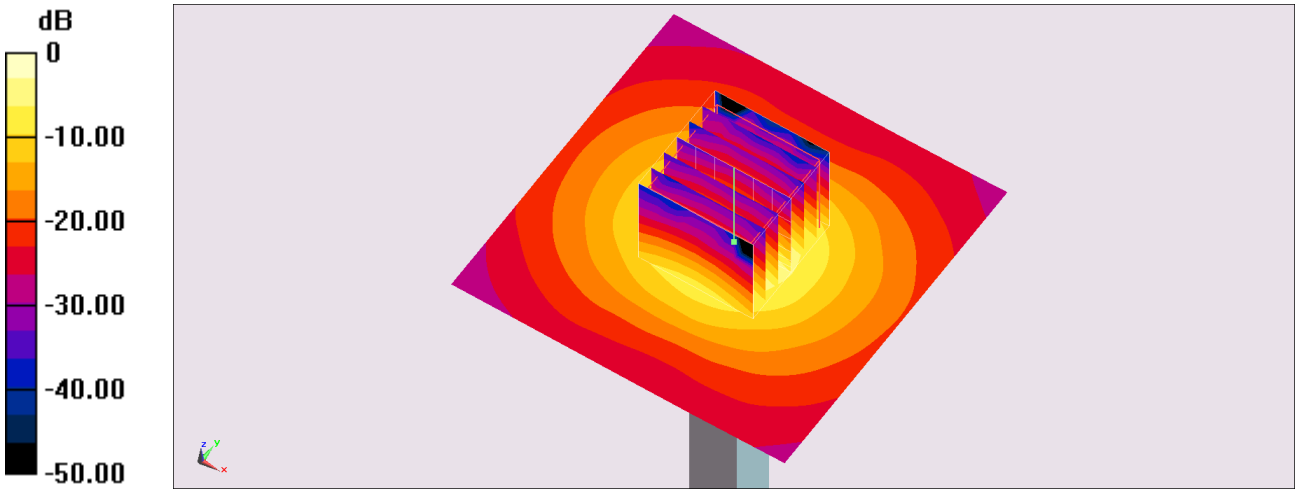
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220717 Medium parameters used: f = 5250 MHz; σ = 4.742 S/m; ε_r = 36.839; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5250 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 24.1 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 81.87 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 35.6 W/kg
SAR(1 g) = 8.61 W/kg; SAR(10 g) = 2.43 W/kg
Maximum value of SAR (measured) = 21.9 W/kg



0 dB = 21.9 W/kg = 13.40 dBW/kg

System Check_Head_5250MHz

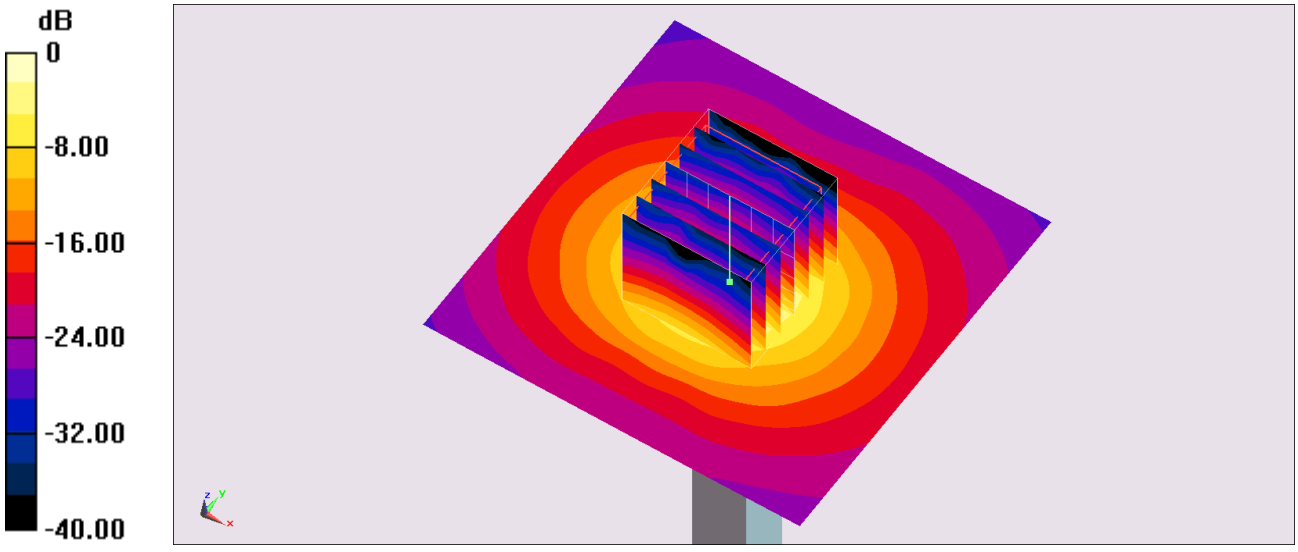
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220718 Medium parameters used: f = 5250 MHz; σ = 4.675 S/m; ε_r = 35.339; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5250 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 25.0 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 72.78 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 35.2 W/kg
SAR(1 g) = 8.5 W/kg; SAR(10 g) = 2.43 W/kg
Maximum value of SAR (measured) = 21.3 W/kg



0 dB = 21.3 W/kg = 13.28 dBW/kg

System Check_Head_5250MHz

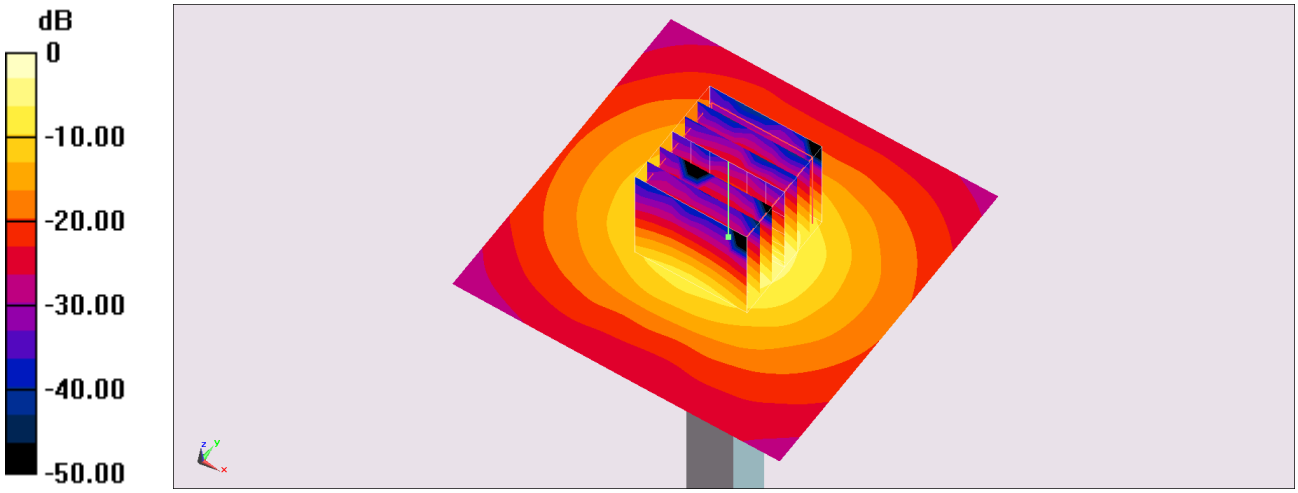
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220720 Medium parameters used: f = 5250 MHz; σ = 4.59 S/m; ε_r = 36.846; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5250 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.9 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 78.93 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 34.9 W/kg
SAR(1 g) = 8.34 W/kg; SAR(10 g) = 2.42 W/kg
Maximum value of SAR (measured) = 21.0 W/kg



0 dB = 21.0 W/kg = 13.22 dBW/kg

System Check_Head_5250MHz

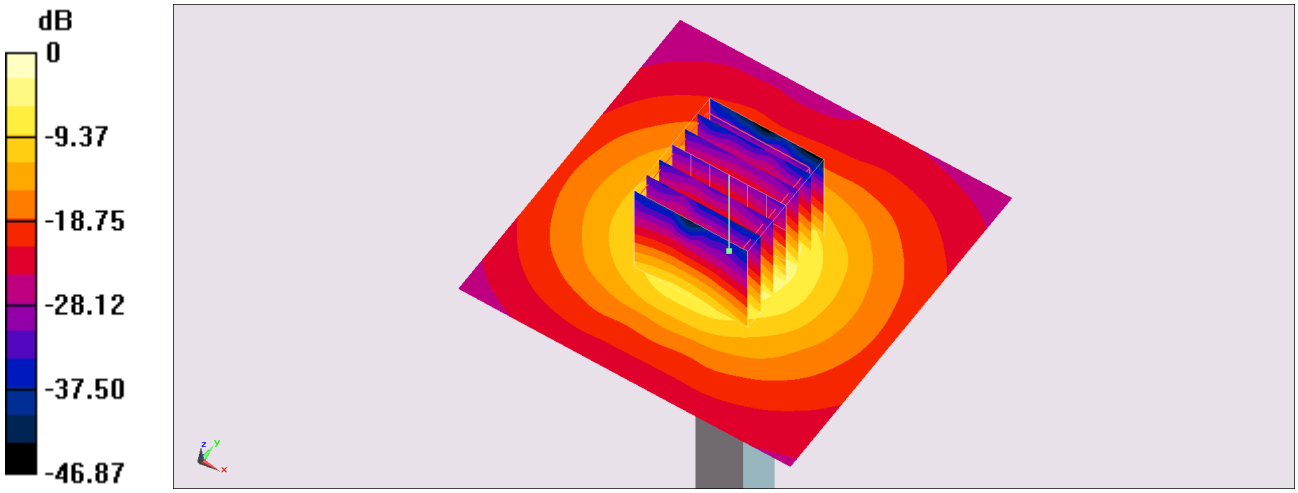
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220721 Medium parameters used: f = 5250 MHz; σ = 4.618 S/m; ε_r = 35.81; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5250 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 24.7 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 72.78 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 34.8 W/kg
SAR(1 g) = 8.39 W/kg; SAR(10 g) = 2.4 W/kg
Maximum value of SAR (measured) = 21.0 W/kg



0 dB = 21.0 W/kg = 13.22 dBW/kg

System Check_Head_5250MHz

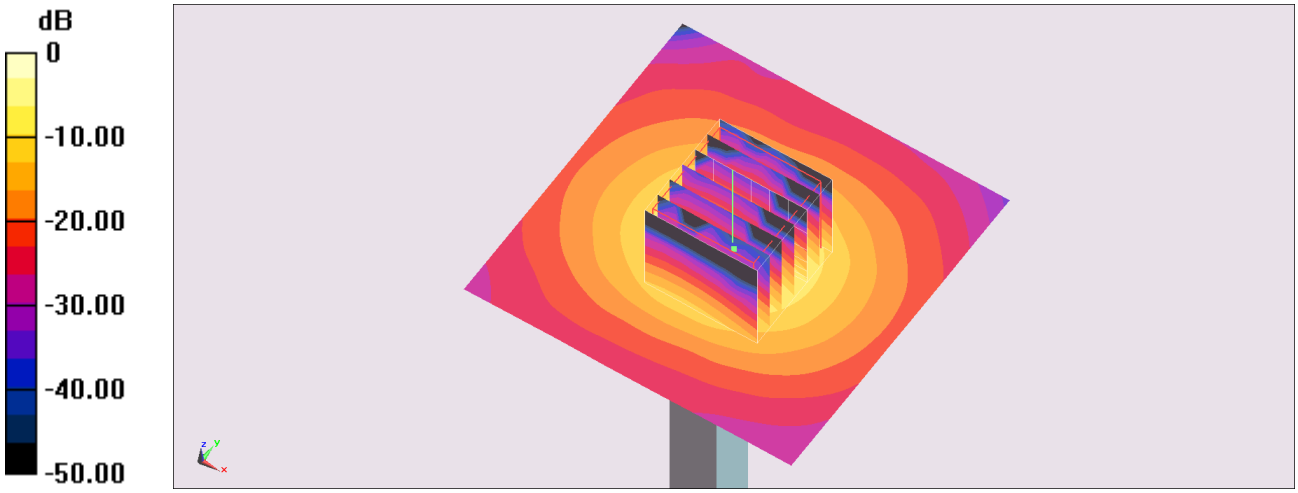
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220810 Medium parameters used: f = 5250 MHz; σ = 4.65 S/m; ε_r = 36.129; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5250 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 22.2 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 75.87 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 36.9 W/kg
SAR(1 g) = 8.76 W/kg; SAR(10 g) = 2.37 W/kg
Maximum value of SAR (measured) = 22.4 W/kg



0 dB = 22.4 W/kg = 13.50 dBW/kg

System Check_Head_5250MHz

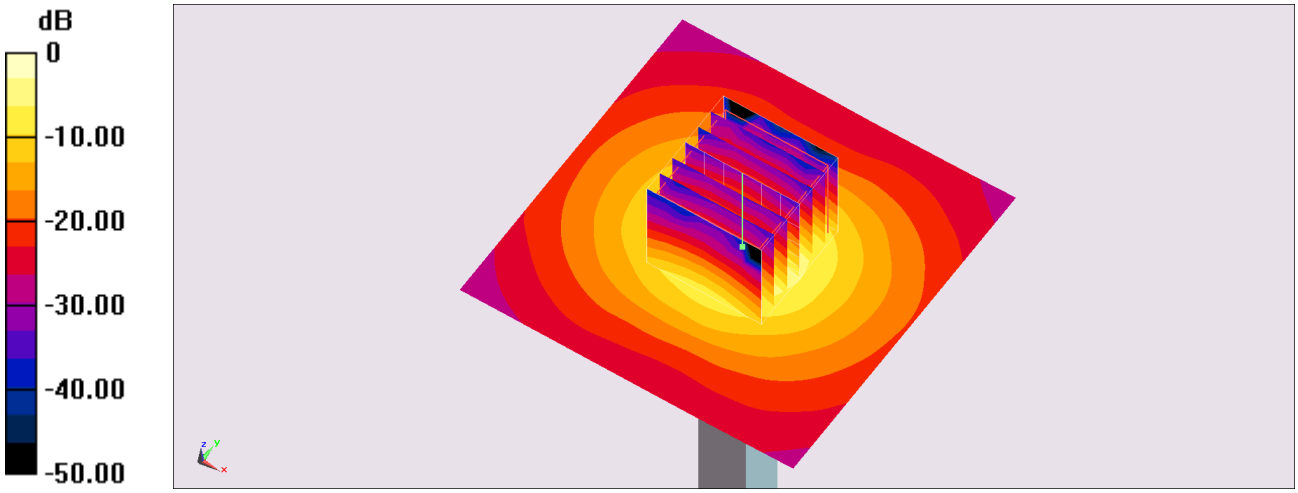
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220811 Medium parameters used: f = 5250 MHz; σ = 4.71 S/m; ε_r = 36.097; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5250 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 23.9 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 81.87 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 35.3 W/kg
SAR(1 g) = 8.55 W/kg; SAR(10 g) = 2.41 W/kg
Maximum value of SAR (measured) = 21.8 W/kg



0 dB = 21.8 W/kg = 13.38 dBW/kg

System Check_Head_5750MHz

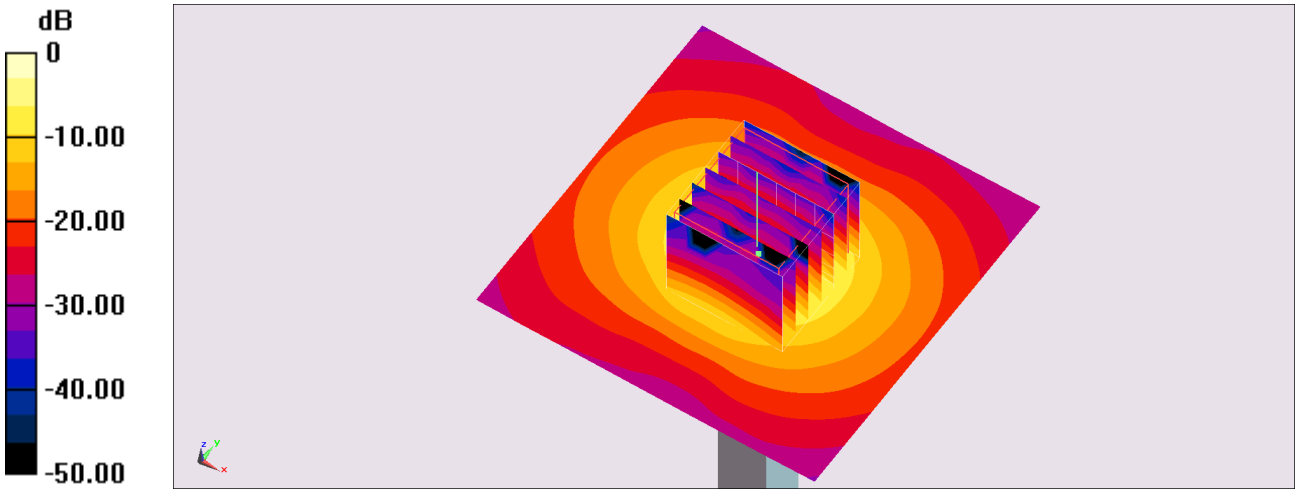
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220717 Medium parameters used: f = 5750 MHz; σ = 5.277 S/m; ε_r = 36.27; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5750 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.6 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 69.29 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 35.9 W/kg
SAR(1 g) = 7.88 W/kg; SAR(10 g) = 2.17 W/kg
Maximum value of SAR (measured) = 19.7 W/kg



0 dB = 19.7 W/kg = 12.94 dBW/kg

System Check_Head_5750MHz

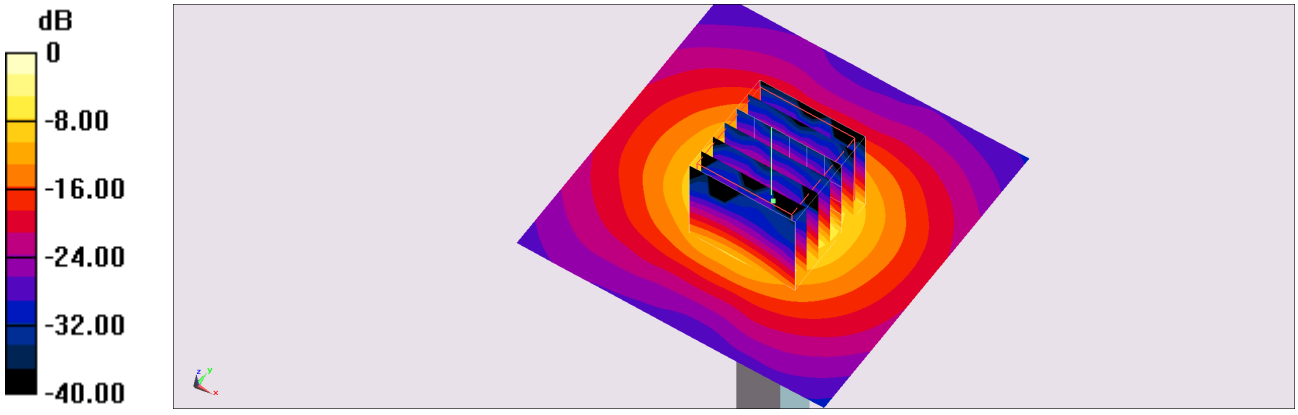
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220718 Medium parameters used: f = 5750 MHz; σ = 5.204 S/m; ε_r = 34.77; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5750 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.3 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 69.29 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 35.4 W/kg
SAR(1 g) = 7.77 W/kg; SAR(10 g) = 2.14 W/kg
Maximum value of SAR (measured) = 19.4 W/kg



0 dB = 19.4 W/kg = 12.88 dBW/kg

System Check_Head_5750MHz

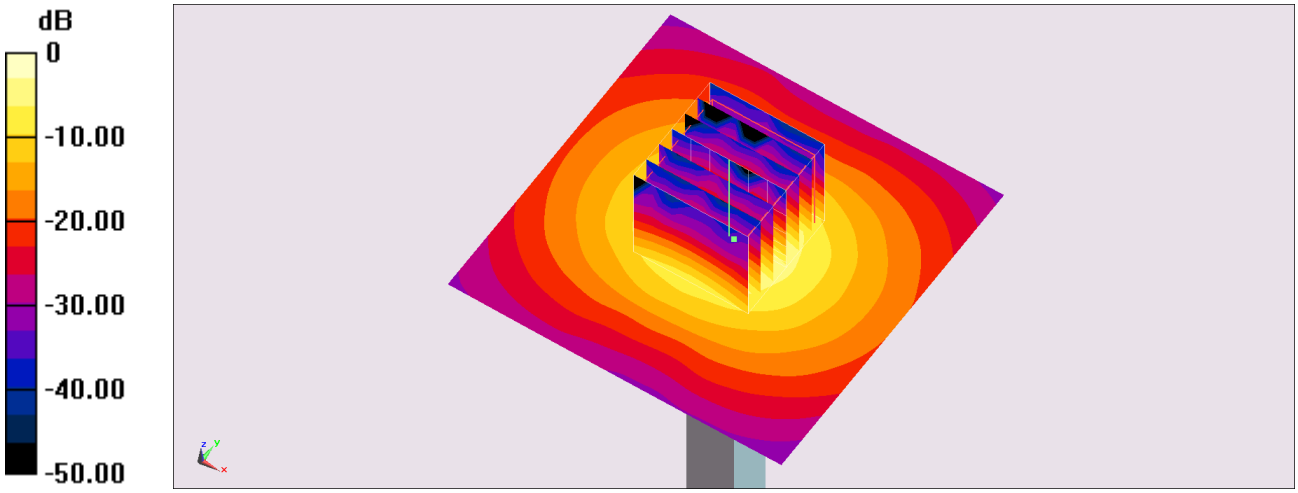
DUT: D5GHzV2-1006

Communication System: CW ; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220720 Medium parameters used: f = 5750 MHz; σ = 5.094 S/m; ε_r = 36.13; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5750 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.3 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 71.16 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 38.0 W/kg
SAR(1 g) = 8.18 W/kg; SAR(10 g) = 2.37 W/kg
Maximum value of SAR (measured) = 21.3 W/kg



0 dB = 21.3 W/kg = 13.28 dBW/kg

System Check_Head_5750MHz

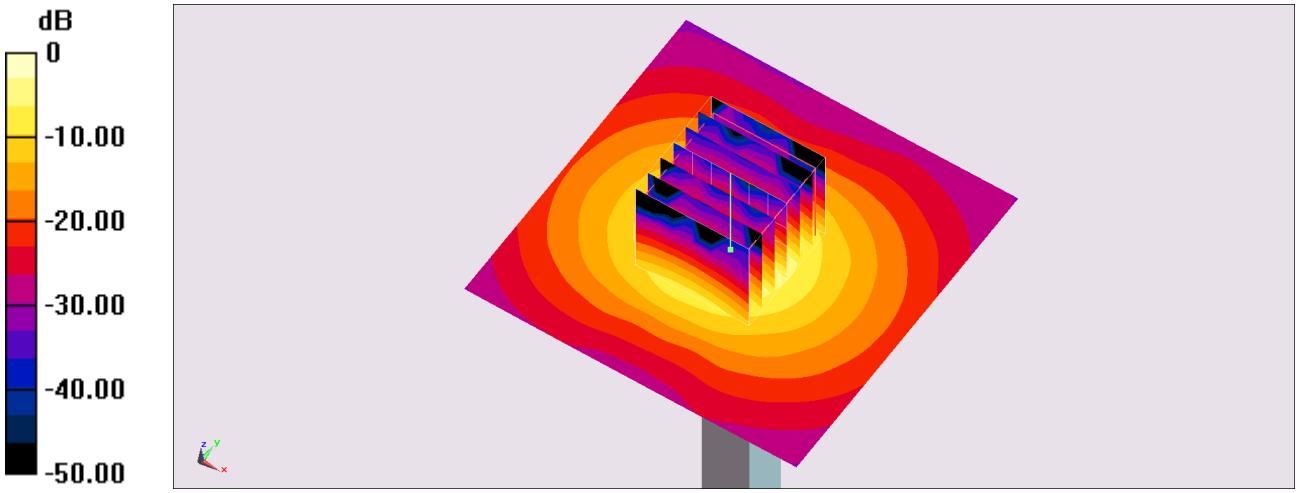
DUT: D5GHzV2-1006

Communication System: CW ; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220721 Medium parameters used: f = 5750 MHz; σ = 5.128 S/m; ε_r = 35.166; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5750 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 20.7 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 71.19 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 38.9 W/kg
SAR(1 g) = 8.34 W/kg; SAR(10 g) = 2.35 W/kg
Maximum value of SAR (measured) = 22.1 W/kg



0 dB = 22.1 W/kg = 13.44 dBW/kg

System Check_Head_5750MHz

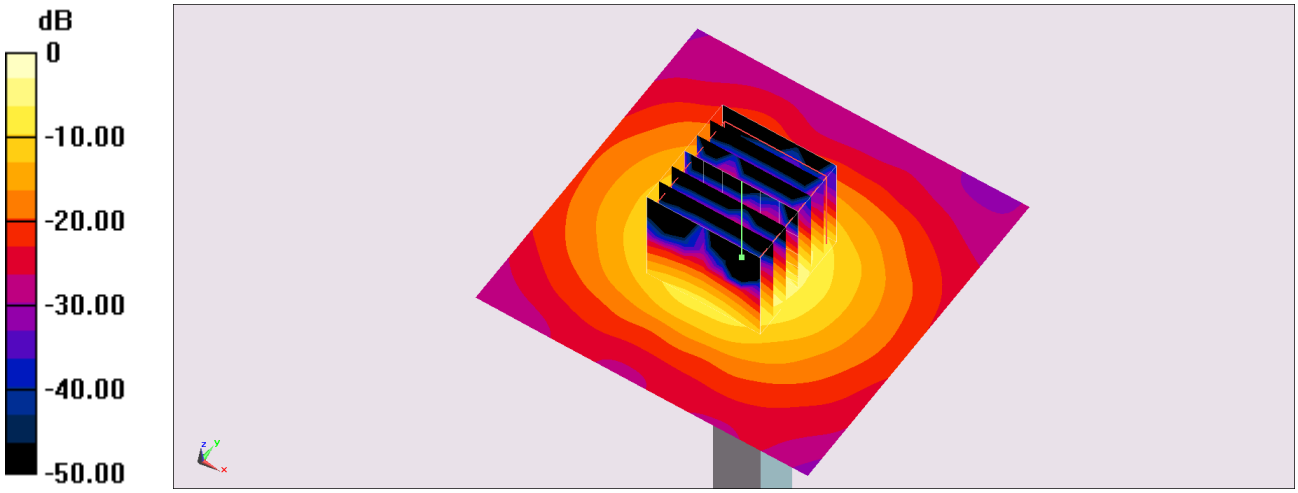
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220721 Medium parameters used: f = 5750 MHz; σ = 5.128 S/m; ε_r = 35.166; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN7439; ConvF(4.8, 4.8, 4.8) @ 5750 MHz; Calibrated: 2022/3/2
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 2021/11/22
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=50mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 9.54 W/kg

Pin=50mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 47.91 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 17.6 W/kg
SAR(1 g) = 3.84 W/kg; SAR(10 g) = 1.08 W/kg
Maximum value of SAR (measured) = 10.2 W/kg



0 dB = 10.2 W/kg = 10.09 dBW/kg

System Check_Head_5750MHz

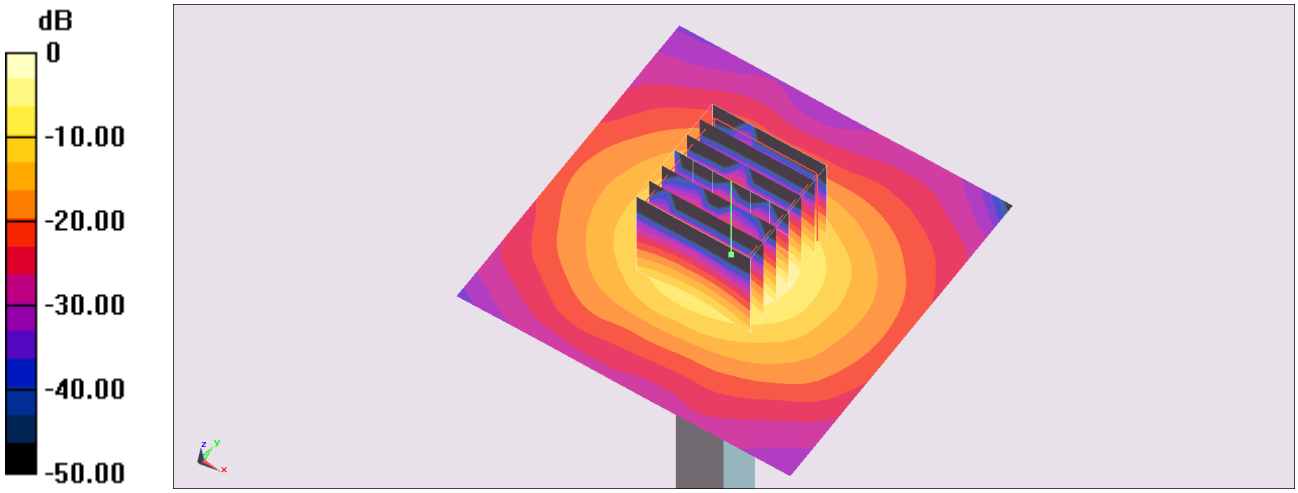
DUT: D5GHzV2-1006

Communication System: CW; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220810 Medium parameters used: f = 5750 MHz; σ = 5.279 S/m; ε_r = 35.323; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5750 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 22.8 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 73.38 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 42.0 W/kg
SAR(1 g) = 8.84 W/kg; SAR(10 g) = 2.46 W/kg
Maximum value of SAR (measured) = 23.9 W/kg



0 dB = 23.9 W/kg = 13.78 dBW/kg

System Check_Head_5750MHz

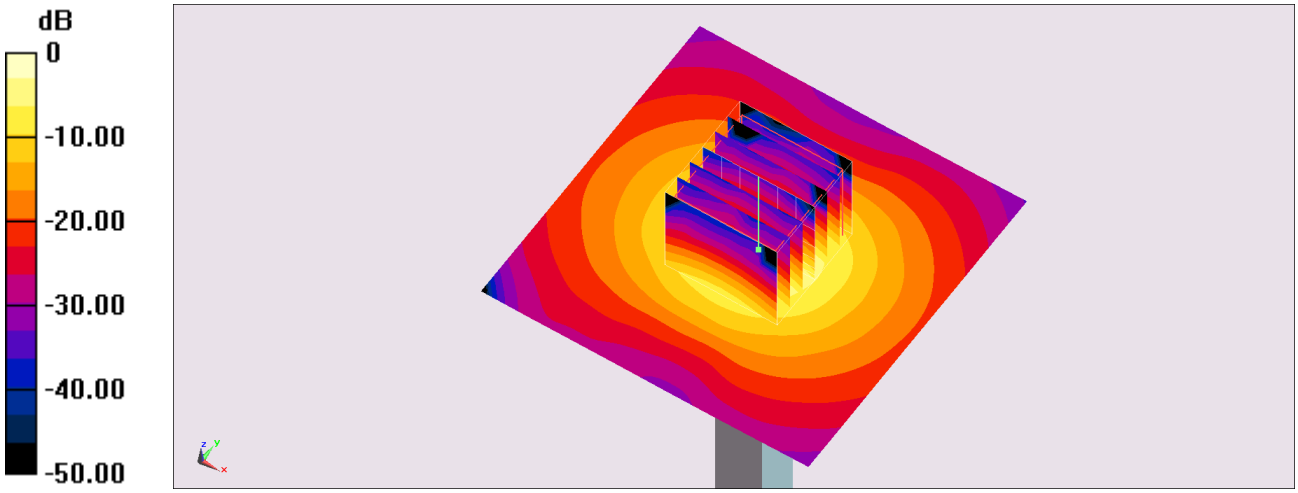
DUT: D5GHzV2-1006

Communication System: CW ; Frequency: 5750 MHz;Duty Cycle: 1:1
Medium: HSL_5G_220811 Medium parameters used: f = 5750 MHz; σ = 5.211 S/m; ε_r = 35.416; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5750 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Pin=100mW/Area Scan (71x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 22.0 W/kg

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 72.94 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 39.8 W/kg
SAR(1 g) = 8.5 W/kg; SAR(10 g) = 2.39 W/kg
Maximum value of SAR (measured) = 22.7 W/kg



0 dB = 22.7 W/kg = 13.56 dBW/kg

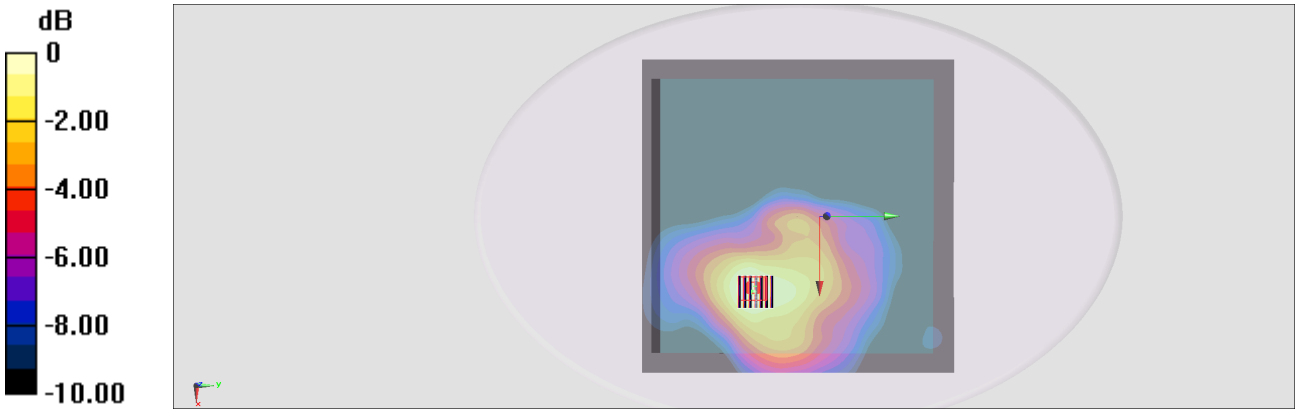
#01_WLAN2.4GHz_802.11b 1Mbps_Front Face_25mm_Ch6

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1.045
Medium: HSL_2450_220715 Medium parameters used : f = 2437 MHz; σ = 1.808 S/m; ε_r = 38.415; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2437 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (241x241x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.568 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.64 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 0.681 W/kg
SAR(1 g) = 0.390 W/kg; SAR(10 g) = 0.236 W/kg
Maximum value of SAR (measured) = 0.567 W/kg



0 dB = 0.567 W/kg = -2.46 dBW/kg

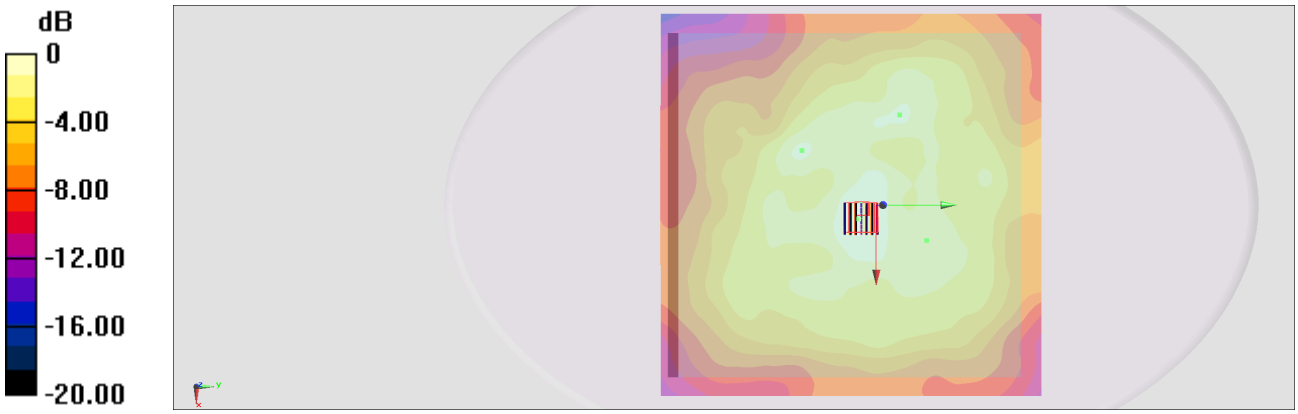
#02_WLAN5GHz_802.11ax-HE40 MCS0_Front Face_25mm_Ch46

Communication System: 802.11ax; Frequency: 5230 MHz;Duty Cycle: 1:1.059
Medium: HSL_5G_220720 Medium parameters used: f = 5230 MHz; σ = 4.575 S/m; ε_r = 36.853; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5230 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (281x281x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 2.16 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 22.77 V/m; Power Drift = -0.12 dB
Peak SAR (extrapolated) = 3.36 W/kg
SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.505 W/kg
Maximum value of SAR (measured) = 2.18 W/kg



0 dB = 2.18 W/kg = 3.38 dBW/kg

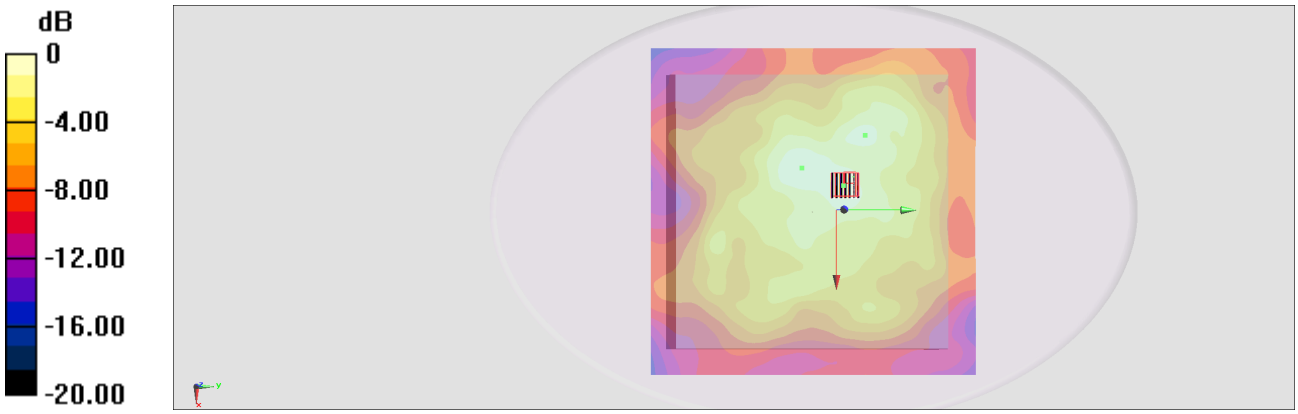
#03_WLAN5GHz_802.11ax-HE80 MCS0_Front Face_25mm_Ch155

Communication System: 802.11ax; Frequency: 5775 MHz;Duty Cycle: 1:1.104
Medium: HSL_5G_220720 Medium parameters used: f = 5775 MHz; σ = 5.12 S/m; ε_r = 36.118; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5775 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (301x301x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.92 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 21.91 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 3.47 W/kg
SAR(1 g) = 0.924 W/kg; SAR(10 g) = 0.382 W/kg
Maximum value of SAR (measured) = 2.00 W/kg



0 dB = 2.00 W/kg = 3.01 dBW/kg

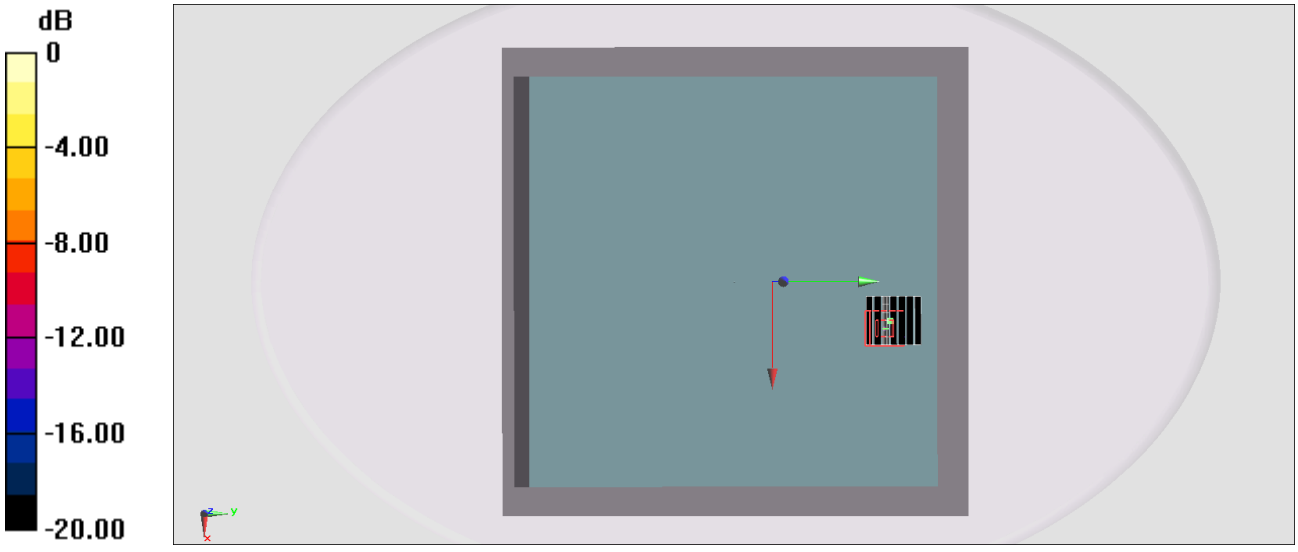
#04_Bluetooth_1Mbps_Front Face_25mm_Ch27

Communication System: Bluetooth; Frequency: 2480 MHz;Duty Cycle: 1:1.572
Medium: HSL_2450_220715 Medium parameters used: f = 2480 MHz; σ = 1.857 S/m; ε_r = 38.229; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2480 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (241x241x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.000277 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.4890 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 0.0150 W/kg
SAR(1 g) = 0.000724 W/kg; SAR(10 g) = 9.08e-005 W/kg
Maximum value of SAR (measured) = 0.0151 W/kg



0 dB = 0.0151 W/kg = -18.21 dBW/kg

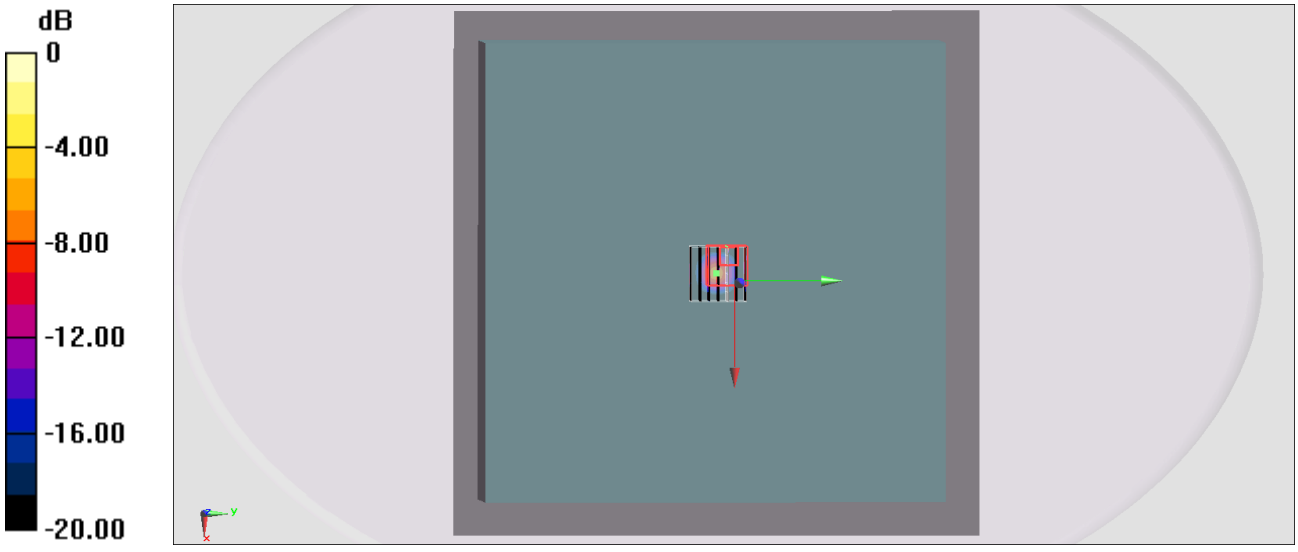
#05_Thread_1Mbps_Front Face_25mm_Ch11

Communication System: Bluetooth; Frequency: 2405 MHz;Duty Cycle: 1:1.001
Medium: HSL_2450_220715 Medium parameters used: f = 2405 MHz; σ = 1.764 S/m; ε_r = 38.551; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2405 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (241x241x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.00265 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.0120 W/kg
SAR(1 g) = 0.000148 W/kg; SAR(10 g) = 2.84e-005 W/kg
Maximum value of SAR (measured) = 0.0125 W/kg



0 dB = 0.0125 W/kg = -19.03 dBW/kg

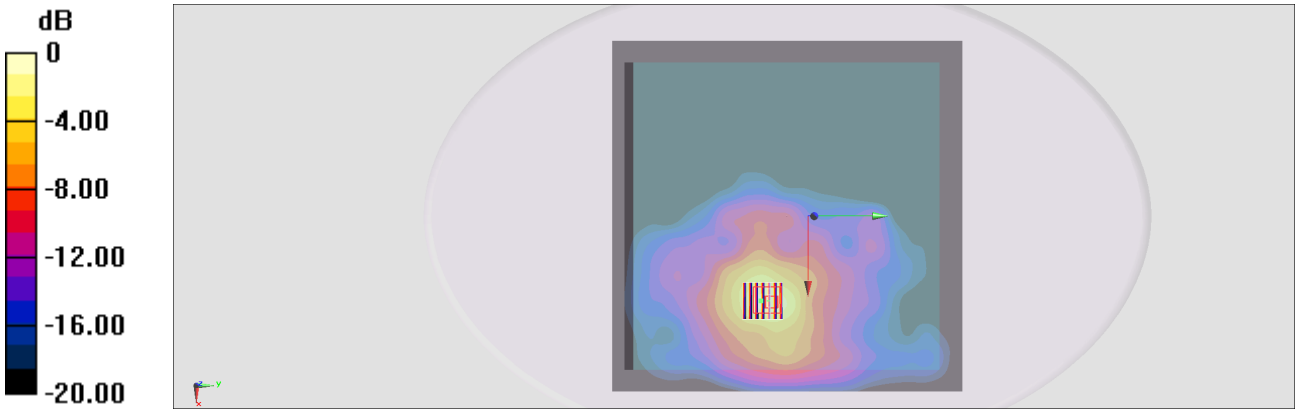
#06_WLAN2.4GHz_802.11b 1Mbps_Front Face_0mm_Ch6

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1.045
Medium: HSL_2450_220719 Medium parameters used : f = 2437 MHz; σ = 1.788 S/m; ε_r = 39.445; ρ = 1000 kg/m^3
Ambient Temperature：23.4 ℃; Liquid Temperature：22.4 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2437 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (241x241x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 3.40 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 47.14 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 5.43 W/kg
SAR(1 g) = 2.51 W/kg; SAR(10 g) = 1.21 W/kg
Maximum value of SAR (measured) = 4.17 W/kg



0 dB = 4.17 W/kg = 6.20 dBW/kg

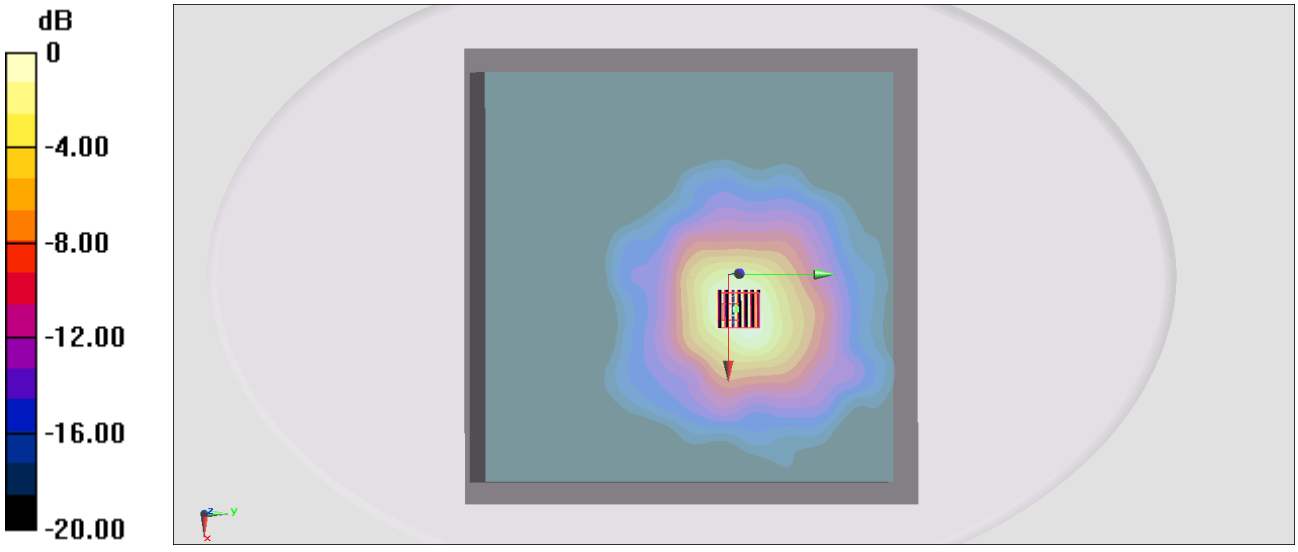
#07_WLAN5GHz_802.11ax-HE40 MCS0_Front Face_0mm_Ch46

Communication System: 802.11ax; Frequency: 5230 MHz;Duty Cycle: 1:1.059
Medium: HSL_5G_220718 Medium parameters used: f = 5230 MHz; σ = 4.667 S/m; ε_r = 35.503; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.58, 4.58, 4.58) @ 5230 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (281x281x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 11.0 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 43.05 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 16.6 W/kg
SAR(1 g) = 5.04 W/kg; SAR(10 g) = 2.24 W/kg
Maximum value of SAR (measured) = 10.6 W/kg



0 dB = 10.6 W/kg = 10.25 dBW/kg

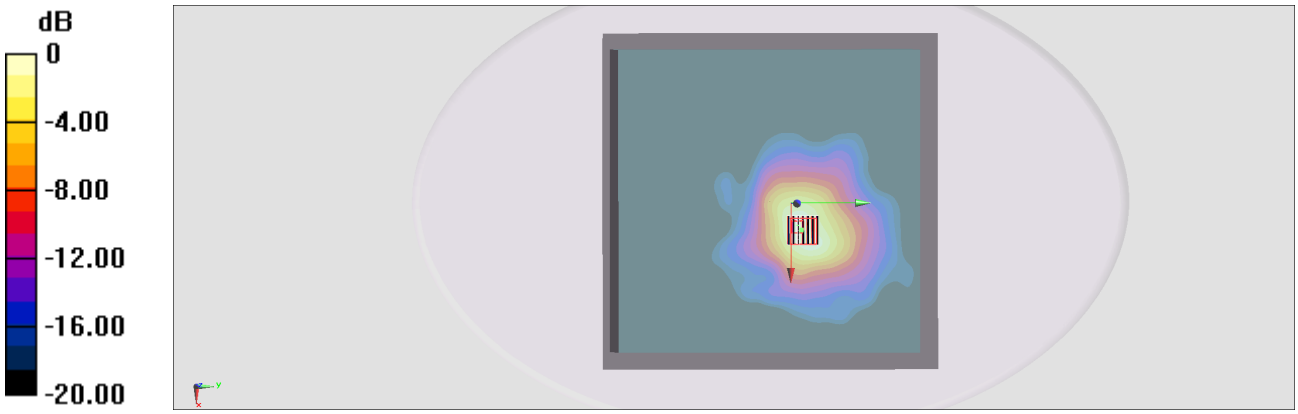
#08_WLAN5GHz_802.11ax-HE20 MCS0_Front Face_0mm_Ch157

Communication System: 802.11ax; Frequency: 5785 MHz;Duty Cycle: 1:1.033
Medium: HSL_5G_220718 Medium parameters used : f = 5785 MHz; σ = 5.232 S/m; ε_r = 34.562; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(4.33, 4.33, 4.33) @ 5785 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (281x281x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 11.3 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 48.49 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 18.1 W/kg
SAR(1 g) = 4.89 W/kg; SAR(10 g) = 2.11 W/kg
Maximum value of SAR (measured) = 10.8 W/kg



0 dB = 10.8 W/kg = 10.33 dBW/kg

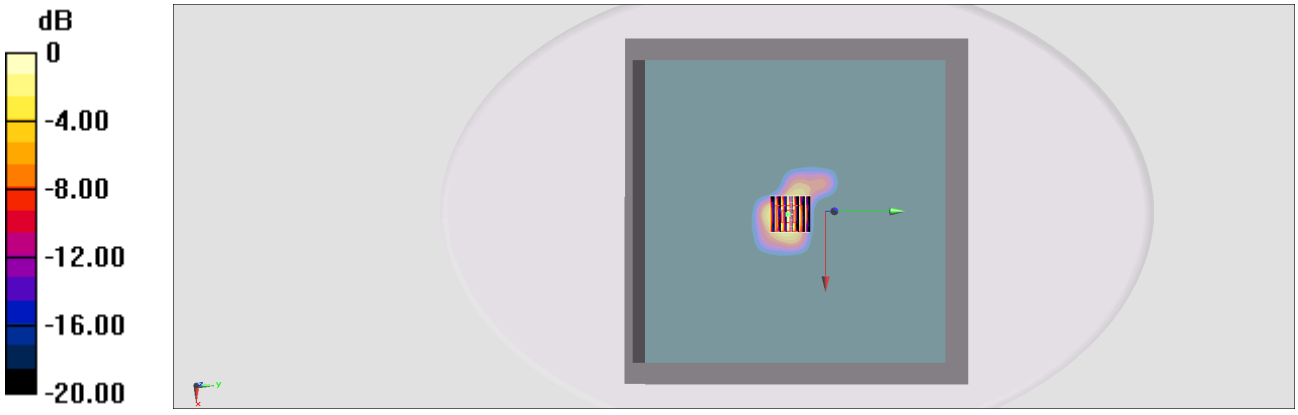
#09_Bluetooth_1Mbps_Front Face_0mm_Ch0

Communication System: Bluetooth; Frequency: 2402 MHz;Duty Cycle: 1:1.572
Medium: HSL_2450_220719 Medium parameters used : f = 2402 MHz; σ = 1.742 S/m; ε_r = 39.607; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2402 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (241x241x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0282 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.357 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 0.0490 W/kg
SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.00805 W/kg
Maximum value of SAR (measured) = 0.0301 W/kg



0 dB = 0.0301 W/kg = -15.21 dBW/kg

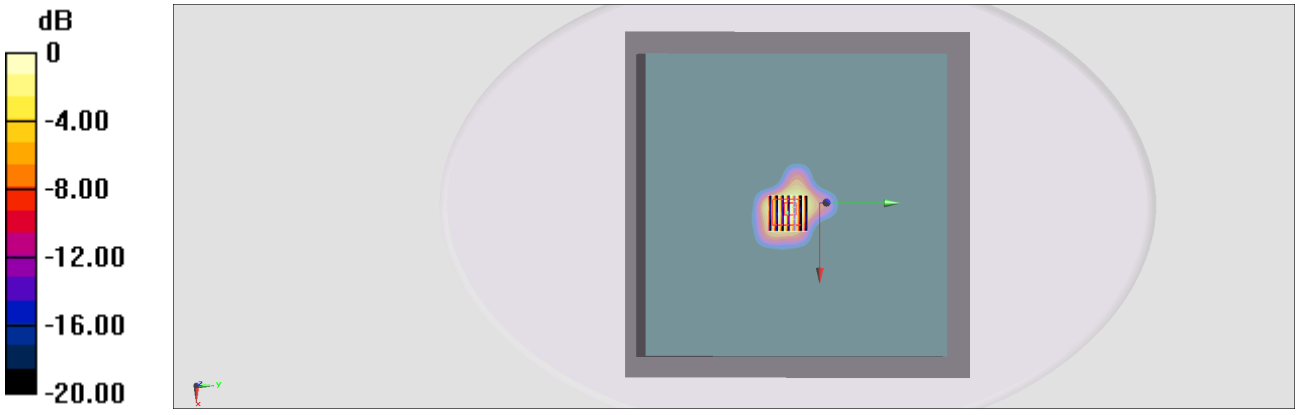
#10_Thread_1Mbps_Front Face_0mm_Ch11

Communication System: Bluetooth; Frequency: 2405 MHz;Duty Cycle: 1:1.001
Medium: HSL_2450_220719 Medium parameters used : f = 2405 MHz; σ = 1.744 S/m; ε_r = 39.581; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃; Liquid Temperature：22.5 ℃

DASY5 Configuration:
- Probe: EX3DV4 - SN3642; ConvF(7.55, 7.55, 7.55) @ 2405 MHz; Calibrated: 2022/4/28
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn854; Calibrated: 2021/8/19
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: 1026
- Measurement SW: DASY52, Version 52.10 (4);SEMCAD X Version 14.6.14 (7483)

Area Scan (241x241x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.0430 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.962 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.0540 W/kg
SAR(1 g) = 0.025 W/kg; SAR(10 g) = 0.012 W/kg
Maximum value of SAR (measured) = 0.0428 W/kg



0 dB = 0.0428 W/kg = -13.69 dBW/kg